

SOCIOECONOMIC ASPECTS OF CERAMIC PRODUCTION IN ROMAN THRACE

Abstract: The province of Thrace was established in ca. AD 45-46 on the territory of the last Thracian kingdom. In the course of more than two hundred years, between the second half of the First and the late Third century, ceramic production was developed in an unprecedented scale in this territory, in both rural and urban context. A number of rural settlements in Thrace, including agricultural estates (*villae*), agrarian and artisan's villages (*vici*), have accommodated pottery and tile workshops since the second half of the First – the beginning of the Second century. From the late First – early Second century onwards potteries were established also in towns and cities.

The presented and analysed data for the location and internal organisation of the ceramic workshops in Thrace indicates that the most widespread type of organised production was the individual workshop. Some of these ateliers were clustered near available resources and developed trade routes, and occasionally incorporated in single settlement units. However, the considerable size and complex layout of the workshops from the early phase of ceramic production under Roman rule could be viewed as a proof that the craft was initially developed by people with certain financial abilities and social status (local dynasts, immigrant civilians, enfranchised itinerant and indigenous army veterans), who were among the first to perceive and advertise the Roman way of life through, on the one side, the new construction techniques and materials, and, on the other, the concomitant culture of eating and drinking, visible through the archaeological discoveries of pottery and other vessels used for the purpose.

Keywords: *Roman Thrace, ceramic production, workshop organisation and ownership, potters and landlords.*

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INTRODUCTION

The province of Thrace was established in ca. AD 45-46 on the territory of the last Thracian kingdom¹. Initially it covered most of the lands of nowadays Bulgaria along with the Romanian part of Dobrudzha, modern Turkish (excluding the Thracian Chersonese) and Greek Thrace (including the islands of Thassos, Imbros and Samothraki), and regions in today's Serbia and North Macedonia. The borders of the province and the one with *Moesia Inferior* in particular underwent several changes during the Principate. The most noticeable of the latter occurred in the reigns of Hadrian and Helvius Pertinax, when its Northern border was gradually shifted closer to the Balkan mountain ridge². During the reign of Aurelian the North-western part of Thrace was relocated within the newly established province of *Dacia*, later *Dacia Mediterranea*³, while under the Tetrarchy the rest of its

¹ See most recently LOZANOV 2015, 76; BOTEVA 2017, 157-168.

² GEROV 1979, 212-240; BOTEVA 1996, 173-176; TATSCHIEVA 2000, 59-78.

³ WATSON 2003, 155-157.

territory was further split into four smaller provinces (*Thracia*, *Haemimontus*, *Rhodopa* and *Europa*)⁴ and eventually included in the newly established Diocese of Thrace⁵.

In the course of more than two hundred years, between the second half of the First and the late Third century, ceramic production was developed in an unprecedented scale in this territory, in both rural and urban context. A number of rural settlements in Thrace, including agricultural estates (*villae*), agrarian and artisan's villages (*vici*), accommodated pottery and tile workshops since the second half of the First century⁶. From the late First – early Second century onwards potteries were established also in towns and cities⁷. Fourteen rural centres and no less than eight urban workshops, the latter found within the boundaries of three cities, were taken into account in the present study, leaving outside its scope some kiln sites of uncertain date and designation.

The aim of this contribution is to explore the socioeconomic aspects of the local ceramic production in *provincia Thracia* during the Principate. In doing so, its first goal is to establish a reliable data base for future study on the topic, including information for the location and organisation of the production within the studied kiln sites, the types of identified workshop installations and manufactured articles there, and the chronology of their artisanal activity. A second objective is to examine the available archaeological and epigraphic evidence for the ownership of the workshops and the lands, upon which the latter have been built. The sought outcome of this complex approach would allow undertaking further analysis on the gathered data in search of the social status and financial abilities of the people engaged in production and distribution of ceramic items and thus to broaden our understanding of the *chaîne opératoire* of ceramic production in Roman Thrace.

I. THE CERAMIC WORKSHOPS OF ROMAN THRACE

1. The villa workshops

Five of the studied here kiln sites were situated within rural settlements, identified by their researchers as Roman villas. Two of the sites were located to the North of the *Haemus mons*, while the rest were excavated to the South of the latter. The northern sites were found in the modern locality of Varbovski livadi, near the town of Pavlikeni, and close to the village of Madara, Shumen district. The southern villas were uncovered in the Chatalka locality, Stara Zagora district, near the village of Dragovishtitsa, close to Sofia and by the village of Pokrovnik, nearby Blagoevgrad.

⁴ This could have also happened in stages, as testified by N. Sharankov, who presented newly found inscription dating to ca. AD 303, where Thrace (if it is not a reference to the late province of the same name) is still referred to as a single unit (SHARANKOV 2016, 971). Furthermore, in a recent re-examination of previously published inscription from *Cabyle* (situated in the province of *Thracia* or *Haemimontus* during Late Antiquity), the same author re-dated the text to AD 297 and underlined that in it was mentioned a provincial governor, formerly thought to have been such of the Late Roman province of *Europa*. One of the suggestions of Sharankov is that the Roman province has been subdivided into smaller Late Roman provinces in several phases (see SHARANKOV 2017, 228-231).

⁵ VELKOV 1977, 61-65; WIEWIOWSKI 2011, 385-386.

⁶ HARIZANOV *in press*.

⁷ HARIZANOV 2018, 299-308.

1.1. Madara (Shumen district)

Site description

One of the largest rustic villas in Thrace was located near the modern day village of Madara, Shumen district (Fig. 1.1). The uncovered there architectural complex included residential quarters, bathhouses, dwellings, winery, *horrea*, and more buildings with agricultural and/or artisanal designation⁸.

During construction work in the late 1980s, a poorly preserved kiln site was discovered between two small rivers, to the Southwest of the villa⁹.

Identified production facilities

No ceramic production installations have been identified among the excavated structures in the inhabited area of the estate.

The separately located kiln site comprised seven circular two-chambered kilns with central supporting pillars, also clay depots, shed(s) and probably a levigation tank¹⁰.

Production repertoire

According to G. Atanasov, the discovered kilns were involved in the manufacture of *amphorae*, kitchenware, tableware and oil lamps, with the former being made as containers for the wine and grain produced at the estate¹¹. The production of wine at the site was further proven by the discovery of a wine press installation inside one of the excavated buildings from the architectural complex¹².

Chronology

The residential complex existed from the Flavian period until the 440s¹³ or more likely only to the late 370s, with a possibility for partial renovation and reuse during the late Fourth – early Fifth century¹⁴. In the course of the second half of the Fifth and the first quarter of the Sixth century, a simple village existed on the same site¹⁵.

The discovered coins during the research of the kiln site were issued between AD 141 and the reign of Julian II in the early 360s¹⁶.

Workshop location and ownership

During the initial stage of its existence, the site was most likely located within the province of Thrace, which up to the times of Trajan or Hadrian included large parts of nowadays North-eastern Bulgaria. An inscription from AD 152 found in the vicinities of the modern village of Nevsha, located some 15 km to the East of Madara¹⁷, informs that this area was part of *regio Geletica* within the city territory of *Marcianopolis*. However, whether this was the most western point of the early territory of this city, or it continued westwards, is not known¹⁸. There is also uncertainty for the Northern border of Thrace and Lower Moesia in the period after the local reforms of Hadrian in the 130s up to the late Second century, caused by the lack of epigraphic and

⁸ DREMSIZOVA-NELCHINOVA 1984, 74-124; DINCHEV 1997, 74-79.

⁹ ATANASOV 1989, 106.

¹⁰ ATANASOV 1989, 106-107; ATANASOV 1990, 221.

¹¹ ATANASOV 1989, 106-107.

¹² See DREMSIZOVA-NELCHINOVA 1984, 95-97.

¹³ DREMSIZOVA-NELCHINOVA 1984, 120-121.

¹⁴ See DINCHEV 1997, 77-79.

¹⁵ DREMSIZOVA-NELCHINOVA 1984, 121.

¹⁶ ATANASOV 1990, 221.

¹⁷ All mentioned in the text distances are measured in a beeline and not according to the modern road network.

¹⁸ GEROV 1988, 125.

archaeological evidence. According to B. Gerov, during that period the vast territory between *Nicopolis ad Istrum* and *Marcianopolis* was still within the borders of Thrace and was split into separate rural regions, ascribed to the territories of the two cities¹⁹. On the contrary, M. Tacheva argued that the territories of the Thracian cities under Hadrian were still rather small and that the region between the said urban settlements was most likely part of *Moesia Inferior* since AD 136. Furthermore, she assumed that the inscription mentions the building of fortifications on the borders of the city territory and that in such case that of *Marcianopolis* stretched only to the modern village of Nevsha²⁰. However, B. Gerov seems to accept the term *per fines civitates* rather as including the whole territory of the city and not only its borders²¹. Such hypothesis was further developed by D. Nikolov who argued that the mentioned in this and several other inscriptions *praesidia*, *burgi* and *phruri* weren't built on the borders of city territories (given that some of the cities were situated in the hinterland of the province and not at its borders) but along the major roads²². This suggestion could be considered further proven if we accept the opinion of S. Torbatov, who presented credible evidence for the identification of the fortified sites of *Melta* (nowadays Lovech), *Sostra* (modern village of Lomets) and *Mezdra* (see below) with some of the *praesidia*, known to be built in *regio Dyptensium* (*Dyptensis*)²³ of the city territory of *Serdica*²⁴ during the 150s. The first two forts were located near road stations from the *Oescus* – *Philippopolis* road, while *Mezdra* was placed on the route from *Oescus* to *Serdica*²⁵.

Given all said it seems more plausible that the territory of *Marcianopolis* did not end for sure around Nevsha and in such case it could have easily reached the closely located area of Madara. On the other hand, the excavator and other scientists support the opinion for the presence of an imperial domain in the region of Madara, with an administrative centre probably located within the discovered architectural complex²⁶. Its size and layout, the identified buildings and

finds were reason enough for its classification as a villa residence²⁷. Such domains represented separate territorial category, being directly managed by imperial officials and not by the administration of the nearby cities²⁸.

If we accept the last present hypothesis, the land upon which both the architectural complex and the kiln site at Madara were built should have been located within the boundaries of the province of Thrace either to AD 136 or (more likely) to AD 193 and presumably owned by the emperor. The imperial domains were usually managed by procurators of equestrian rank or freedmen. These managers were either directly involved in the estate's affairs or were leasing some of their responsibilities to *conductores* or *coloni* for a fixed term²⁹. Judging by the said, the lands of the Madara estate were probably state-owned. As for the practised within it crafts, Dremsizova-Nelchinova suggested that the various duties were performed by slaves and later *coloni*³⁰. According to another opinion on the matter, some of the most complex artisanal activities could have probably been carried out by specialist craftsmen, hired for the specific task³¹. In consistence with this hypothesis, contracts from Roman Egypt between landowners and amphora producers were cited, where land and recourses were leased in exchange of manufactured containers³². Additional evidence in support of this idea, were presumed orders for similar items made by the military to private contractors.

1.2. Varbovski livadi (Pavlikeni municipality, Veliko Tyrnovo district)

Site description

The other Roman villa, uncovered to the North of the *Haemus mons*, was excavated in the Varbovski livadi locality, about 3.0 – 3.5 km to the West-Northwest of the modern town of Pavlikeni (Fig. 1.2). It was explored during the 1970s by B. Sultov, who discovered three clusters of buildings and production installations³³, consecutively named Central, Western and Southern sectors (Fig. 2) by P. Vladkova in her more recent work, dedicated to the same site³⁴.

The most thoroughly studied was the so-called Central sector, where more than ten buildings (nos. A-N³⁵) and at least nineteen firing installations were discovered (Fig. 3). Several of these buildings (nos. A-I, K) were built around a central yard and surrounded by a stone wall. The discovered kilns were found mostly outside the enclosure, while some were located within the latter and also inside premises³⁶. During the renewed excavations over the last years (2014–2017), two more buildings (nos. S and T) were uncovered to the East of the stone-walled enclosure³⁷.

Sector West was located less than 100 m to the West-

¹⁹ GEROV 1988, 117.

²⁰ TATSCHIEVA 2000, 68-76.

²¹ GEROV 1988, 55, note 73; 125.

²² NIKOLOV 1994, 125-131.

²³ Opposite to this hypothesis and more precisely to the location of *Melta* and *Sostra* within the *regio Dyptensis*, is the suggestion of B. Gerov, who places in that area another region, with administrative centre possibly located exactly at *Melta*, which could have received the rights of *municipium* during the Second century (see GEROV 1988, 110). This however does not necessarily disprove the suggestion for the identification of the two forts with some of the *praesidia* built in the 150s.

²⁴ Conversely, opposite to the opinion of V. Beshevliev and B. Gerov (see BESHEVLIEV 1952, 33-36; GEROV 1988, 110; 125), M. Tacheva has stated that the two administrative units *regio Dyptensis* and *regio Geletika*, mentioned in the inscriptions in relation to the cities of *Serdica* and *Marcianopolis*, were not part of their territories but were rather neighbouring regions, situated within the province of *Moesia Inferior*. Her opinion was based on the presumption that *regiones* were only known from Lower Moesia and not from Thrace (TATSCHIEVA 2000, 73-74). Still, the analogous inscription for the erection of *burgi* and *praesidia* in the territory of *Augusta Traiana*, found at Shipka, also comprises the term *regio* (see BUYUKLIEV/GETOV 1964, 29-33; GEROV 1988, 154) and if it is not a *regio* from the Southern border of Moesia Inferior, but such from the territory of the said town, could disprove her theory. As a counterpoint, in the preserved text of the inscription for the territory of *Deultum*, situated in the hinterland of the province, no *regio* is mentioned (see KAZAROV 1927, 107-112).

²⁵ See TORBATOV 2012, 137-141; TORBATOV 2015, 151-153.

²⁶ DREMSIZOVA-NELCHINOVA 1984, 117; GEROV 1988, 76-77.

²⁷ See DINCHEV 1997, 74.

²⁸ GEROV 1988, 69-71.

²⁹ See GEROV 1988, 70-71.

³⁰ DREMSIZOVA-NELCHINOVA 1984, 120.

³¹ HARIZANOV 2019a, 126.

³² See COCKLE 1981, 87-97; also GALLIMORE 2010, 155-161.

³³ SULTOV 1985, 22-24.

³⁴ VLADKOVA 2011.

³⁵ The letter numbering of the described buildings is made according to the nomenclature of P. Vladkova (VLADKOVA 2011).

³⁶ SULTOV 1985, 22-24; VLADKOVA 2011; HARIZANOV 2019a, 128-140.

³⁷ See VLADKOVA et al. 2015, 444-448; CHAKAROV/ALEKSANDROV 2016, 493-497; CHAKAROV 2017, 498-501; CHAKAROV 2018a, 431-435.

Northwest of the central complex. Four separate buildings (nos. O-R) and no less than seventeen kilns were discovered, the latter situated near or (in one case) partially within the former³⁸.

Sector South was found a little more than 100 m to the South of sector West and about 140 m to the Southwest of sector Centre. Remains of living quarters were discovered here, separated by a stone wall of adjacently built premises with agricultural and artisanal designation. Seven or eight ceramic kilns were also found within this part of the complex³⁹.

Identified production installations

Most of the identified ceramic production installations were uncovered within the Central sector of the complex. Securely recognised and still preserved *in situ* were seventeen of probably eighteen or nineteen ceramic kilns. Another kiln-like structure was most likely used for pitch production⁴⁰.

Two large pits for clay extraction were also located within the Central sector⁴¹, while several of the discovered there buildings were also most probably used in various stages of ceramic production⁴². Two of these structures (nos. C and D) were identified by B. Sultov and later P. Vladkova respectively as a bath and living quarters⁴³. According to a recent hypothesis, the so-called bath was actually used for initial treatment of raw clay material (levigation, moistening and/or mixing clay with additives) and the presumed living quarters served as place for forming and artificial drying of ceramic products⁴⁴. Four or five of the other buildings (nos. A and K inside and nos. J, M and N outside the enclosure) were almost certainly used as workshop facilities and/or potters' dwellings at least in part of their exploitation period⁴⁵. Furthermore, three small intramural premises (G, H and I), structurally connected with two sheds, were identified as store rooms for agricultural stock and farming tools⁴⁶ or ceramic products⁴⁷.

To the North of the enclosure were situated buildings J and N and at least seven ceramic kilns, with six more kilns and two buildings (nos. L and M) being found to the Northeast of the latter⁴⁸.

The four uncovered buildings in the Western sector of the site were identified by B. Sultov as individual potters'

workshops, used by the craftsmen also as living spaces⁴⁹. P. Vladkova argued that two of them (nos. O and P) could have been used for housing in the first construction period and as potters' ateliers in the second one. She suggested that the third one (no. Q) had functioned either as a warehouse or as an additional workshop, while for the fourth building (no. R) there was a probability to have been used as a small temple. According to her, the discovered structures were part of adjacent to the estate *vicus*⁵⁰. The last opinion on the matter presumed that the buildings were used by individual potters both for living and working spaces, with the latter being located within a possible artisan's village, neighbouring the villa⁵¹.

The Southern part of the complex, with its separation of living spaces (where the most noticeable archaeological finds were discovered) and production installations, was supposedly used as residential quarters by the owner of the estate in the second construction period⁵². According to Vladkova, seven kilns were discovered within the enclosed yard, to the South of the residential quarter⁵³. However, on the site plan in the publication of B. Sultov there could be clearly seen two kilns to the North and six to the South of the said building⁵⁴. Furthermore, an abandoned clay pit, filled with discarded pottery, was also found within the yard⁵⁵. Some finds of early date (including coins of Nero, Claudius and Trajan), discovered within the crafting area together with the shapes of the described discarded ceramic vessels were accepted as an indication for a possible early start of the ceramic production in this sector, before the erection of the living quarters⁵⁶. Additionally, it could also be assumed that the filling of the abandoned clay pit with debris has been done during a repurposing of the space from a pottery crafting area to living quarters and place for other agricultural activities, absent the undesirable side effects of kiln firing.

Production repertoire

The major part of the production repertoire of the Varbovski livadi workshops was dedicated to red slipped fine wares, mostly tableware (plates, bowls, cups, table *amphorae* and pitchers), also ritual vessels (crater-shaped vessels, *paterae*) and kitchen or storage wares (sifters and pots). Ceramic building material, grey-black kitchenware (cooking pots, pans, bowls, lids), oil lamps, terracotta figurines and so-called medallions were also manufactured, but in smaller quantities⁵⁷.

Chronology

B. Sultov divided the habitation period of the site into four Phases, with the last one connected to a post-villa settlement. According to him, the first three Phases occurred between the beginning of the Second century and AD 170 (first: beginning of Second century – AD 120; second: AD

³⁸ SULTOV 1985, 22-24; VLADKOVA 2011, 40-43.

³⁹ SULTOV 1985, 24; VLADKOVA 2011, 43-44; HARIZANOV 2019a, 136-137.

⁴⁰ See HARIZANOV 2019a, 546-580.

⁴¹ See SULTOV 1985, 22-23.

⁴² HARIZANOV 2019a, 130-134.

⁴³ See SULTOV 1985, 22-24; VLADKOVA 2011, 29-34.

⁴⁴ See HARIZANOV 2019a, 133-134. If we accept the hypothesis from the cited work, the purpose of the entire Central sector could be described as related to agricultural and artisanal activities and, in such case, defined as an actual *pars rustica* of the villa, leaving the building in the Southern sector for the place of *pars urbana*. Furthermore, given the discrepancy of the dating of the two sectors, the site could have been established as a villa of category I (without living quarters for the owner) and in time developed as a villa of category II (with a living space for the owners) – see DINCHEV 1997, 115-125, for description of the two categories and examples of such settlement development.

⁴⁵ HARIZANOV 2019a, 131; 134-136.

⁴⁶ SULTOV 1985, 23.

⁴⁷ VLADKOVA 2011, 36-37.

⁴⁸ SULTOV 1985, 22-23; VLADKOVA 2011, 37-40; VLADKOVA *et alii* 2015, 448-449; HARIZANOV 2019a, 134-136.

⁴⁹ SULTOV 1985, 22-24.

⁵⁰ VLADKOVA 2011, 40-43.

⁵¹ HARIZANOV 2019a, 137-138.

⁵² VLADKOVA 2011, 43-44; 138.

⁵³ VLADKOVA 2011, 44.

⁵⁴ See SULTOV 1985, Table IV.

⁵⁵ SULTOV 1985, 24.

⁵⁶ See HARIZANOV 2019a, 136-137.

⁵⁷ SULTOV 1985, 22-25; 61-94; VLADKOVA 2011, 51-136; IVANOV 2018, 7-46; 53-54; IVANOV 2019, 1-31.

120 – AD 138; third: AD 138 – AD 170), when the estate suffered a major destruction during the Costoboci incursion. Simple dwellings belonging to a *vicus* were built after AD 170 and were used until the mid-Third century⁵⁸.

After detailed analysis of the discovered coins, P. Vladkova assumed that the estate was inhabited from the second half of the First century to the second quarter of the Third century, with two major construction periods, first – probably from the reign of Domitian to AD 170 and second – from AD 170 to the late 230s. The abovementioned post-villa settlement existed from the last decades of the Third century until the 360s⁵⁹.

As for the period of ceramic production, Sultov stated that fineware production began in the first decades of the Second century, while that of grey-black coarse wares started after AD 170⁶⁰. Vladkova argued that building ceramics were produced from the start of the site's occupation but that the manufacture of both fine and coarse pottery was developed after AD 170⁶¹. More recently she wrote that the latter happened around the mid-Second century⁶². Recent studies on the red slip vessels, manufactured at the site, led to another dating of this part of its production. The author claimed that red slipped items were produced only in the time between the reign of Hadrian or Antoninus Pius and the Costoboci incursion of AD 170⁶³. However, similarly to B. Sultov, S. Ivanov restricted the active period of the Varbovski livadi fineware workshops, and its starting date in particular, to a large extent on the basis of finds, discovered at sites, which were established at least two or three decades after the Varbovski livadi villa⁶⁴. Given this inconsistency of his arguments, his hypothesis has been questioned most recently⁶⁵, with additional support of previously laid assumptions, which had the evidence from the preserved *in situ* kilns also taken into account⁶⁶. According to the latter, the artisanal activities in the villa began immediately after its foundation in the late First century with brick and tile manufacture, while the production of fine wares probably started after that, but no later than the beginning of the Second century. The major part of the red slipped items were produced until AD 170, however there still isn't sufficient data for the secure setting the time for the total abandonment of this branch of the artisanal activity. As for the grey-black coarse wares, they were most likely manufactured during the Second and the first decades of the Third century, while some of their forms could have been produced during the post-villa occupation of the site⁶⁷.

⁵⁸ SULTOV 1985, 22-24.

⁵⁹ VLADKOVA 2011, 45-49; 137.

⁶⁰ SULTOV 1985, 22-25.

⁶¹ VLADKOVA 2011, 39; 137.

⁶² VLADKOVA 2014, 13.

⁶³ IVANOV 2018, 53-54; IVANOV 2019, 25-27. It should be noted, that the research of S. Ivanov enabled the thorough differentiation of the products of Varbovski livadi from those of Hotnitsa and especially Butovo, which have been more often referred to as "Pavlikeni-Butovo" in publications on the topic, because of the previous lack of precise information and knowledge on the subject.

⁶⁴ See SULTOV 1985, 61-94; IVANOV 2018, 8-38; IVANOV 2019, 3-21.

⁶⁵ HARIZANOV *in press*.

⁶⁶ See HARIZANOV 2015, 28-29; HARIZANOV 2019a, 139-140.

⁶⁷ For ceramic vessels found at the site of Varbovski livadi and dated to the Third – Fourth century see KABAKČIEVA/SULTOVA/VLADKOVA 1988, 12-14; 21-36; 39.

Workshop location and ownership

After its establishment, the site at Varbovski livadi was most likely located within the province of Thrace⁶⁸, while between AD 136 and AD 193 it was very close to the latter's border with *Moesia Inferior*. Its position is proven by a border marking from AD 136 found near the located closely to the North-Northwest villages of Nedan and Butovo⁶⁹. The latter village is one of the supposed locations of *Emporium Piretensium*. According to some researchers, this emporium should be identified precisely with the production site underneath the modern village of Butovo⁷⁰. According to B. Gerov, this site has been situated within the limits of the Thrace⁷¹, while M. Tacheva have disagreed, stating that it was part of Lower Moesia instead, but again situated very close to the borders between the two provinces⁷². In the latter case, the border line between the two provinces must have passed immediately to the west of the Roman villa at Varbovski livadi. On the same opinion is P. Vladkova, who argued that the villa was part of Thrace but wasn't included in the Nicopolitan territory at least until AD 136⁷³. Given all said, for now it seems more likely for the villa to have been part of Thrace until the provincial border relocation in AD 193.

As for the ownership of the Varbovski livadi estate, no secure evidence has been found so far. Nevertheless, two recent hypotheses must be mentioned in relation to this topic.

During the 1970s excavations, two branding irons⁷⁴ were discovered inside an abandoned clay pit (Fig. 3.1; 4.1) within the central sector of the villa⁷⁵, in context related to the first construction period of the complex. The tools bore the letters *T F G* – a supposed abbreviation of the name of the estate's owner⁷⁶.

In a recent salvage archaeological research, some 80 m to the Northeast of the Central sector, a funerary stele, one grave and a possible clay extraction pit were found. The preserved inscription on the stele informed that it was a

⁶⁸ According to S. Torbatov the first official demarcation of the borders of Thrace occurred in ca. AD 74 during the reign of Vespasian (see TORBATOV 2012, 112-113).

⁶⁹ This border stone is one of a number of such monuments erected, according to the preserved upon them text, during the reign of Hadrian and under the provincial governor *Antius Rufinus* in AD 136 for demarcation of the Northern border of *Thracia* with *Moesia Inferior* (for the text of inscription, see GEROV 1989, 197-198, no. 429; CIL III, 12407; for the Hadrianic border reform of AD 136, see TATSCHIEVA 2000, 62-65).

⁷⁰ For description of the available opinions and literature on the topic, see mostly TSAROV 2005, 47-52; TSAROV 2006, 45-57. The author of the cited articles denies the mentioned hypothesis and supports a previously made identification of *Emporium Piretensium* with the ruins near the modern village of Gorsko Kosovo, some 21 km to the South (a little to the Southwest) of Butovo and 16 km to the South-Southwest of Varbovski livadi. This opinion was also supported by I. Boyanov, who likewise mentioned all of the known controversies on the matter (see BOYANOV 2014b, 134-137).

⁷¹ GEROV 1979, 223-224.

⁷² See TATSCHIEVA 2000, 64. This is one of the reasons why this site is not included in the present contribution. Another argument in favour of his exclusion is the fact that most of the site's pottery workshops began their operations around the same time when *Nicopolis ad Istrum* (and Butovo at the latest) was transferred to *Moesia Inferior* (see HARIZANOV 2019a, 142-144).

⁷³ See VLADKOVA 2011, 137.

⁷⁴ For a thorough description and drawings of these tools, see MINCHEV 2004, 76-77; 79, Fig. 1; 96-97, Fig. 29.

⁷⁵ SULTOV 1977, 83; CHAKAROV 2018b, 74.

⁷⁶ VLADKOVA 2014, 14.

tombstone of one *Cai(us) Ursidi(us) Senecio*, who died at the age of forty (Fig. 4.4-5)⁷⁷. After examining the said name, the researcher concluded that the deceased was a Roman citizen of presumed Italian origin⁷⁸.

The grave, discovered some 4.50 m to the east of the stele, contained the buried remains of child and not the said person. Among the grave goods was a bronze coin of Hadrian, issued in AD 125-128. Due to its state of preservation, which indicated that it was used before being placed inside the grave, the author concluded that the burial could have taken place in the middle or the third quarter of the Second century⁷⁹.

The option for *Caius Ursidius* to have been the owner of the Varbovski livadi estate was thoroughly studied by K. Chakarov. He argued that the iron tools with the supposed abbreviated name of the owner (*TFG*) and the funerary stele were found in contexts of similar date (Second century for the former, middle – third quarter of the same century for the latter) and that in such a case *Caius Ursidius* was either not the owner, or that *TFG* didn't represent the latter's initials. His final conclusion was that, despite the lack of evidence for his actual position, the former used to live in the estate and was probably involved in its management⁸⁰.

If we assume that the mentioned letters were truly an abbreviation of the owner's name, then finding of attested in the epigraphic records person with such initials, who lived in the nearby region during the same period, could lead us to the landlord's identity. A votive plaque of the Thracian horseman, discovered less than 20 km to the Southwest of Varbovski livadi, near the modern village of Kramolin⁸¹, could shed some light on this matter (Fig. 4.2). The inscription preserved upon the find (*ILBulg 403; CIL III, 12419*) was made by one *Herculanus*, an actor of the estate of (*Titus*) *Flavius Gemell* (Fig. 4.3). The latter was supposedly a veteran from the army⁸². Both the name of this *Titus Flavius Gemell* and the fact that he owned an estate, managed by an actor, in the nearby region point him as a suitable candidate for a landlord of the Varbovski livadi villa⁸³. Furthermore, the said person had probably acquired his citizenship and lands under the Flavian dynasty⁸⁴, at the same time in which the villa was most likely founded⁸⁵.

'*Gemell*' (meaning 'twin')⁸⁶ appears to be more common for the Eastern part of the Empire, as could be judged by the

available epigraphic data. A search in the online data base of Roman period inscriptions provided evidence for the use of *Gemell* (in the Aegean and Asia Minor, also Macedonia, Dacia and the East), also *Gemellos* (Asia Minor, Macedonia, Central Greece, the Aegean, also in Egypt and the East) and *Gemellin* (almost exclusively in Dacia)⁸⁷. However, apart from the text of the described votive plaque, *Gemell* is mentioned in only three other inscriptions from *Moesia Inferior* and *Thracia*. The first one is from the sanctuary of Asclepius at Batkun near Pazardzhik, where a dedication by the *bouleut* *Gemellos Gemell* is found (*IGBulg III, 1, 1123*)⁸⁸. The second is a funerary inscription from the area of the Roman fort of *Iatrus* (near modern Krivina), where one *Iulius Gemell* is mentioned (*ILBulg 339*). The third is the well-known inscription from AD 227 found near Butovo (or the nearby Nedan), where the members of a Dionysian cult society (*bacchium vernaculorum*) are listed. Among them is a person called *Aurelius Sulu Gemell* (*ILBulg 438*). Given his name, he had probably received Roman citizenship after the Edict of Caracalla in c. AD 212-213⁸⁹, so a family relation to the said *Flavius Gemell* is not impossible but seems unlikely⁹⁰.

The possibility for *Titus Flavius Gemell* to have been the owner of the Varbovski livadi estate, at least in the first decades of its foundation, leaves open the question for the role of the abovementioned *Caius Ursidius*. In his publication, K. Chakarov suggested that the branding irons were discarded after a possible change in the ownership of the estate⁹¹. For such a change to be in concordance with the developed here hypothesis, this should have happened in the course of the Second century, probably in its first half. However, the discovered so far archaeological evidence indicate that if there have been such shift in ownership it should have occurred after the Costoboci incursion of AD 170, when the residential quarters in the Southern sector are erected. Even more, before the said incursion a hoard of 3727 coins had been concealed in a building from the Central sector, remaining hidden there for more than 1800 years. Conversely, consistent with the current dating of the funerary stele, *Caius Ursidius* probably died prior to AD 170, which discards the option for his participation in a possible change of ownership after the same year.

As for the supposed origin of *Titus Flavius Gemell*, the possibility for him to be a veteran from the army and at same time own an estate of considerable size needs further clarification.

As already mentioned, the name of this person indicates that he have probably received Roman citizenship under the Flavian dynasty⁹², which usually (but not

⁷⁷ I am grateful to the colleague Kalin Chakarov (Regional Historical Museum – Veliko Tŕrnovo) for providing me additional photos on the grave monument.

⁷⁸ CHAKAROV 2018b, 49-60.

⁷⁹ CHAKAROV 2018b, 60-62.

⁸⁰ CHAKAROV 2018b, 74-77.

⁸¹ The find was first published by G. Katsarov (see KAZAROW 1938, 107, no. 556; Abb. 285). For a list of Roman period discoveries in the region of Kramolin, including the mentioned votive plaque, see CHAKAROV 2019, 179-181. The votive monument in question is described also in an article by D. Boteva concerning dedicators with Roman names, who made offerings to the Thracian horseman (see BOTEVA 2007, 86-87).

⁸² See GEROV 1988, 45; 122.

⁸³ This suggestion has already been put forward briefly in a recent article by the author of this contribution (see HARIZANOV *in press*).

⁸⁴ See GEROV 1988, 45.

⁸⁵ See VLADKOVA 2011, 137.

⁸⁶ For this clarification and other important consultations regarding the included here epigraphic evidence, I am very grateful to Nicolay Sharankov (assistant professor, Sofia university).

⁸⁷ The research was done on the website <https://inscriptions.packhum.org/>.

⁸⁸ For the sanctuary and this inscription in particular, see VALCHEV 2015, 261-268. In the cited book, the name of this person is described as Roman (VALCHEV 2015, 267).

⁸⁹ For an overview on the spread of Roman citizenship right and the effect on the latter of *Constitutio Antoniniana*, see lastly LAVAN 2019b, 21-54. For the list from Butovo, see GEROV 1989, 201-203, no. 438 (CIL 438). For the attested during the Third century practise of using only the *nomen gentile* and examples for post-AD 212 Aurelians in Thrace, see SHARANKOV 2005, 281-282.

⁹⁰ I was consulted on this matter by N. Sharankov (assistant professor, Sofia University).

⁹¹ CHAKAROV 2018b, 74.

⁹² See GEROV 1988, 45.

exclusively) happened after a service in the army. Non-citizens were enlisted mostly in the auxiliary units and after Claudius had to serve no less than 25 years⁹³. Following their discharge, veterans usually received *missio numaria* or *missio agraria*, a retirement payment in money or land. *Missio agraria* was practised only until the time of Hadrian, when local recruitment was introduced⁹⁴, and most likely wasn't at all given to auxiliaries⁹⁵. So if *Gemell* was a peregrine with newly acquired citizen status, he probably served exactly in an auxiliary unit (although carrier as a legionary is not to be omitted). For a veteran to be able to afford an estate of sizeable proportions, he should have been an officer⁹⁶. When describing the rustic villas in the territory of Bulgaria, V. Dintchev argued that most of the discovered sites (including Varbovski livadi) were centres of large private or imperial domains, engaged in agriculture and some artisanal activities⁹⁷, above the financial abilities of the regular discharged soldiers. So, if *Gemell* was a former soldier he probably served as an officer in some auxiliary unit.

As for *Caius Ursidius*, it is possible that he was not the owner but rather a manager of the estate (similarly to the mentioned *Herculanus*), a suitable position for a Roman citizen. Yet another option for his status and occupation is related to the mentioned hypothesis, according to which the Western sector of the estate was inhabited by individual artisans⁹⁸ who were probably using both land and raw materials in exchange for a rent, paid to the landlord⁹⁹. If it is correct, he could have been one of these individuals.

1.3. Chatalka (Elhovo village, Stara Zagora district)

Site description

The site in the Chatalka locality is located 18 km to the Southwest of the Roman town of *Augusta Traiana*, modern day Stara Zagora, among the villages of Elhovo, Yavorovo and Mogilovo. Excavated during the 1960s, this rural agglomeration comprised a large villa with separately built *pars urbana* and *pars rustica*, another smaller villa, a satellite *vicus* and two tumular necropoleis (Fig. 1.3; 5), the latter used respectively by the inhabitants of the estate and the adjacent village¹⁰⁰.

Identified production installations

Facilities for ceramic production were discovered on three locations within the estate (Fig. 5.B, D-E). A small number of pottery kilns were unearthed beneath and near burial mound no. 4 (Fig. 5.E). Only one of the structures in

question was found partially preserved. It had circular plan of the combustion chamber and vertically arranged ceramic tubes, used as support for the perforated floor¹⁰¹.

A pair of tile kilns was discovered near the South-western corner of *pars rustica* of the villa (Fig. 5.D). The better preserved of the two structures had circular combustion chamber with a diameter of ca. 4 m¹⁰², which made it the largest documented circular kiln from that time in the territory of Bulgaria¹⁰³.

The third section of the estate, where ceramic production was developed, was located in the Eastern part of *pars rustica*, found in the Delimyonova niva locality (Fig. 5.B; 6). Divided of the rest of the complex with a stone wall, it included a workshop building, one large water basin, living quarters for the potters and another building, supposedly used by the manager of the artisanal activities. The workshop building comprised four premises. The largest room was the actual workshop, where two kilns, few clay pits, a channel for running water and stone platforms, most likely used as bases for potter's wheels, were found. The second and third premises had floors on suspension, while in the fourth a *praefurnium* was located. The described hypocaust system situated in the last three rooms had been used for pre-fire drying of the ceramic production¹⁰⁴.

Production repertoire

No publication concerning the locally made ceramic items exists. When describing the kiln site beneath mound no. 4, the excavators wrote that the pottery found there consisted of fine tableware, namely cups, bowls, plates and pitchers, with light coloured surface¹⁰⁵. The separately located tile kilns were most probably used for the firing of architectural terracotta¹⁰⁶.

The workshop located in *pars rustica* was involved in the production of fine tableware, as could be judged by the model for relief decoration discovered within premise A¹⁰⁷. It could also be suggested that most of the kitchenware, table *amphorae* and pitchers, discovered during the excavations of the villa, the *vicus* and the two necropoleis¹⁰⁸ were likewise locally made.

Chronology

According to D. Nikolov, *pars rustica* was erected simultaneously with the living quarters of the villa in the second half of the First century. After a devastation of both complexes in the mid-Third century, they were rebuilt. During the second period, the larger of the two indoor located kilns and the water basin within *pars rustica* were constructed¹⁰⁹. However, the discovered coins, only one of which has been dated to a time prior the 160s, indicate that it is much more plausible for this part of the estate to have been established after the Costoboci incursion of AD 170¹¹⁰. It was probably operational until some point in the second

⁹³ LAVAN 2019a, 28-31.

⁹⁴ GEROV 1988, 43.

⁹⁵ BOYANOV 2008, 253.

⁹⁶ A centurio, a prefect or with even higher rank – see BOYANOV 2008, 251-254.

⁹⁷ DINCHEV 1997, 115-131.

⁹⁸ See HARIZANOV 2019a, 137-140.

⁹⁹ For grouping of individual workshops around raw materials and profitable markets, both in sub-urban and rural context, see PEACOCK 1982, 103-113, POBLOME *et alii* 2001, 151-156. For the mentioned epigraphic evidence from Egypt of the lease of land by a landlord to craftsmen in exchange for vessels production, see COCKLE 1981, 87-97. For the site at Butovo, where a supposed cooperation of small producers but grouped in another kind of settlement structure could have existed, see PEACOCK 1982, 113; HARIZANOV 2019a, 142-144.

¹⁰⁰ NIKOLOV 1984, 5-73; BUYUKLIEV 1986; DINCHEV 1997, 60-67.

¹⁰¹ NIKOLOV 1984, 40; HARIZANOV 2019a, 461-462.

¹⁰² NIKOLOV 1984, 39-40.

¹⁰³ See HARIZANOV 2015, 52; HARIZANOV 2019a, 459-460.

¹⁰⁴ NIKOLOV 1984, 29-38; HARIZANOV 2016b, 34.

¹⁰⁵ NIKOLOV 1984, 40; BUYUKLIEV 1986, 19.

¹⁰⁶ NIKOLOV 1984, 39-40.

¹⁰⁷ NIKOLOV 1984, 35.

¹⁰⁸ See BUYUKLIEV 1986, 64-140.

¹⁰⁹ NIKOLOV 1984, 26-29; 38-39.

¹¹⁰ HARIZANOV 2015, 28; HARIZANOV 2019a, 125.

half of the Fourth century.

The pottery kilns near and beneath mound no. 4 were in operation most likely from the end of the First until the middle or the second half of the Second century¹¹¹, while the two tile kilns near *pars rustica* were related to the reconstruction of the villa in the mid-Third century¹¹² although there is also the option for their use in the initial construction of the entire complex or in the presumed post AD 170 erection of the farmyard.

Workshop location and ownership

The distance of only 18 km from the site to the Roman city of *Augusta Traiana* is a clear indication about its attribution to the latter's territory. This, however, must have occurred after the foundation of the city in the time of Trajan (or Hadrian) and the enlargement of the urban territories in Thrace at the expense of the still preserved *strategiae*, which most likely happened under Hadrian or the early years of the rule of Antoninus Pius at the latest¹¹³.

An inscription found near the village of Yavorovo, 3.5 km to the South of the Chataalka villa, gave reason for the hypothesis that the estate was owned by the family of one *Titus Flavius Dinis*. The inscription was made in honour of Zeus Sabazios by his priest, the said *Titus Flavius Dinis*, son of *Skeles*, who was also an archpriest (*archiereus*) of the Thracian *koinon*¹¹⁴. There is a discourse about the dating of the inscription. According to the first view, it should be dated to the Flavian period¹¹⁵, while a second opinion claims that the text has been composed around the time of Hadrian¹¹⁶. The last proposition on the subject sets the date in the late First or early Second century¹¹⁷.

M. Tacheva suggested that *Dinis* had acquired his Roman citizenship not as part of the army but as a descendant of the pre-Roman Thracian aristocracy, which preserved their privileged status after the Roman conquest¹¹⁸, a possibility noted also by B. Gerov¹¹⁹ and D. Boteva¹²⁰.

A recently found partially preserved inscription from the village of Kirilovo, some 5 km to the East of the Chataalka locality, contains the name of a possible relative (a son?) of *Dinis*, probably one *Titus Flavius Longinus*. This inscription is also dated to the very end of the First or more likely to the beginning of the Second century¹²¹. Names of other supposed members of the *Dinis* family were identified in two inscriptions from Stara Zagora (*Augusta Traiana*) dated to the Second – the first half of the Third century. These possible relatives of his were *Flavius Dinis* (son of *Longinus*) and his son *Titus Flavius Nepot*¹²². The last presumed member of the family is a priest called *Titus Flavius Skeles*¹²³. All of the latter three were most likely among the prominent citizens

of *Augusta Traiana*.

Consistent with the prestige of this family is the prosperity of the villa from the late First to the mid-Third century, best attested by the rich grave finds from the adjacent tumular necropolis¹²⁴. One of the earliest and richest graves contained Roman face-mask helmet as well as weapons and armour of possible Sarmatian or Parthian origin. A recent re-assessment of the find led to the conclusion that the buried individual served as an auxiliary officer in the Roman army and that he could have taken part in a military operation against the Sarmatians in AD 92. Furthermore, the authors of this publication acknowledge the possible connection of the said *Titus Flavius Dinis* with the Chataalka villa and suppose that he could be the actual person buried in the mentioned grave¹²⁵. However, in the inscription from Yavorovo *Dinis* is mentioned as a hereditary priest of Zeus Sabazios making an offering for the fifteenth time¹²⁶. Given that, if we suppose that each period of priesthood lasted for a year, he could have been priest for at least fifteen years in the time of setting the stele, thus pointing to a different type of carrier development. This, along with the fact that he was also the archpriest of the Thracian *koinon*, makes his enlistment in the Roman army as an auxiliary officer rather unlikely. It seems more probable that the supposed auxiliary officer buried in the Roshava Dragana mound was only a relative of the priest, but not *Dinis* himself.

Given the presented facts and hypotheses, it could be concluded that the Chataalka estate was most probably owned by the *Dinis* family and since it was established shortly after the mid-First century (in the third quarter?) it is possible that its founder was either the first *Dinis* himself or his father *Skeles*. If these assumptions prove to be correct, it would relate ceramic production to the range of economic activities of one of the most prominent families in the province.

1.4. Pokrovnik (Blagoevgrad district)

Site description

The most recently discovered Roman villa in Thrace, with developed ceramic production, was excavated near the town of Blagoevgrad during construction work for the Struma highway in 2017 and 2018. The discovered structures comprised a large villa complex and situated to the North of its buildings and production installations belonging to adjacent *vicus* (Fig. 1.4; 7). The two settlement structures were separated by a tomb complex, situated within a stone-walled enclosure¹²⁷.

Identified production installations

Eighteen firing installations were discovered among the ruins of the villa and the *vicus*. Twelve of these facilities were identified as ceramic kilns¹²⁸. Six kilns (nos. 2-4; 7; 9-10) were found close or within the villa complex (four with circular and two with quadrangular floor plan), with the rest (six of quadrangular plan, nos. 13-18) being discovered among the structures from the presumed *vicus* (Fig. 7).

¹²⁴ See BUYUKLIEV 1986.

¹²⁵ NEGIN/KAMISHEVA 2018, 45-70.

¹²⁶ See SHARANKOV 2015, 69.

¹²⁷ See DIMITROV/RAYCHEVA/RUSEV 2018, 374-377; DIMITROV/RAYCHEVA/RUSEV 2019, 380-382; DIMITROV 2019, 1-16.

¹²⁸ See DIMITROV/RAYCHEVA/RUSEV 2018, 374-377; DIMITROV/RAYCHEVA/RUSEV 2019, 380-382; DIMITROV 2019, 12.

¹¹¹ BUYUKLIEV 1986, 18-20.

¹¹² NIKOLOV 1984, 39-40.

¹¹³ See GEROV 1988, 38-40; BOTEVA 1992, 25-30; TATSCHIEVA 2004a, 47.

¹¹⁴ TATSCHIEVA 2004c, 191-194; see also GEROV 1988, 61.

¹¹⁵ See BOTEVA 1992, 27-28; TATSCHIEVA 2004c, 191-192.

¹¹⁶ See SHARANKOV 2007, 519, note 5.

¹¹⁷ SHARANKOV 2015, 69.

¹¹⁸ TATSCHIEVA 2004c, 193.

¹¹⁹ GEROV 1988, 60.

¹²⁰ BOTEVA 1992, 27.

¹²¹ SHARANKOV 2015, 69.

¹²² See NIKOLOV 1972, 135-139; GEROV 1988, 156; SHARANKOV 2015, 69.

¹²³ TATSCHIEVA 2004c, 194; SHARANKOV 2015, 69.

Production repertoire

Most of the kilns from the *vicus* were probably used for the production of ceramic building material, while for a few there is also a possibility for involvement in pottery manufacture.

Two or three of the villa kilns were also designed for brick and tile production, with the rest being most likely used in pottery production, including reduced fired vessels.

A number of loom weights (mostly with tipped tops) were discovered inside some of the tile kilns in both parts of the archaeological site. However, these were not kiln products but rather kiln furniture, used as props (stacking supports) for supporting the fired ceramic building material¹²⁹.

Chronology

The villa complex had two construction periods. The first one occurred in the Third century, when a villa of modest size existed on the spot. In the second construction period, between the end of the Third and the mid-Fifth century, the complex was enlarged and encompassed more than forty premises and four yards¹³⁰.

The buildings and facilities, situated within the *vicus*, were in use since the second half of the Second or the Third century. A second construction period occurred there during the Fourth century. After the end of the latter, the structures were probably abandoned¹³¹.

Most of the discovered kilns were in use during the Third and the Fourth centuries, while some could have been built during the second half of the Second century. An archaeomagnetic dating of three of the structures have provided terminal dates for their use in the second half of the Third century (ca. AD 252 – 290)¹³². The first of these three kilns was found beneath walls of the second villa complex and was probably in use during the first construction period of the site. The second and the third installations were located within the *vicus* and, in concordance with the latest dating, were likewise used during the first construction period. Given that the lifecycle of ceramic kilns could span from several years to several decades¹³³, the earliest dates for the construction of the three installations might be set in the first half of the Third century.

Workshop location and ownership

No secure data concerning the ownership of the estate was found during the excavations. Given the size of the villa complex it was probably owned by a wealthy landlord, maybe a citizen of *Pautalia*¹³⁴, to which territory belonged this part of the Struma valley during the Principate and probably the early Dominate¹³⁵.

As for the dwellings from the *vicus*, they were most likely inhabited by people engaged in the agricultural and artisanal activities developed by the villa's owner. The

presence of kilns near some of the buildings indicates that here could also have lived individual craftsmen, mostly engaged in the production of ceramic building material, leasing for that purpose both land and raw materials by the landlord¹³⁶.

1.5. Dragovishtitsa (Sofia district)

Site description

The last villa with traces of local ceramic production was discovered close to the Bulgarian capital Sofia (the Roman *Serdica*), near the village of Dragovishtitsa in 2015 (Fig. 1.5). An architectural complex, identified as living quarters of a rural estate, was excavated within the studied area¹³⁷.

Identified production installations

One ceramic kiln of quadrangular floor plan was found near the architectural complex¹³⁸.

Production repertoire

The kiln probably served for the firing of ceramic building material¹³⁹.

Chronology

The site was occupied from the second half of the Third until the beginning of the Fifth century¹⁴⁰. The kiln was most likely used during the initial construction of the estate¹⁴¹.

Workshop location and ownership

The site was located within the city territory of *Serdica*¹⁴². However, no data concerning the ownership of this complex has been found so far.

2. Ceramic workshops in artisan's villages

From the early Second century onwards, rural ceramic production in Roman Thrace was also developed in what appear to have been separate artisanal establishments. The sites in question have produced limited amount of data for spaces used for permanent habitation, together with an overall large number of discovered production installations.

2.1. Hotnitsa (Veliko Tynovo district)

Site description

The site near modern Hotnitsa was discovered during the 1960s about 2.5 km to the Southwest of the present day village, in an area close to a small river and in proximity to large stone quarries, exploited during the Roman period (Fig. 1.6; 8). Twenty one kilns (one dating to the Medieval Period) and a workshop building were excavated¹⁴³.

Identified production installations

The only discovered building had three adjoining rooms. A ceramic kiln and a clay pit were discovered in the central premise, while a stone platform, probably for a potter's wheel, was found in the eastern one. A domestic oven was excavated in the western room, which might have been used as a living space (Fig. 9). The building had a roof

¹²⁹ Finds of loom weights, reused in the same manner, are known from Greece (see HASAKI 2002, 91-96).

¹³⁰ DIMITROV/RAYCHEVA/RUSEV 2019, 381; DIMITROV 2019, 9-10.

¹³¹ DIMITROV/RAYCHEVA/RUSEV 2019, 381.

¹³² The analysis was made by the team of Dr. Maria Kostadinova-Avramova (Assoc. Prof., BAS).

¹³³ See HASAKI 2002, 297-299.

¹³⁴ For the rights of landlords to be elected in the council of the nearby city, to which territory their domains belong, see GEROV 1988, 89.

¹³⁵ See GEROV 1961, 245-249; 306-307; GEROV 1988, 139-140; TATSCHIEVA 2004b, 85-115; KATSAROVA 2005, 40-47; 241-245.

¹³⁶ Like in the supposed artisan's village at Varbovski livadi, see above.

¹³⁷ HRISTOV/TANEVA 2016, 539-542.

¹³⁸ HRISTOV/TANEVA 2016, 539-542.

¹³⁹ HARIZANOV *in press*.

¹⁴⁰ HRISTOV/TANEVA 2016, 539-542.

¹⁴¹ HARIZANOV *in press*.

¹⁴² For the city territory of *Serdica*, see GEROV 1988, 137-138.

¹⁴³ SULTOV 1985, 18-19.

made of tiles, some of which had ventilation openings¹⁴⁴.

Most of the kilns had circular floor plan and sunken or semi-sunken firing chambers, with central pillar(s) and tongue wall(s) being used as supports for the perforated floors. Several of the installations were grouped around common working platforms, while some had stoke pits surrounded by stone walls and placed under wooden sheds¹⁴⁵.

The lack of permanent dwellings and installations, which could have provided opportunities for year-round production activities, led to the conclusion that the centre at Hotnitsa could have operated only seasonally¹⁴⁶.

Production repertoire

Grey-black kitchen wares were the main items in the repertoire of the Hotnitsa workshops. The manufactured shapes comprised mostly baking pans, bowls, cooking pots and lids. Among the vessels with special function were *kerneli* and *turibulae*. Several varieties of flat-bottomed vessels (mostly red slipped) were also produced at the site. Common forms among the red slip table wares were cups, bowls and dishes, probably also crater-shaped vessels and sifters¹⁴⁷.

Chronology

According to B. Sultov, the kiln site at Hotnitsa functioned from the beginning of the Second until the mid-Third or the beginning of the Fourth century. Grey-black kitchenware was produced throughout the entire period, while the manufacture of fine tableware was practised for a short time around the mid-Second century, under the influence of the centre at Varbovski livadi¹⁴⁸. St. Ivanov stated that fine wares were produced around the second quarter or the second half of the Second century¹⁴⁹. It seems plausible that most of the kilns at the site were in operation until the mid-Third century, while some could have been used up to the beginning of the Fourth century¹⁵⁰.

Workshop location and ownership

B. Sultov supposed that the production of the Hotnitsa workshops was purposed for the nearby stonemason villages, related to the exploitation of the large stone quarries¹⁵¹. Vessels of presumed Hotnitsa origin were also discovered within the legionary camp of *Novae*¹⁵². The presence of Hotnitsa limestone in buildings of the Second and Third centuries at the same military site¹⁵³, led to the assumption that the ceramic products of the local workshops were distributed at *Novae* in relation (probably as a side product) to the trade with stone material¹⁵⁴.

According to some scientists, the organisation and management of stone quarries on the city territory were within the responsibilities of the city authorities¹⁵⁵, while

others have argued that these sites, including Hotnitsa, were emperor's property¹⁵⁶ and as such were administered by his representatives¹⁵⁷.

If the closely located stone quarries (some 4 km to the East) had been part of emperor's domain, the same could be supposed for the land where the kiln site was located. In such a case, there is the possibility that the potters were private entrepreneurs, who used the land and its resources in exchange for a rent¹⁵⁸. There is also the option for an organised production, managed by the *procurator* of the presumed domain or an administrator from the city of *Nicopolis ad Istrum*¹⁵⁹, to which territory the site's area was most likely ascribed in AD 136 at the latest¹⁶⁰.

2.2. Nova Nadezhda (Haskovo district)

Site description

The site at the modern village of Nova Nadezhda was discovered in 2013 close to the right bank of the Maritsa River (Fig. 1.7; 10). Five kilns, three clay pits, two ovens and a possible shed or a house were discovered¹⁶¹.

Identified production installations

Three of the kilns had circular combustion chambers (Fig. 11), while the fourth had floor plan close to a rectangle and a double *praefurnium* (Fig. 12). The fifth structure, initially described as a domestic oven¹⁶², was proved a kiln after the combined results of archaeometric analyses showed that it was fired in higher temperatures, similar to the ones achieved inside ceramic firing installations¹⁶³. The mentioned clay pits were discovered close to the kilns, with one of them being reused as a temporary dwelling after the end of the clay extraction¹⁶⁴.

Production repertoire

Ceramic building material (mostly tiles, smaller quantities of tubes and bricks) and mould-made terracotta figurines were among the earliest items produced at the site. However, the major part of the output of the Nova Nadezhda workshops was dedicated to table and kitchen wares. Common among the former were cups, bowls and dishes, while the latter were represented mostly by cooking pots, deep bowls and pitchers¹⁶⁵.

Chronology

The site was in operation from the time of Antoninus Pius (around the mid-Second century) until the mid-Third century at the latest¹⁶⁶.

Workshop location and ownership

The kiln site was most likely located within the city territory of *Augusta Traiana*¹⁶⁷. As for its exact nature,

¹⁴⁴ SULTOV 1985, 19; HARIZANOV 2019a, 686-687.

¹⁴⁵ SULTOV 1969, 12-16; SULTOV 1985, 19-20; HARIZANOV 2019a, 680-696.

¹⁴⁶ HARIZANOV 2019a, 149.

¹⁴⁷ SULTOV 1983, 17-27; SULTOV 1985, 21; 61-94; IVANOV 2018, 10; 15; 19; 25; 29; 40; 44-45.

¹⁴⁸ SULTOV 1969, 22-23; SULTOV 1985, 21; 30; 91-94.

¹⁴⁹ IVANOV 2018, 55.

¹⁵⁰ HARIZANOV 2015, 31; HARIZANOV 2019a, 147.

¹⁵¹ SULTOV 1985, 21; for the quarries see PETROVA/IVANOV 2008, 179-180.

¹⁵² SULTOV 1985, 84; KLENINA 2016, 433-434.

¹⁵³ See BIERNACKI/SKOCZYLAS 2003, 197-203.

¹⁵⁴ HARIZANOV *in press*-2.

¹⁵⁵ DIMITROV 2009, 307.

¹⁵⁶ PETROVA/IVANOV 2008, 166.

¹⁵⁷ See also GEROV 1988, 82.

¹⁵⁸ See above the suggestions for the presence of individual artisans at Varbovski livadi and the cited literature. Such renting of lands and resources of imperial domains was first approved by Hadrian, supposedly for increase of their financial profits (see BOYANOV 2014b, 143-145).

¹⁵⁹ See HARIZANOV 2019a, 149.

¹⁶⁰ See above the discussion for Varbovski livadi.

¹⁶¹ HARIZANOV 2016a, 581; HARIZANOV 2019a, 156-157.

¹⁶² HARIZANOV 2016a, 581-585.

¹⁶³ HARIZANOV 2019a, 156-157.

¹⁶⁴ HARIZANOV 2016a, 585.

¹⁶⁵ HARIZANOV 2016a, 586-589.

¹⁶⁶ HARIZANOV 2016a, 589-592; HARIZANOV 2019a, 157.

¹⁶⁷ For the territory of this city, see GEROV 1988, 137-138.

the excavated facilities are an indication for the seasonal character of the developed artisanal activities and respectively to the occupation of this site. Furthermore, the lack of permanent dwellings suggests that during the colder months of the year the potters probably lived at another, still undiscovered location. The mentioned on several occasions in this contribution possible cooperation of artisans, formed near places with available resources and developed trade routes, could have also been the case of the Nova Nadezhda workshops. The kilns were situated near the river bed, in an area with availability of raw clay, also river sand and wood, and were probably used by more than one atelier. In addition, the local potters were able to benefit from the good location by exporting their production via the Maritsa River and the closely located Central road¹⁶⁸.

2.3. Malko Tyrnovo (Burgas district)

Site location

In 1958 a Roman and Late Antique industrial site was explored close to the western vicinities of the modern town of Malko Tyrnovo (Fig. 1.8). Remains of a massive building with three premises were discovered on a small hillside in the eastern part of the studied area. Fourteen graves were found beneath the building's floor, in one of which there was a coin of Emperor Aurelian. To the West of it, on the next terrace down the slope, three stratigraphic layers of archaeological materials were distinguished. The upper one was formed in modern times, while the second consisted of considerable amount of copper slag lumps formed in Antiquity. The third layer contained the remains of several constructions – parts of dwellings and production installations, the latter dug into the bedrock¹⁶⁹.

Identified production installations

Four of the constructions, discovered in the western part of the site, were described by the author as metallurgical furnaces, used for copper smelting. He claimed that the copper ore was purified in crucibles, placed within those furnaces¹⁷⁰. However, among other uncertainties of this hypothesis, the installations in question were very similar to ceramic kilns (two of quadrangular floor plan – Fig. 13.2) and drying facilities (a drying shed and a dryer – Fig. 13.1), which led to the suggestion that they were actually used in ceramic manufacture¹⁷¹.

Production repertoire

The remains of ore extraction are a certain indication for this type of activity, which could have been practised in the nearby area, but in other, undiscovered during the excavations facilities. On the other hand, the ceramic building material, coarse wares and oil lamps, found in large number during the archaeological research, could have all been manufactured at the site¹⁷².

Chronology

In concordance with the discovered coin of Aurelian in one of the graves, the eastern building was dated to the Late Antiquity. The coins from the western sector were

issued between the early Third and the Sixth century¹⁷³. A re-examination of the numismatic material allowed the distinguishing of two habitation periods in this part of the site, first – from the early Third until the beginning or the first decades of the Fourth century and second – from the late Fifth – early Sixth century to the 560s or 570s¹⁷⁴.

Workshop location and ownership

V. Velkov suggested that the excavated production site was part of a Roman town due to the many discoveries of monumental building remains (such as columns, marble decorations etc.) and epigraphic evidence in the area underneath and around Malko Tyrnovo¹⁷⁵. Another proposition was made by B. Gerov, according to whom an imperial domain existed in the region, in relation to the large scale mining activities developed there. This hypothesis was based on inscriptions from the third quarter of the Second century. In the first, a local ethnic and trade organisation of people of Greek origin has been mentioned (*IGBulg III.2, 1859*). The second was made by an *actor*, for himself, his family and his *patron* (*IGBulg III.2, 1863*), but whether this *patron* was a private contractor of an imperial property or possessed a domain of his own in the region, is unknown. The third inscription is a funerary epigram of a freedman of *Marcus Antonius Rufus* (*CIL III, 8256*). The latter's family is known from the epigraphic records as a major contractor for imperial mines exploitation in the Danubian provinces, including North-western Thrace¹⁷⁶. As for the possible presence of an unidentified Roman town underneath Malko Tyrnovo, Gerov cites an inscription from the modern town (found after the research made by V. Velkov), where it is mentioned that this region was in the territory of *Bizye*, thus disproving the previous hypothesis of V. Velkov¹⁷⁷.

If we accept the option for the presence of an imperial domain in the area around Malko Tyrnovo, it is very likely that the some of its lands were leased to private entrepreneurs. The discovered production installations indicate a significant financial investment, which could have been made either by a wealthy individual or by a cooperation of craftsmen. If the latter is to be believed, the facilities in question could have been part of an artisan's settlement. However, given also the many finds of architectural elements in the area, there could have been located a centre of the imperial domain, as it is supposed for the architectural complex at Madara.

3. Workshops in villages and other rural sites

The other major category of rural settlements, where ceramic production in Thrace was attested for the Roman period, is the one where kilns were discovered in more or less inhabited environment. The exact nature of some of these sites remains uncertain, due to stage of the digs progress and/or the size of the excavated area.

3.1. Pavlikeni (Veliko Tyrnovo district)

Site description

During the 1950s remains of buildings and grave

¹⁶⁸ HARIZANOV 2016a, 592-593; HARIZANOV 2019a, 157.

¹⁶⁹ VELKOV 1965, 77-84; HARIZANOV 2016b, 36.

¹⁷⁰ VELKOV 1965, 79-92.

¹⁷¹ HARIZANOV 2016b, 36-37; HARIZANOV 2019a, 154-156; 499-502.

¹⁷² HARIZANOV 2016b, 37; HARIZANOV 2019a, 154-156.

¹⁷³ VELKOV 1965, 78; 86.

¹⁷⁴ HARIZANOV 2016b, 37; HARIZANOV 2019a, 155.

¹⁷⁵ VELKOV 1965, 93-99.

¹⁷⁶ GEROV 1988, 80-81.

¹⁷⁷ GEROV 1988, 55; 139.

monuments were found beneath the modern day town of Pavlikeni (Fig. 1.9). The researcher assumed that they were part of a Roman settlement¹⁷⁸. In 2015 and 2016, in the course of construction work in the same, north-western part of the modern town, nine pottery kilns and remains of few stone-walled buildings were uncovered¹⁷⁹.

Identified production installations

One stone-walled building with a tile roof (found fallen *in situ*) and adjacent water well, built probably within a stone enclosure, were discovered during the 1950s research. According to B. Sultov, the building could have served both as a craftsman's workshop and a store, due to the finds of stone *exagia*, a terracotta mould, also unfinished *arae* and more than forty coins¹⁸⁰.

The kilns from the 2015-2016 salvage excavations were found dug into a clayish layer of soil, in proximity to a small stream and were clustered in two groups, approximately 150 m apart, with some of them being situated near stone walls. The installations had circular floor plans, with central pillar or without an additional support for the perforated floors. Some of them had sunken or semi-sunken firing chambers. After their abandonment, they were used as rubbish pits¹⁸¹.

Production repertoire

A large amount of ceramic finds was discovered in the course of the 1950s excavations. Most of the vessels were fine table wares, covered in red slip with occasional external decoration (mostly *en barbotine*), while there were also fragments of *amphorae*. A mould for terracotta figurines, few oil lamps and loom weights were found as well¹⁸².

The finds from the 2015-2016 research included lamp moulds, discarded fine wares (mostly two-handled cups) along with a large number of fragments of more fine wares (cups, bowls), also *amphorae*, cooking pots etc.¹⁸³. According to St. Ivanov, the fine wares in question resembled those produced by the Butovo workshops¹⁸⁴.

Chronology

The coins (three silver and forty bronze examples) from the research of B. Sultov were issued between the reigns of Antoninus Pius and Gordian III. Single coins were minted under the said emperors, another twenty bore the impressions of members of the Severan dynasty (Septimius Severus, Iulia Domna, Caracalla, Iulia Mamaea, Elagabalus and Severus Alexander) and Macrinus, while the rest were unrecognised and described as Second and Third century coins. The earliest and the latest mentioned coins were used to determine the chronological frames of the site's occupation¹⁸⁵.

Similarly to the finds of B. Sultov, the coins from the most recent excavations comprised single example issued under Antoninus Pius, with the rest being minted during the Severan period (mostly during the reign of Caracalla and partly under Severus Alexander). According to K. Chakarov,

the kiln site was in operation during the last decade of the Second and the first three decades of the Third century¹⁸⁶.

Workshop location and ownership

As the closely located villa at Varbovski livadi, this site was also part of the province of Thrace and was most likely under the administrative jurisdiction of *Nicopolis ad Istrum* since AD 136 or the 190s at the latest¹⁸⁷. After describing the various archaeological and epigraphic discoveries from Pavlikeni and its vicinities, P. Vladkova states that a road station has most likely existed beneath the modern town. Her major argument was a dedication from the Severan period of a *beneficiarius consularis* of the *Legio I Italica* stationed at *Novae*, presumably related to the management of this road station and the organisation of the legion's supply¹⁸⁸. K. Chakarov complied with her hypothesis, adding that the local artisans have probably specialised mainly in the production of ceramic items, supplemented by stone working and other crafts¹⁸⁹.

The first attested road stations in Thrace and Moesia were most likely built under Nero to whose time are dated the earliest known inscription of construction of *tabernae* and *praetoria* along the Central road¹⁹⁰. The road stations of the Roman and Late Roman period differed in size and included buildings of various purposes such as inns, stables, baths, police posts and after Septimius Severus also warehouses, the latter supposedly related to the military *annona*¹⁹¹. According to B. Gerov, in the early Third century many of the existing road stations (or at least those on the main roads in Thrace) were transformed into *emporia*. Attested from the rule of Marcus Aurelius onwards, these semi-urban settlements were further developed under the Severan dynasty as shown by the inscription from *Pizos*. Apart from engagement in local trade, many inhabitants of these settlements were probably also employed in agriculture¹⁹². Another opinion on the matter claimed that *emporia* were established within the city territories most of all in order to ease the distribution and re-distribution of goods and increase the coin circulation¹⁹³. A third hypothesis, regarding the *Pizos* case in particular, suggests that it has been founded in order for better support of the state transportation system in this section of the Central road to be obtained¹⁹⁴.

Given the said, if a road station really existed beneath the modern town of Pavlikeni, it could have also been transformed into an *emporium* as its counterparts in Thrace, rather shortly after its secure establishment¹⁹⁵, regardless of it being placed within Moesian territory after AD 193¹⁹⁶.

¹⁸⁶ CHAKAROV 2017c, 52.

¹⁸⁷ See above, in the part for the site at Varbovki livadi, the presented facts and hypotheses for this section of the border line between Thrace and Lower Moesia during the Second century. See also TATSCHEVA 2000, 64, for the presumed limited size of the territory of *Nicopolis ad Istrum* until the Severan period.

¹⁸⁸ VLADKOVA 2011, 7-10.

¹⁸⁹ CHAKAROV 2017c, 52.

¹⁹⁰ KOLB 2018, 271-272.

¹⁹¹ TORBATOV 2004b, 81-82.

¹⁹² See GEROV 1988, 158-159; BOYANOV 2014b, 122.

¹⁹³ BOYANOV 2014a, 125-130; BOYANOV 2014b, 163-175.

¹⁹⁴ KOLB 2018, 273.

¹⁹⁵ The latter happened around the mid-Second century the earliest (see VLADKOVA 2011, 10).

¹⁹⁶ See above for the changes in the territories of *Moesia Inferior* and *Thracia*, and in particular – for the border section near the site at Varbovski livadi,

¹⁷⁸ SULTOV 1962, 7-20.

¹⁷⁹ CHAKAROV *et alii* 2016, 488-491; CHAKAROV 2017c, 49-52.

¹⁸⁰ SULTOV 1962, 7-15.

¹⁸¹ CHAKAROV *et alii* 2016, 488-491; CHAKAROV 2017c, 52-56.

¹⁸² SULTOV 1962, 8-9.

¹⁸³ CHAKAROV *et alii* 2016, 488-491; CHAKAROV 2016, 491-493; CHAKAROV 2017b, 502-506.

¹⁸⁴ IVANOV 2018, 54-55.

¹⁸⁵ SULTOV 1962, 15-16.

Such change in the status could be explained by its favourable position, on the crossroad between two important roads, leading respectively from *Novae* to *Augusta Traiana* and from *Marcianopolis* to *Melta*¹⁹⁷. Furthermore, even after the 190s border shift, it was still close to the Northern limits of Thrace, to which territory the *emporium Discoduratae*, located some 25 km to the South, remained securely attached at least until the 240s¹⁹⁸.

According to the *Pizos* inscription, the inhabitants of the *emporium* were relieved by paying taxes (*annona*, *fructus*) to the city on which territory it was established, as well as of the obligation of supplying animals for the state system of transportation (*cursus publicus*). The dwellers were classified in two groups, one of more wealthy people and one of landless peasants and petty farmers¹⁹⁹.

The so far visible scale of the ceramic production underneath modern Pavlikeni indicates that the craft was most likely developed by people of certain financial abilities, closer to those of the upper strata of the rural inhabitants of the presumed *emporium*. However, at this state of research nothing could be stated for certain.

3.2. Georgi Dobrevo (Lyubimets municipality, Haskovo district)

Site description

The rural complex near the modern day Georgi Dobrevo, Lyubimets municipality, was discovered in the course of a rescue archaeological research, related to the construction of Maritsa highway (Fig. 1.10; 14.1). Three buildings (including a *horreum*) and two ceramic kilns were found within the excavated area²⁰⁰.

Identified production installations

The ceramic kilns were discovered in the eastern part of the site, situated near a small river. The first installation had quadrangular combustion chamber and a central supporting pillar (Fig. 14.3), while the second had circular floor plan and again (most likely) central supporting pillar. The stoke pit of the larger kiln was placed under a shed covered with roof tiles. A clay depot was also found nearby²⁰¹.

The largest discovered building (Fig. 14.2), identified as a *horreum*²⁰², could have served also in certain stages of ceramic production. For instance, the presumed portico on the eastern side of the construction²⁰³ could have been used as a place for natural drying of ceramic building material and other pottery items, before their firing²⁰⁴.

Production repertoire

The larger of the two kilns was supposedly used for the manufacture of bricks and tiles²⁰⁵, while more recently was argued that it could have also been used for the firing

of domestic pottery²⁰⁶. The other kiln was involved in the production of kitchen and table wares (coated in red slip), mostly pots, pitchers, cups and bowls²⁰⁷.

Chronology

The kiln site functioned from the end of the Second until the mid-Third century, simultaneously with the use of the uncovered buildings²⁰⁸.

Workshop location and ownership

The discovered settlement was located within the city territory of *Hadrianopolis*. When analysing his exact nature, E. Pencheva assumed that the discovered buildings and production installations were most likely part of a separate household, located within the boundaries of a *vicus*. According to her, the small amount of manufactured pottery forms is an indication for non-specialised production purposed for the inhabitants of the complex²⁰⁹. On the contrary, the other opinion on the latter subject states that the restricted number of fabricated vessel shapes could be considered as a proof that the local atelier has been specialised in the production of small number of items, at least part of which intended for sale in the nearby area. Such a trade could have been eased by the location of the site near both the Maritsa River and the Diagonal road²¹⁰.

If we consider the supposed option for the type of settlement structure at hand, its owner could have been a wealthy dweller of a *vicus*, with substantial financial abilities which would have enabled him to support the manufacture of ceramic building material and domestic pottery (including red slip wares) as well as the other crafts, practised within the complex.

According to the researchers, agriculture and animal husbandry were also developed at certain scale. Furthermore, the discovered finds indicate divergent sources of goods supply, with olive oil, wine and other amphora-borne products coming mostly from the Aegean islands, fine table wares imported from the regions of *Pergamon* and Northern Africa, and oil lamps manufactured at Attic and Asia Minor workshops²¹¹.

However, there are other possibilities for the ownership of the discovered structures. The presence of a *horreum* of considerable size, a possible workshop or farm building (with light construction and a thatched roof), and the two kilns within the excavated area²¹² could be an indication for joint ownership of the stored grain (where the harvest of more individual producers could have been stored) and crafting merchandise by more than one of the inhabitants of the presumed *vicus*. In such case this could have been the industrial part of the settlement.

Of course there is also the possibility for the site to had been part of a villa estate, with the only discovered building with housing purpose²¹³ being used by a manager (*vilicus*?), engaged with the supervision of the developed various agricultural and artisanal activities.

located some 3 – 3.5 km to the West of Pavlikeni.

¹⁹⁷ See VLADKOVA 2011, 7; for the roads see TORBATOV 2004b, 89-90.

¹⁹⁸ See BOYANOV 2014b, 18-19.

¹⁹⁹ See GEROV 1988, 158-159.

²⁰⁰ PENCHEVA 2012, 33-49; PENCHEVA 2014.

²⁰¹ PENCHEVA 2010, 341-359; PENCHEVA 2011, 147-171; PENCHEVA 2014, 3-17; 23; HARIZANOV 2019a, 153; 411-414.

²⁰² See PENCHEVA 2012, 33-49.

²⁰³ See PENCHEVA 2012, 41.

²⁰⁴ See HARIZANOV 2019a, 9 and the cited there literature, for the use of protective covers as places for natural drying of ceramic production and the advantages of this practise over drying pottery out in the open.

²⁰⁵ PENCHEVA 2010, 347; PENCHEVA 2014, 15-16.

²⁰⁶ HARIZANOV 2019a, 411-412.

²⁰⁷ PENCHEVA 2011, 152; PENCHEVA 2014, 17.

²⁰⁸ PENCHEVA 2014, 17-25.

²⁰⁹ PENCHEVA 2014, 17-20.

²¹⁰ HARIZANOV 2019a, 153.

²¹¹ See PENCHEVA 2014, 17-24.

²¹² See PENCHEVA 2012, 33-49; PENCHEVA 2014, 14-17.

²¹³ For the latter see PENCHEVA 2014, 3-14.

3.3. Poletto (Simitli municipality, Blagoevgrad district)

Site description

The site near the modern village of Poletto, Simitli municipality, was discovered during the 1980s in the course of construction work near the Struma River (Fig. 1.11). One lime kiln, a water fountain and a ceramic kiln (Fig. 15) were excavated²¹⁴.

Identified production installations

The discovered ceramic kiln had rectangular floor plan and internal cross-walls, used as support for the perforated floor²¹⁵.

The water facility was found 100 m to the Southeast of the ceramic kiln, in the lowest part of the studied area. Described as a water fountain, the installation was used for the capture of a nearby water spring. The construction was solid, made of bricks and stones with mortar bonding. The water came through an arched opening in a stone wall, the latter used to support the northern slope of the terrain. Beneath it, there was a small two-step basin, surrounded by brick pavement. Other features of the installation included a pipeline and another small shaft, used according to the excavator for draining the water during cleaning and repairs²¹⁶. It seems very likely that the water capture was constructed in relation to the developed artisanal activities (or vice versa²¹⁷), given that water was needed both for lime and ceramic production. Furthermore, it is also possible that some of the features of the water facility were used in the process of initial clay preparation (breaking, purification, moistening, mixing and/or maturing).

Production repertoire

According to I. Kulov, the ceramic kiln was used for the production of ceramic building material²¹⁸. However, his hypothesis was based mostly on the shape of the kiln, since no production waste was mentioned. Given that kilns of rectangular floor plan were used for both pottery and tile manufacture²¹⁹, it could be assumed that the large quantity of fragmented and discarded ceramic vessels found near the three installations²²⁰ and outside their usual household context were also part of the workshop's repertoire.

Chronology

Three of the seven coins, found during the research, were recognised. They were minted in the reigns of Septimius Severus, Gordian III and Claudius II. In concordance with their dating, the site's exploitation was placed from the end of the Second until some point in the Third century²²¹, probably around the end of its third quarter.

Workshop location and ownership

The industrial site was situated in the Southern vicinity of a presumed Roman *vicus* (not excavated) of the

city territory of *Pautalia*²²², and its production was probably purposed for the inhabitants of this settlement²²³. Judging by the well-crafted production installations, their erection and maintenance required a certain amount of funds and work force. They could have been owned by a wealthy dweller of the settlement or else, a joint enterprise of the latter's inhabitants.

3.4. Breznik (Pernik district)

Site description

The archaeological site was discovered some 2 km to the South of the modern town of Breznik (Fig. 1.12). During the salvage excavations in 2016 and 2017 remains of a Roman rural site were found, comprising three stone-walled buildings, possible shed and three ceramic kilns²²⁴.

Identified production installations

The three ceramic kilns had quadrangular floor plan. Kiln no. 2 was situated in the Eastern part of the site, near a stone wall of a possible large shed. The combustion chamber, the stoking channel and the stoke pit were dug into the bedrock. The walls of the chamber, the two central supporting pillars and the remains of the perforated floor were all built of mud bricks and clay (Fig. 16).

The other two kilns (nos. 1 and 3) were found to the West of the first one (Fig. 17). Kiln no. 1 was built after kiln no. 3 was abandoned, with the southern section of the latter's lower chamber being reused as a part of the stoke pit of the former. Kiln no. 1 was also positioned on top of the bedrock. The lower chamber and the preserved tongue wall with side pilasters, used as support for the perforated floor, were built of full-sized bricks and clay.

Kiln no. 3 was also only partially preserved. The combustion chamber had been positioned upon the bedrock. In its centre were situated two central supporting walls, only one of which was found *in situ*. The preserved kiln parts were built of full-sized bricks and clay.

An interesting discovery was made in the northern part of the site, within building no. 2. Several connected pits, cut into the bedrock, were found there, together with a pit filled with purified clay²²⁵. They were probably part of an installation or installations, used in the initial treatment of the raw material²²⁶.

Production repertoire

The three installations were most probably used for the production of tiles, bricks and loom weights²²⁷. No secure data for pottery manufacture has been found until now.

Chronology

Two construction periods, the second with two phases, were identified on the site. The first period lasted from the second half of the Second until the 260s. The second period occurred between the 260s or 270s and the third quarter of the Fourth century. A date in the 310s or the 320s has been set as a margin of the two construction

²¹⁴ KULOV 2007, 132.

²¹⁵ KULOV 2007, 134-135; HARIZANOV 2019a, 620-621.

²¹⁶ KULOV 2007, 135-137.

²¹⁷ If the water catchment was the first construction in the area, its presence could have been the stimulus for the choice of location of the production installations.

²¹⁸ KULOV 2007, 134-135.

²¹⁹ See HARIZANOV 2019a, 118-122.

²²⁰ See KULOV 2007, 136-139, Fig. 9-11.

²²¹ KULOV 2007, 132; 139-140.

²²² For it see GEROV 1961, 177-184.

²²³ KULOV 2007, 132.

²²⁴ PAUNOVA/TRENDABILOVA 2017, 510-513; PAUNOVA 2018, 435-438.

²²⁵ PAUNOVA 2018, 436.

²²⁶ I would like to thank the Dig Director of the site, Vasilka Paunova (Regional Historical museum Pernik), for the additional information on the matter.

²²⁷ PAUNOVA 2018, 438.

phases²²⁸.

The installations in building no. 2 and kiln no. 2 were used during the first construction period. Kiln no. 3 was most likely in operation in the course of the first phase of the second period, while kiln no. 1 was exploited in the second Phase of the latter²²⁹.

Workshop location and ownership

The site was most likely located within the city territory of *Pautalia*²³⁰. According to the researchers, the discovered buildings and installations were part of the industrial section of a villa complex, with the latter being located (but not excavated) to the Southeast of the studied area²³¹. However, there still isn't sufficient data for proving this hypothesis.

3.5. Mezdra (Vratsa district)

Site description

The site at Kaleto locality was situated on a rocky hill in the South-western vicinities of the modern day town of Mezdra, on the left bank of the Iskar River (Fig. 1.13). A Roman fort existed for a short period on the spot, replaced after its devastation by a pagan sanctuary. In the Late Antique period a fortified settlement was founded at the same place²³².

A large rural (semi-urban?) settlement existed close to the hilltop, near the river bank. One building of considerable dimensions, a great amount of movable finds (pottery, coins, stone artefacts, etc.) and also rich graves from the local necropolis testify for its prosperity²³³.

Identified production installations

One partially preserved ceramic kiln, found filled with underfired pottery vessels, was discovered in the vicinity of the open settlement²³⁴.

Production repertoire

The pottery from the kiln in question comprised mostly cups with red slip coating. In addition, a double-sided ceramic die, used for producing stamped decoration, was found near the installation²³⁵.

Furthermore, a set of ceramic moulds for the production of vessels with applied decoration was discovered during the excavations of the pagan sanctuary. The four moulds represented deities (Heracles, Silvan and Athena) and were supposedly locally made²³⁶.

Chronology

According to the latest finds, the Roman fort at Kaleto was established around the mid-Second century and existed until a devastating attack, which occurred between the 170s and 190s. The site was reoccupied in the early Third century (probably in 220s or the 230s) when a pagan sanctuary was settled among its ruins. The cult complex functioned until the early Fourth century, with a margin between its two

construction phases set around the mid-Third century²³⁷.

The date for the establishment of the civic settlement underneath Mezdra is still under consideration. What is certain is that it existed in the Second and the first half of the Third century²³⁸. The settlement suffered from the same disastrous attack that ended the occupation of the nearby fort in the last decades of the Second century, after which the community was quickly revived²³⁹.

The moulds were discovered in context related to the first phase of the occupation of the religious centre²⁴⁰. The underfired vessels from the kiln were described as similar to the ones, discovered at the Kaleto site in contexts of the Third century²⁴¹. Given the said, the testified pottery workshop was most likely established in the late Second or early Third century and was in operation at least until the middle of the latter.

Workshop location and ownership

According to S. Torbatov, the two sites were situated near the road leading from *Oescus* to *Serdica* and were under the administrative jurisdiction of the city of *Serdica*. Furthermore, he identified the Roman fort with one of the four *praesidia* known from the epigraphic records to have been built in this region (*regio Dyptensium*) during the 150s²⁴².

As for the ownership of the ceramic workshop, no secure evidence concerning this issue has been found until now. It could be suggested, that it was owned by an inhabitant of the civic settlement and its production was purposed both for the local dwellers and the visitors of the nearby sanctuary.

3.6. Karanovo (Nova Zagora municipality, Sliven district)

Site description

Another Roman settlement was located 1 km to the Northwest of the present day village of Karanovo, Nova Zagora municipality (Fig. 1.14). During rescue excavations in the 1970s and the 1980s, remains of a rural settlement were discovered. They comprised a Roman sanctuary, a necropolis, a large building with thirteen premises, some smaller dwellings, several production installations, three consecutively built Christian basilicas and two separate fortifications²⁴³.

Identified production installations

An unknown number of lime kilns and tile kilns, along with two pottery kilns, were discovered in the western part of the settlement, close to buildings with artisanal or agricultural function. Only the pottery kilns were described in detail in the so far published articles. They were two-chambered, sunken structures²⁴⁴, had circular floor plan

²²⁸ PAUNOVA 2018, 438.

²²⁹ PAUNOVA 2018, 436; HARIZANOV *in press*.

²³⁰ See GEROV 1961, 245-249.

²³¹ PAUNOVA/TRENDABILOVA 2017, 512.

²³² TORBATOV 2015, 153.

²³³ MASHOV 1998, 16-19; TORBATOV 2009, 37-38; TORBATOV 2015, 153.

²³⁴ LUKA 2006, 163-164; TORBATOV 2009, 40.

²³⁵ LUKA 2006, 164; 167, Fig. 6; 168, Fig. 7; TORBATOV 2009, 40.

²³⁶ LUKA 2006, 161-170.

²³⁷ TORBATOV 2015, 153-157.

²³⁸ TORBATOV 2009, 37.

²³⁹ MASHOV 1998, 19.

²⁴⁰ LUKA 2006, 161.

²⁴¹ LUKA 2006, 164.

²⁴² TORBATOV 2015, 153-154; see also the same paragraph for the site at Madara.

²⁴³ IGNATOV 1999, 92-93; BORISOV 2009, 38-39; BORISOV 2013, 281-282.

²⁴⁴ For the employed here kiln terminology, as well as for the techniques and materials, used in the construction of the antique kilns in the modern territory of Bulgaria, see HARIZANOV 2019a, 38-66; HARIZANOV 2019b,

and were placed around a common stoke pit (Fig. 18). The smaller kiln had no support for the perforated floor, while the slightly larger installation had a central supporting pillar. The chambers were dug into the bedrock and plastered with clay, while the perforated floors were constructed of full-sized and fragmented tiles (mostly *imbrices*) and clay²⁴⁵.

Production repertoire

All of the pottery, discovered during the excavation of the kilns, has been described as locally made. Classified as kitchenware (red and grey-black coarse wares) and red slip tableware, the two groups included cooking pots, cups, bowls, plates, flat-bottomed *amphorae* (including two-handled jugs) and lids²⁴⁶. However, some of the plates are almost identical to shapes of the Eastern sigillata C (ESC, Çandarlı ware) and more precisely to forms Hayes 1 and 4 of the so-called “late series” of Çandarlı products²⁴⁷. Furthermore, these plates bore the same characteristics as the products of the *Pergamon* region – fine clay with pink-red to red colour after firing and good quality red gloss, thicker on the inside of the vessels²⁴⁸.

Chronology

According to B. Borisov, the site was inhabited from the mid-First century onwards. Four construction periods were distinguished for the Roman and late antique periods, first – from the mid-First to the middle/third quarter of the Third century, second – from the end of the Third/beginning of the Fourth century to the 370s, third – from the late Fourth/early Fifth to the middle of the Fifth century, and fourth – from the end of the Fifth/beginning of the Sixth to the end of the Sixth – beginning of the Seventh century²⁴⁹.

The ceramic workshop was presumably active in the second construction period and more precisely during the second half of the Third and possibly the beginning of the Fourth century. The dating was based on the shapes of the described pottery and the chronological distribution of the pointed parallels, found at other sites in both Lower Moesia (later *Moesia Secunda* and *Scythia Minor*) and Thrace (including later *Thracia* and *Haemimontus*)²⁵⁰.

Several arguments could be pointed out in favour of an earlier starting date for the manufacture of clay-formed items in this workshop. The ESC forms Hayes 1 and 4, which if not imported (as it seem more plausible) were at least imitated by the local craftsmen, were most common for the second half/last decades of the Second and first half (or a little later) of the Third century²⁵¹. In addition, some of the other locally made vessels from Karanovo find analogies in the production of closely located centres like Nova Nadezhda and *Augusta Traiana*²⁵² and more distant ones like

that at Pet mogili (Karavelovo)²⁵³, Hotnitsa and Varbovski livadi²⁵⁴. As already mentioned (see above), the first one was active from the mid-Second until the mid-Third century at the latest. The site from the South-western necropolis of *Augusta Traiana* functioned until the late Third or early Fourth century at the latest (see below), while the one at Pet mogili (Karavelovo) – either to the mid-Third²⁵⁵ or the beginning of the Fourth century at the latest²⁵⁶. The other described in this contribution sites at Varbovski livadi and Hotnitsa, functioned respectively to the 170s or 230s and to the mid-Third or early Fourth century (see above). Given all said, it could be assumed that the workshop at Karanovo started its operation at an earlier point, probably in the first half of the Third century. Furthermore, if we consider the first proposed ending date for the first construction period at the site²⁵⁷, it seems very likely that the kilns were used precisely in the course of this period (probably in its third phase). As for the terminal date of their operation, it could have happened before or after the beginning of the second construction period, when the first fortification wall was supposedly built²⁵⁸.

Workshop location and ownership

At the time of operation of the ceramic workshop, the site has been located within the city territory of *Augusta Traiana*²⁵⁹.

No secure data about the ownership of the workshop has been published so far. If we presume, as proposed above, that the workshop functioned during the first three quarters of the Third century, it should have coexisted with a round-shaped sanctuary building, a bath and another building with elongated floor plan. There is a proposition that in the course of the same period a small military detachment was stationed within the settlement²⁶⁰. As for the nature of the latter, there is a hypothesis, that, among others, the site at Karanovo was a *praesidium* located near a road and that it could have served as a permanent base of a Roman auxiliary unit²⁶¹. However, if such type of fortification really existed, it should have been built in the late Third or early Fourth century, as the current evidence suggests²⁶². As for the earlier period, the possibility for the existence of a road

production of the Nova Nadezhda workshops (HARIZANOV 2016a, 586; 590, Fig. 12). Also, Borisov's types 1 and 4 of the cooking pots, types 1, 2, 5-7 of the bowls and type 8 of the plates, in comparison to similar items from the kiln site in the South-western necropolis of *Augusta Traiana* (see respectively BORISOV 2013, 284-302; 326-333, Tables I-II, IV-VI, VIII; KALČEV 1991, 246-247; 258-263, Abb. 8-13).

²⁵³ See Borisov's type 3 of the amphora-shaped vessels and type 4 of the bowls (BORISOV 2013, 292-295; 303-304; 330, Table V; 334, Table IX) and their similarities with the locally made wares from Pet mogili / Karavelovo (IVANOV 2019, 271; 275).

²⁵⁴ See Borisov's type 6 for the bowls, types 8 and 9 for the plates, type 1 of the cooking pots (BORISOV 2013, 285-286; 297; 301-302; 326-327, Tables I-II; 331, Table VI; 333, Table VIII) and their analogies with Sultov's types 2 and 3 of the pots, the type of grey-black bowls and types 1, 2 and 3 of the dishes (SULTOV 1985, 84-86; Tables XLII-XLIII).

²⁵⁵ See IVANOV 2019, 281-282.

²⁵⁶ See HARIZANOV 2019a, 157-158; 161.

²⁵⁷ Based on latest coins of Aurelian – see BORISOV 2009, 42.

²⁵⁸ See BORISOV 2009, 42-43.

²⁵⁹ For the territory of the city, see again GEROV 1988, 137-138.

²⁶⁰ See BORISOV 2009, 40-42.

²⁶¹ NIKOLOV 1994, 128-129. On the terminology, functions and examples of *praesidia* in Moesia and Thrace, see TORBATOV 2004a, 36-37.

²⁶² See BORISOV 2009, 42-43.

15-39.

²⁴⁵ BORISOV 2005, 129-131; BORISOV 2009, 38; 44; BORISOV 2013, 283; HARIZANOV 2019a, 470-472.

²⁴⁶ BORISOV 2013, 284-307.

²⁴⁷ See Borisov types 1 and 5 of the plates (BORISOV 2013, 297-300; Table VII.1-3; 8-9) and their equivalents, respectively Hayes 4 and 1 of the Çandarlı products, common for the late Second and Third centuries (Hayes 4), and the second half of the Second – first half of the Third century (Hayes 1 – see HAYES 1972, 318-319; 321-322; HAYES 1985, 77-78).

²⁴⁸ See BORISOV 2013, 297; 300; 317-318; HAYES 1972, 316-317.

²⁴⁹ BORISOV 2009, 39; BORISOV 2013, 282.

²⁵⁰ BORISOV 2005, 137; BORISOV 2013, 307.

²⁵¹ See HAYES 1972, 318; 322; HAYES 1985, 77-78.

²⁵² See from the typology of B. Borisov, cooking pots type 4, bowls type 4 and 6b (BORISOV 2013, 329-331, Tables IV-VI) and their equivalents in the

station, but without the supposed fortification²⁶³ is worth considering. The site was most likely located very close to the road leading from *Anchialus*, via *Aquae Calidae* and *Cabyle* to *Augusta Traiana*²⁶⁴. It could have also been situated near a road leading from *Nicopolis ad Istrum* through the Tvarditsa pass to *Cabyle*²⁶⁵, or even on an intersection between the two roads. In addition to such an assumption, sanctuaries, baths (*balnea*) and buildings used for accommodation and various artisanal and/or agricultural activities are among the usually found structures in known from the Empire road stations²⁶⁶. Furthermore, if we accept the hypothesis that the described above settlement beneath modern Pavlikeni has also been a road station, the ceramic production developed at Karanovo is not going to be an exception²⁶⁷. With that being said, the workshop in question could have been owned by a person who lived in the settlement and had certain (although not significant) financial abilities.

4. The urban ceramic workshops

Urban ceramic production in the province of Thrace during the Principate has been attested indirectly in most of its towns. However, the direct archaeological proof is still limited and seldom published. The several excavated workshops, securely dated to the period, were located on the sites of the city of *Philippopolis* (nowadays Plovdiv), the towns of *Augusta Traiana* (modern-day Stara Zagora) and *Hadrianopolis* (modern Edirne, Turkey). The available data for the craft's presence in the rest of the urban settlements in Thrace is based mostly on secondary data²⁶⁸. The towns of *Nicopolis ad Istrum* and *Marcianopolis*, which were part of the province until AD 193²⁶⁹, are the other two urban settlements, where indications for functioning kilns sites of the period were likely being found. On the site of the first town, there were 21 magnetic anomalies, detected during a survey of the Northern extramural area, which were identified as ceramic kilns²⁷⁰.

During the 1950s, a pottery workshop with unspecified date was uncovered outside the Northern fortification wall of *Marcianopolis*, but the results weren't published in detail²⁷¹. Furthermore, a collective find of ceramic lamps, discovered inside the fortified area of the settlement in the 1970s, was supposedly locally manufactured during the first half of the 3rd c. AD²⁷² but whether in the discovered workshop or elsewhere, it is not sure. The two ceramic kilns, studied on different locations within the city (inside it and near the outer face of the Southern fortification wall), were dated to the Fourth – Fifth century²⁷³.

Given the location of the extramural workshop in *Marcianopolis* and the possible kiln site at *Nicopolis ad Istrum*

in comparison with the data for the development of the craft in the rest of the urban settlements in the province, it has been suggested that they were in operation until the mid-Third century at the latest²⁷⁴. However, until more archaeological evidence is found, this would remain only a hypothesis.

4.1. Philippopolis (modern Plovdiv)

Sites description

Four ceramic workshops²⁷⁵ from the chronological period in question have been studied so far on the site of the Roman city of *Philippopolis*, beneath modern Plovdiv (Fig. 1; 19). The first workshop (Ph-1) was located in an *insula* from the South-eastern part of the city, adjacent to the inner face of the later built Southern fortification wall. The second *officina* (Ph-2) was found to the South-east of the first one, close to the outer face of the same part of the city's fortifications, situated above the ruins of private houses from a previous construction period. The third atelier (Ph-3) was located close to the outer face of the Eastern fortification wall and was also established above the remains of private houses and a street, after they were both ruined. The fourth workshop (Ph-4) was excavated in the vicinities of the Roman city, to the South of its habitation area²⁷⁶.

Identified production installations

Ph-1 comprised eight kilns, a clay depot, waste pits and two wells, all situated in and near one building with a yard²⁷⁷. At Ph-2 three kilns situated around a common stoke pit were found, along with two water wells²⁷⁸. The preserved *in situ* production facilities of Ph-3 included one pottery kiln (with two construction periods), one basin for clay preparation, a ceramic pipeline, a clay depot, two sheds and several waste pits²⁷⁹. Four kilns (Fig. 20), one from the first and three from the second construction period of the site, two wells, two waste pits, a clay depot, clay extraction pits and possible sheds were studied at Ph-4²⁸⁰.

Production repertoire

Domestic pottery, terracotta figurines and oil lamps were produced in Ph-1²⁸¹. The repertoire of Ph-2 is not fully identified. However, at least part of its output was dedicated to table wares²⁸². Kitchenware, flat-bottomed *amphorae* and amphora stoppers were certainly produced at Ph-3, possibly together with terracotta figurines, oil lamps and tableware²⁸³. The repertoire of Ph-4 included mostly kitchenware, with smaller quantities of tableware and flat-bottomed *amphorae*²⁸⁴.

²⁷⁴ See HARIZANOV 2018, 302.

²⁷⁵ For the needs of this study, the four sites will be referred to as Ph-1 to Ph-4, numbered in the order of their description here. The same will be done for the four kiln site from *Augusta Traiana* (see below), which will be labelled ATr-1 to ATr-4.

²⁷⁶ HARIZANOV 2018, 300-301, Fig. 2.

²⁷⁷ MARTINOVA-KYUTOVA 2011, 341-342; HARIZANOV 2019a, 174; 596-597.

²⁷⁸ KOLEV 1973, 4; HARIZANOV 2019a, 174; 598-599.

²⁷⁹ BOSPATCHIEVA 1991, 87-93; BOSPATCHIEVA 2004, 89; HARIZANOV 2019a, 174-175; 600-602.

²⁸⁰ BOZHINOVA/HRISTEVA 2014, 390-393; HARIZANOV 2019a, 175; 603-608.

²⁸¹ MARTINOVA-KYUTOVA 2011, 342.

²⁸² See CHERNEVA 2006, 285-286.

²⁸³ BOSPATCHIEVA 1991, 93-109; BOSPATCHIEVA 2004, 89-104.

²⁸⁴ BOZHINOVA/HRISTEVA 2014, 393.

²⁶³ For the latter, see NIKOLOV 1994, 129; IGNATOV 1999, 93.

²⁶⁴ See TORBATOV 2004b, 90; MADZHAROV 2009, 195.

²⁶⁵ See DOCHEV 1994, 69-72; MADZHAROV 2009, 251-256.

²⁶⁶ See TORBATOV 2004b, 81-83.

²⁶⁷ A pottery kiln from the second half of the Second or the early Third century has also been found near the road station *Sostra* on the *Oescus* – *Philippopolis* road (see HARIZANOV 2019a, 163; 491).

²⁶⁸ See HARIZANOV 2018, 299-300.

²⁶⁹ See BOTEVA 1996, 173-176.

²⁷⁰ FALKNER 1999, 112, Note 2.

²⁷¹ MIRČEV/TONČEVA 1956, 69-79.

²⁷² MINČEV/GEORGIEV 1991, 223.

²⁷³ MINČEV/GEORGIEV 1991, 223-244.

Chronology

Ph-1 was in operation from the beginning of the Second to the beginning of the Third century AD²⁸⁵ or until the 170s²⁸⁶, when the new city's fortification wall was built²⁸⁷. Ph-2 probably functioned from the end of the Second²⁸⁸ until the mid-Third century AD²⁸⁹, when *Philippopolis* was besieged and ransacked by the Goths²⁹⁰. The first proposed dating of Ph-3 was from the second half of the Second to the mid-Third century²⁹¹, while later its period of operation was set in the Third and the early Fourth century AD²⁹². While some of the finds like terracotta figurines and lamps could be attributed to earlier times (and possible an earlier workshop at the same spot), the ceramic artefacts that were most certainly produced on the site were common for the period between the second half of the Third and the second half of the Fourth century AD, at the latest²⁹³. According to the discovered coins pottery and applied archaeomagnetic, Ph-4 probably functioned from the second half of the Third to the second half (third quarter?) of the Fourth century AD, at the latest²⁹⁴.

Workshop location and ownership

So far, there is no secure evidence for the owners of the workshops in *Philippopolis*. The location within an *insula* from the early Roman urban network along with the layout and size of Ph-1 indicate that its owner most likely had substantial financial abilities. However, until more information is published, nothing else could be said on the matter.

Ph-2, Ph-3 and Ph-4 demonstrate another type of urban workshop planning, where the production installations were being set up aside from the populated area of the city. However, Ph-2 and Ph-3 were located in the immediate vicinity of the inhabited zones, while Ph-4 was situated farther to the South of the latter, near one of the city necropoleis.

Given the location and dating of Ph-1 and Ph-2 it is not impossible for the two sites to have been owned by the same person or family. In such case, the production installations of the same workshop could have been relocated outside the fortified zone of the city, once the fortification wall was built, probably due to implemented safety regulations.

As for Ph-3, it was located within the so-called quarter of Eastern immigrants, where traces of the practise of other crafts have also been found²⁹⁵. Still, there is no secure data for tracing the origin of the potters who worked there and that of the workshop owner (if he was other than the employed craftsmen). Even more, some of the features of the excavated kiln could be viewed as evidence for a mix of both

Western and Eastern influence²⁹⁶.

The discovered production facilities and ceramic finds at Ph-1, Ph-3 and Ph-4 could serve as an indication for the significant amount of finances invested in the craft. Overall, it seems that the described workshops were able to achieve a substantial production output.

A possible owner of a ceramic workshop or an estate with developed agricultural production is one *Titus Flavius Dorzinthos*, whose name is found stamped on a *dolium* rim near the village of Dragomir close to Plovdiv. The said person was most likely a relative of *Tiberius Claudius Dorzinthos*, a philarch in *Philippopolis* during the Flavian period²⁹⁷. Given that *dolia* were used not only for storing of grain but also for wine production²⁹⁸ and wine storing²⁹⁹, it cannot be stated for sure what was the economic activity, developed by this member of the *Dorzinthos* family. He could have been both wine or grain producer and pottery workshop owner, as is seen by examples of known estates in Thrace³⁰⁰ and elsewhere in the empire, and also noted by some Roman agronomists³⁰¹.

4.2. Augusta Traiana (modern Stara Zagora)

Sites description

Four kiln sites (ATr-1 to ATr-4) have been excavated so far within the margins of the Roman town of *Augusta Traiana*, underneath modern Stara Zagora (Fig. 1; 21)³⁰². Two (ATr-1 and ATr-2) were discovered outside the city fortifications, among the grave structures from its South-western and Eastern necropoleis³⁰³. The remains of the other two potteries were found inside the fortified area of the town, close to the Southern gate (ATr-3)³⁰⁴ and in its Western intramural part (ATr-4)³⁰⁵.

Identified production installations

Seven kilns and two waste pits were discovered within ATr-1. The kilns had circular or quadrangular floor plan and central supporting pillars³⁰⁶. One kiln of quadrangular floor plan and support for the perforated floor comprising a central pillar and side pilasters (Fig. 22), along with a water basin (or a levigation/moistening tank), were found in ATr-2³⁰⁷.

The kiln from ATr-3 was found almost completely destroyed and no information concerning its construction had been published³⁰⁸.

ATr-4 was discovered in the Western part of the town. One kiln with circular floor plan and central supporting wall was found near a partially excavated stone-walled building.

²⁹⁶ See HARIZANOV 2019a, 100-101; 600-602.

²⁹⁷ See SHARANKOV 2004, 151-153.

²⁹⁸ See for example the winery at Madara – DREMSIZOVA-NELCHINOVA 1984, 95-97.

²⁹⁹ See PEÑA 2007, 20; 46-47.

³⁰⁰ For instance, the included here estates at Varbovski livadi and Madara, where *horrea* and in the second case also a winery were discovered along with the pottery producing facilities (see above).

³⁰¹ See AUBERT 1994, 204-206.

³⁰² HARIZANOV 2018, 302-303, Fig. 3.

³⁰³ KALČEV 1991, 245; 247.

³⁰⁴ See KALČEV 1991, 248.

³⁰⁵ See KAMISHEVA 2007, 302-304.

³⁰⁶ KALČEV 1989, 73-75; KALČEV 1991, 245-246; HARIZANOV 2019a, 181; 666-673.

³⁰⁷ KALČEV 1991, 248; HARIZANOV 2019a, 181; 675-676.

³⁰⁸ KALČEV 1991, 248.

²⁸⁵ MARTINOVA-KYUTOVA 2011, 342.

²⁸⁶ HARIZANOV 2015, 39; HARIZANOV 2018, 300; HARIZANOV 2019a, 176.

²⁸⁷ See TOPALILOV 2012, 375.

²⁸⁸ See KOLEV 1973, 4.

²⁸⁹ HARIZANOV 2018, 300.

²⁹⁰ For the latter, see TOPALILOV 2012, 375.

²⁹¹ BOSPATCHIEVA 1991, 101.

²⁹² BOSPATCHIEVA 2004, 93.

²⁹³ HARIZANOV 2018, 300; HARIZANOV 2019a, 174-175.

²⁹⁴ HARIZANOV 2018, 300; HARIZANOV 2019a, 175, with additional information on the topic by E. Bozhinova (Regional Archaeological Museum Plovdiv), to whom I once again express my gratitude.

²⁹⁵ See BOSPATCHIEVA 1991, 88.

Few clay pits were also uncovered near and above the production installation³⁰⁹.

Production repertoire

ATr-1 was involved in the production of red slip fine wares, red and grey-black coarse wares, oil lamps and probably a small quantity of terracotta figurines and plaques³¹⁰.

ATr-2 specialised in the manufacture of similar pottery categories – red slip fine wares and red and grey-black coarse wares³¹¹.

The ceramic vessels discovered during the excavations of ATr-3 included fine red slip wares and coarse wares³¹². However, not all of the finds from the three sites could be securely classified as locally made, given that some of the vessels show similar features with imported fine wares of possible Eastern (Eastern sigillata A, B and C, henceforth ESA, ESB, ESC) and African (African red slip ware, hereafter ARSW) origin³¹³.

No secure information about the production repertoire of ATr-4 has been initially found³¹⁴. However, during excavations in 2005 at another archaeological site situated to the West of the described workshop, near the inner face of the town's Western fortification wall, a large number of ceramic lamps dated to the middle and the second half of the Third century AD were discovered. The close proximity of the two sites led to a suggestion that the abovementioned kiln was part of a production centre, specialised (but not exclusively) in the manufacture of oil lamps³¹⁵.

Chronology

ATr-1 was dated to the early Third – late Third/early Fourth century in concordance with the data from the discovered finds and pottery, and also in relation to the stratigraphic position of the kilns and the grave structures, some of which were found above or beneath the production installations³¹⁶.

Judging by the discovered pottery and coins of Septimius Severus and Constantine I, ATr-2 most likely functioned from the late Second to the first decades of the Fourth century³¹⁷.

The finds related to the period of exploitation of the kiln from ATr-3 were dated between the beginning of the Third and the third quarter of the Fourth century³¹⁸. It has been assumed that the production installation functioned after the mid-Third century³¹⁹.

³⁰⁹ IVANOVA 2007, 302-304; HARIZANOV 2019a, 677.

³¹⁰ KALČEV 1989, 75; KALČEV 1991, 246-247; 257-267, Abb. 7-20.

³¹¹ KALČEV 1991, 247-248; 269-270; Abb. 22-23.

³¹² KALČEV 1991, 248; 271-273; Abb. 24-26.

³¹³ See for example the vessels illustrated at KALČEV 1991, 257, Abb. 7.1-2, 4; 258, Abb. 8.8; 269, Abb. 22.17; 271, Abb. 24.14-16, which stand very close to forms 1, 3 and 4 of Hayes' later series of Eastern sigillata C / Çandarlı ware (see HAYES 1972, 316-322). Also there are vessels of possible additional Eastern origin (ESA and ESB) – see KALČEV 1991, 257, Abb. 7.3; 271, Abb. 24.2, 5, and their similarities with forms Atlante 52 (ESA), Atlante 68 and 75 (ESB) (HAYES 1985, 38; 66; 68). The finds of presumable African origin (Hayes form 6 – see HAYES 1972, 28-31) could be seen at KALČEV 1991, 257, Abb. 7.5-6, 8.

³¹⁴ KAMISHEVA 2007, 303.

³¹⁵ KAMISHEVA 2010, 242.

³¹⁶ KALČEV 1989, 75; KALČEV 1991, 248.

³¹⁷ KALČEV 1991, 248.

³¹⁸ KALČEV 1991, 248.

³¹⁹ HARIZANOV 2018, 302-303.

ATr-4 has been initially dated to the Third – Fourth century³²⁰. Given the dating of the lamp assemblage, which was supposedly manufactured there, it could be suggested that it was likewise operational from the middle or the second half of the Third century onwards³²¹.

Workshop location and ownership

For now, nothing certain could be said for the ownership of the kiln sites in *Augusta Traiana*. The installations in the South-western necropolis could have been used by more than one workshop. Such clustering of production installations of more than one urban atelier has been attested at contemporary Roman towns from other provinces³²².

The testified presence in *Augusta Traiana* of members of the abovementioned family of *Titus Flavius Dinis*, the possible owners of the Chatalka villa, could relate them to the development of the potter's craft within the town as well. If they were really the landlords of this closely located villa, where ceramic production was practised for about a hundred years before its start in *Augusta Traiana*, they must have been among the most knowledgeable people engaged in such artisanal activities in the region. Furthermore, the date for the initiation of pottery manufacture in the town coincides with that for its major development within the estate (late Second – first half of the Third century). So, it could be assumed that at least one of the known urban potteries was possessed by the *Dinis* family. However, the present lack of any archaeological or epigraphic confirmation of such a possibility restricts this hypothesis.

4.3. Hadrianopolis (modern Edirne)

Site description

During 2002-2003 rescue excavations were conducted near the so-called Macedonia tower in Edirne, Turkey (Fig. 1; 23). Parts of the fortifications of Roman *Hadrianopolis* were revealed, together with five ceramic kilns and several buildings, dating from the Roman to the Ottoman period³²³.

In a Master's thesis, defended in 2008, L. Atli Akbuz examined the Roman age pottery from the excavations, including the findings from one of the discovered kilns, located outside the northern fortification wall³²⁴.

Identified production installations

The extramural kiln was found beneath tombs from the Byzantine period (Fig. 23). It had circular (close to hexagonal) floor plan and a central supporting pillar³²⁵.

Production repertoire

Twenty eight vessels were found inside the combustion chamber of the kiln. They were classified in three groups – open (cups, bowls, plates, etc.) and closed (pots, jugs, *amphoriskoi*, *oinochoai*, *amphorae*) forms of vessels for daily use, and *unguentaria*³²⁶.

Chronology

The kiln and the discovered pottery within it were dated to the Second century. The date was based both on

³²⁰ KAMISHEVA 2007, 303.

³²¹ HARIZANOV 2018, 302-303.

³²² See HARIZANOV 2018, 304-305 and the cited literature.

³²³ YILDIRIM 2006, 293-304.

³²⁴ ATLI AKBUZ 2008.

³²⁵ ATLI AKBUZ 2008, 19; Lev. 3-4.

³²⁶ ATLI AKBUZ 2008, 19-27; Lev. 5-24.

parallels of the vessels' shapes and the dating of the city fortifications. According to the author, the shapes were close to those made in the production centres at Butovo and Pavlikeni. Furthermore, the base of the kiln was discovered on the same level as the fortification wall, supposedly built in the time of Hadrian³²⁷. We have secure *terminus post quem* for the erection of the kiln in the 120s, when the town was established. However, the discovered pottery was most likely produced after the mid-Second century. Similar cups were produced during the second half of the Second and the first half of the Third century in the centres at Nova Nadezhda³²⁸ and *Augusta Traiana*³²⁹. Among the bowls are fragments very similar (or identical?) to the ESC form Hayes 3³³⁰, distributed mainly in the second half of the Second and the Third centuries³³¹. Conversely, some of the plates could find analogies in form Loeschke 9 of the same Eastern wares³³², common for the second half of the First and the Second century³³³. Judging by the said, it seems logical to set the date for the erection of the extramural production installation around the mid-Second century, while its abandonment could have happened at some point in the late Second or the first half of the Third century.

Workshop location and ownership

No data, concerning the ownership of this workshop has been published. Given that some of the presumed locally made forms resemble Eastern products, it could be suggested that the potter or potters, who worked here, were immigrants from Asia Minor. Of course, it is also possible that they were local craftsmen who followed the tendencies and produced pottery shapes popular in the region during that time period³³⁴.

II. DISCUSSION

The gathered and presented data about the ceramic workshops in Roman Thrace allows several aspects of the craft to be further analysed, namely the size, production repertoire and chronology of the studied ateliers and centres, along with to the potteries' ownership, the social status and financial abilities of the people engaged in the production and distribution of clay-formed items.

1. Chronological distribution

In a recent study on the ceramic kilns in the modern territory of Bulgaria, two major periods of development of the production of clay-formed items in the region were identified. In the course of the first of those periods, which occurred between the second half of the First century AD and the 370s, four distinct phases were recognised. The first three of those phases correspond to the time of the Principate and the first two or three decades of the Dominate and thus

to the time frame set for the present study³³⁵.

The presented periodisation could be used for the territory of *provincia Thracia* as well. During the first phase of the first period, which took place between the second half of the First and AD 170³³⁶, several rural workshops and only one urban atelier were securely established. The extra-urban sites were located mostly within villa estates – the ones at Varbovski livadi, Chataalka and Madara. The other two rural sites were situated within the presumed artisan's villages at Hotnitsa and Nova Nadezhda. The only securely dated urban workshop is from the city of *Philippopolis* (Ph-1). The other atelier of possible starting date before AD 170 is the extramural site at *Hadrianopolis*³³⁷. The only site, where ceramic production is supposedly terminated (or more likely only reduced) at that time is the one at Varbovski livadi.

The period between two of the most destructive series of Barbarian raids in Thrace – the Costoboci incursion of AD 170³³⁸ and the invasions of the Goths in ca. AD 248–251³³⁹, is set as a second phase of the first period of local ceramic production³⁴⁰. During that time a number of both smaller and larger workshops were founded. These include the kiln sites at the villa at Pokrovnik, also the ones with still unidentified status at Pavlikeni, Breznik, Malko Tyrnovo and possibly Karanovo (see above), the presumed *vici* at Georgi Dobrev, Mezdra and Poletto. This is also the period of significant advancement of urban ceramic production, with functioning ateliers being attested at *Philippopolis* (Ph-2), *Augusta Traiana* (ATr-1, ATr-2), *Hadrianopolis* and possibly also at *Marcianopolis*.

The rest of the included here time period, i.e. the second half of the Third century with a possible extension in the first years or decades of the Fourth century, has been set as a third phase in the development of ceramic production in the modern Bulgarian lands³⁴¹. After the disastrous Barbarian invasions of the mid-Third century the number of operating rural workshops has been severely reduced. Starting from the 230s onwards, the production sites (in most cases along with the entire settlements) at Varbovski livadi, Nova Nadezhda, Georgi Dobrev and possibly also Pavlikeni and Mezdra were abandoned. Terminal dates around the middle of this century are likewise the most plausible for the extramural urban kiln sites at *Hadrianopolis* (at the latest), Ph-2 at *Philippopolis* and maybe *Marcianopolis*, and also for the severe reduction (or abandonment) of pottery manufacture at the artisan's village at Hotnitsa.

Only one new rural kiln site is securely dated to that period – the one at the Dragovishtitsa villa³⁴². However,

³²⁷ ATLI AKBUZ 2008, 27–28.

³²⁸ See HARIZANOV 2016a, 586; 591, Fig. 13.

³²⁹ Here since the late Second century – see KALČEV 1991, 258–259, Abb. 8–9.

³³⁰ See ATLI AKBUZ 2008, Lev. 15.

³³¹ See HAYES 1985, 78.

³³² See ATLI AKBUZ 2008, Lev. 16.

³³³ See HAYES 1985, 76.

³³⁴ For the import of Eastern sigillata C (Çandarlı wares) in this part of Thrace, see lastly HARIZANOV *in press-2* and the cited there literature.

³³⁵ See HARIZANOV 2019a, 194–199.

³³⁶ See HARIZANOV 2019a, 195.

³³⁷ However, judging by the discovered there pottery (see above), it seems much more likely for this site to have started its operation in the last quarter of the Second century.

³³⁸ Which prompted the fortification of the cities in Thrace during the reign of Marcus Aurelius, see for example LOZANOV 2015, 87.

³³⁹ For the two periods of invasion and their devastating effect on the settlement life in Thrace, see for instance IVANOV 1999, 109–110; BOTEVA 2001, 37–44; VARBANOV 2012, 289–310.

³⁴⁰ See HARIZANOV 2019a, 195–196.

³⁴¹ See HARIZANOV 2019a, 196.

³⁴² Given that the kiln was most likely used only for the production of ceramic building material for the needs of the estate, it cannot be related to the supply and trade with ceramic items in the province.

at the same time several urban potteries were most likely established at *Philippopolis* (Ph-3? and Ph-4) and *Augusta Traiana* (ATr-3? and ATr-4?). If correct, this observation could be considered as an indication that the urban ateliers were founded as a result of the decline of rural ceramic production and the resulting lack of sufficient pottery supply.

The rural sites at Poleto and possibly Karanovo functioned until the 270s or the 280s. The ones at Malko Tyrnovo and Hotnitsa were in operation until the early Fourth century at the latest, with a similar terminal date being the last possible for the Karanovo workshop and the extramural kiln sites (ATr-1 and ATr-2) at *Augusta Traiana* as well.

The only sites where a continuation of the artisanal activities is observed are the ones at Breznik, Madara, Chatalka and Pokrovnik, which functioned until some point in the second half of the Fourth century. This is also the last possible time for the abandonment of the extramural pottery producing sites (Ph-3 and Ph-4) at *Philippopolis*³⁴³.

2. Workshop location

The so far identified ceramic workshops were located within several city territories and possible imperial domains in Thrace.

Starting from North to South, the site at Varbovski livadi was most likely located in the territory of a Roman *strategia* – *Rusike*, if we accept M. Tacheva's opinion that the latter was situated in the region of the future *Nicopolis*³⁴⁴. However, B. Gerov seeks *Rusike* around the auxiliary fort at *Abritus*³⁴⁵, so there could have been another administrative unit in this area. As for the period after Trajan's urbanisation, to the West of the territory of *Nicopolis*, Gerov describes a rural *regio* with administrative centre at *Melta* (modern Lovech), while to the Southwest (around modern Sevlievo) – another rural region – *civitas Usdicensis*³⁴⁶. If the city territory of *Nicopolis* settled in AD 136 did not reach the area of Varbovski livadi, the site should have been incorporated in another rural *civitas*, given that the mentioned two regions (*Meltensis* and *Usdicensis*) were supposedly included within Moesia Inferior. The latest time of its inclusion in the city territory of *Nicopolis ad Istrum* is in the 190s, before or after the relocation of the town and his hinterland from Thrace to Lower Moesia³⁴⁷.

The site at Pavlikeni was also most likely located within the city territory of *Nicopolis ad Istrum* starting from AD 136 or the 190s at the latest. However, as said above, in AD 193 both Pavlikeni and Varbovski livadi were transferred to *Moesia Inferior* along with the rest of the Nicopolitan territory.

³⁴³ Where however tile kilns of later date were also found (see HARIZANOV 2019a, 175-176). Furthermore, after the beginning of the Fourth century there was again a noticeable development in ceramic production within the province (now compared to the second half of the Third century). This development however was to a large extent limited to the production of ceramic building material (likely related to the large scale building initiatives of the state) and less to that of domestic pottery (see HARIZANOV 2019a, 197).

³⁴⁴ See TATSCHIEVA 2004a, 35.

³⁴⁵ See GEROV 1988, 36.

³⁴⁶ See GEROV 1988, 114-116.

³⁴⁷ For the border relocation in AD 193 and the possible date in the late 190s of enlargement of the city territory of *Nicopolis*, see BOTEVA 1996, 173-176.

The site at Hotnitsa was likewise probably within the territory of *Nicopolis ad Istrum* since AD 136, while on the other hand there is also a possibility for its inclusion in an imperial domain, related to the exploitation of the nearby stone quarries.

The site at Madara was located within the territory of Thrace either until AD 136 or AD 193, depending on where the Northern provincial border was set in the mid-period. During that time and later it was either part of the city territory of *Marcianopolis* (*regio Geletica*?) or (more likely) placed within an imperial domain.

The territory of *Serdica* included production sites both to the North and South of the *Haemus mons*. To the North was the one at Mezdra (within *regio Dyptensis*?), while to the South – the villa at Dragovishtitsa.

The territory of *Pautalia* encompassed the sites at Breznik, Poleto and Pokrovnik. Of the so far excavated potteries, under the administrative jurisdiction of *Philippopolis* were only the city workshops. Conversely, within the territory of *Augusta Traiana* were most likely situated also the sites at Chatalka, Nova Nadezhda and Karanovo.

The site at Georgi Dobrev was located within the territory of *Hadrianopolis*, while the one at Malko Tyrnovo was either under the jurisdiction of *Bizye* or within an imperial domain, related to the exploitation of the local copper ore mines.

Apart from the urban sites, the nature of almost half of the rural ones is still disputable. The ones at Chatalka, Dragovishtitsa and Madara were located within the settlement structure of Roman villas. The same is likewise true for Varbovski livadi and Pokrovnik, however, at these sites production installations (around a half of all studied kilns) were situated also within adjacent *vici* (?). The site at Breznik is also presumed to have been part of a villa complex, but for now there still isn't sufficient data for its proper identification.

The ones at Hotnitsa, Nova Nadezhda and Malko Tyrnovo were most likely organised as separate artisan's villages, aside from the permanent dwellings of the craftsmen. The possibility to be placed within the compounds of a road station is noted for the sites at Pavlikeni and Karanovo.

The settlements at Mezdra and Georgi Dobrev were most likely with the status of *vici*, however of different nature – semi-urban for the first one and rural for the second.

3. Organisation of the production

Several modes of organisation of the manufacturing process have been attested in Roman Thrace.

Two major groups could be defined regarding the time cycles of production. Most of the described kiln sites were active only during the warmer part of the year. Installations (indoor located kilns, clay pits and facilities for clay treatment, drying sheds or dryers, etc.) that could have enabled year-round production activity were identified at the sites of Varbovski livadi, Chatalka and most likely Malko Tyrnovo. It is possible that some of the other potteries, especially urban ateliers like the earliest in *Philippopolis*, could have possessed such facilities and thus the prospect for operation throughout the year.

As for the precise layout of the production installations, several types of positioning could be recognised. Two types of internal organisation were attested for the urban potteries. According to the first one the production facilities were situated in or near a permanent building, which might have been also used as a dwelling. Two or three of the excavated workshops were settled in this manner – Ph-1 at *Philippopolis*, ATr-4 and probably also ATr-3 at *Augusta Traiana*.

The production process at the rest of the excavated urban kiln sites at *Philippopolis* (Ph-2, Ph-3 and Ph-4), *Augusta Traiana* (ATr-1 and ATr-2) and *Hadrianopolis* was organised in more or less open areas, separated of the potters' living spaces. At these locations the indoor-related activities were most probably carried out under wooden sheds, as judging by the discovered remains of such constructions at the last two potteries in *Philippopolis*.

The greater options for the use of large open spaces at the rural sites are mirrored by the more divergent organisation schemes attested there. Two types of internal organisation are observed within the villa estates. The first one is clustering of the production installations at a certain distance from the inhabited zone of the settlement and without the use of permanent workshop buildings, which is attested at Madara and the first kiln site at Chataalka. The kilns at Varbovski livadi and Pokrovnik were situated closer to the houses of the local dwellers, both in the zones of the villa complex and the one of the adjacent *vici*, while at least some (if not most) were located next to a permanent workshop. The second kiln site at Chataalka was likewise closer to the habitation zone, while the third was found within a permanent building. The kiln at Dragovishtitsa was also located near the residential part of the villa (most likely in order to be closer to the building during its erection).

The presumed artisan's villages at Hotnitsa, Nova Nadezhda and Malko Tyrnovo were situated aside from permanently inhabited zones. The kilns at Nova Nadezhda were scattered near the exploited clay depots. A similar lack of planning is observed at Hotnitsa, where most of the kilns were likewise situated near the deposits of raw material, while one was located within the only permanent building at the site. The lack of precise data for the Malko Tyrnovo site impedes this part of the analysis. However, it seems that the kilns there were located close to permanent buildings and probable workshops.

The separate location of production installations is also attested for the site at Poletto, while clustering closer to the inhabited zone is observed at the sites of Georgi Dobrev, Karanovo, probably Breznik and Mezdra. The situation for the site of Pavlikeni is unclear, given the lack of data for the precise inhabited area of the settlement. However, the discovered kilns were also grouped around used clay deposits, but probably not far from the permanent dwellings of the potters and the houses of the other local inhabitants.

4. Production repertoire

Fine wares, mostly table wares, were one of the major categories of products of the workshops in Thrace. They were certainly manufactured at nine rural sites (Chataalka, Varbovski livadi, Hotnitsa, Madara, Nova Nadezhda, Georgi

Dobrev, Pavlikeni, Mezdra, Karanovo) and possibly also at three more (Pokrovnik, Poletto, Malko Tyrnovo). Only the sites at Breznik and Dragovishtitsa have failed until now to supply evidence for such a production. Among the urban workshops, fine wares were produced in *Philippopolis* (Ph-1 (?), Ph-2, Ph-3 (?), Ph-4), *Augusta Traiana* (ATr-1, ATr-2, ATr-3 (?)) and *Hadrianopolis*.

Coarse wares, and most of all kitchenware, were another of the major categories of manufactured items. They were produced at the same rural sites where fine wares were made, excluding the one at Mezdra, for which there is no sufficient information. In urban context, kitchenware was produced in *Philippopolis* (Ph-1, Ph-3, Ph-4), *Augusta Traiana* (ATr-1, ATr-2, ATr-3) and *Hadrianopolis*.

Oil lamps, terracotta figurines and/or so-called medalions were surely made at Varbovski livadi, Madara, Nova Nadezhda, *Philippopolis* (Ph-1, Ph-3), *Augusta Traiana* (ATr-1, ATr-4) and probably also Chataalka, Pavlikeni, Malko Tyrnovo and *Marcianopolis*.

Ceramic building material, mostly tiles, less frequently bricks and tubes, was part of the assortment of eight rural workshops (Chataalka, Varbovski livadi, Nova Nadezhda, Georgi Dobrev, Poletto, Pokrovnik, Breznik, Dragovishtitsa), while the ones at Karanovo and Malko Tyrnovo were also possible producers. Despite the discoveries of stamped bricks in the vicinities of Madara (see Gerov 1988, 75-76), no examples certainly produced there have been found until now. Among the urban sites possible evidence for such a production exists until now only for *Philippopolis* (Ph-1).

It should be noted that despite the lack of archaeological data for big rural producers of ceramic building material during the Principate, they were probably located precisely in the countryside of the province³⁴⁸. So far, the evidence for the urban workshops in Thrace indicates that this part of the artisanal activity wasn't developed there in larger scale until the Late Roman period. Furthermore, it has been assumed that the occasionally found tile kilns of earlier date in urban context could have been related to building programs initiated by the city or the state authorities, for example the fortification of the Thracian cities in the 170s³⁴⁹.

5. Distribution patterns

Due to the current state of research, the territorial distribution of the products of most of the studied here kiln sites is yet unknown. However, in a recent study comments were made on the used trade routes by the potters at Varbovski livadi, Hotnitsa and Nova Nadezhda³⁵⁰.

The site at Varbovski livadi was most likely one of the largest producers in Thrace at the time. Its products have been identified at the necropolis at Butovo and the nearby region³⁵¹, as well as at the legionary camp of *Novae*³⁵² and

³⁴⁸ See also AUBERT 1994, 204, who argues that the production with a higher demand for quantity of raw material, like bricks, tiles, dolia and amphorae, was usually produced closer to the exploited large clay beds in the countryside.

³⁴⁹ See HARIZANOV 2018, 299-308.

³⁵⁰ See HARIZANOV *in press*.

³⁵¹ SULTOV 1985, 61-103; VLADKOVA 2014, 13; IVANOV 2019, 27.

³⁵² VLADKOVA 2014, 13; KLENINA 2016, 426; 430-431. In the recent years, chemical reference groups for ceramic products of Butovo, Pavlikeni (i.e. Varbovski livadi) and *Novae* have been established (see BARANOWSKI, DASZKIEWICZ 2009, 125-152; DASZKIEWICZ *et alii* 2018, 541-549).

probably also to South of *Haemus mons*³⁵³. Being one of the earliest ceramic workshops in Thrace, and North of the *Haemus mons* in particular, the site at Varbovski livadi was most likely able to exploit the increasing demand for cheaper and easily accessible fineware by the Roman soldiers and immigrant settlers in the province³⁵⁴.

Hotnitsa coarse wares were likewise supposedly found at *Novae*³⁵⁵, while according to B. Sultov, most of the workshops' production has been designated for the villages of the stonemasons, who worked at the closely located quarries³⁵⁶. As part of a usually locally distributed class of pottery, the coarse wares of the Hotnitsa workshops were probably able to reach more distant places like *Novae* as a side product of other local goods, most likely stone material from the nearby quarries, which was used for construction projects in the military camp during the Second and the first half of the Third century³⁵⁷.

The site at Nova Nadezhda, on the other hand, seems to have benefited from its location near the Central road and the large Maritsa River. A possible indication for the outreach of its products is the discovery of similar items at the site at Georgi Dobrev³⁵⁸, situated near the same road, about 40 km to the East – South-east of the former³⁵⁹.

In a recent study on the supply of fine wares along the Central road, excavated during the 1930s sites near Mladinovo and Svilengrad were examined³⁶⁰. Some of the discovered there vessels find analogies within the described as locally produced pottery assemblages at *Hadrianopolis*³⁶¹. The location of these sites (burial mounds of local villages) in the territory of the latter city probably eased the reaching of its ceramic products in the considered area, both through local traders or by individual purchase.

The presented observations, however, cannot be considered proven, before an interdisciplinary approach is undertaken, including significant increase in the number of produced chemical analyses of pottery finds from the kiln sites and their supposed destinations.

6. Social status of the potters and the workshops' landlords

The presented data for the location and internal organisation of the ceramic workshops in Thrace indicate that the most widespread type of organised production was the individual workshop³⁶². Some of these ateliers were clustered

near available resources and developed trade routes, and occasionally incorporated in single settlement units. Most of the craftsmen who lived and worked there were likely among the lower class of the population of the province, with a status of free but landless people. They were able to work through paying taxes both to the state and probably the local landlord or administrative unit (town, rural *civitas*, etc.)³⁶³. Others could have been part of the middle class of the rural inhabitants, for example enfranchised army veterans, able to own plots of land³⁶⁴.

On the other hand, some of the villa workshops (like Chataalka and Varbovski livadi), as well as few urban ateliers (like Ph-1), were most likely owned by a wealthier class of people, most of whom had Roman citizenship and were able to take important administrative posts both within the nearby towns and the province in general³⁶⁵. These people were either directly engaged in the organisation of production or, more likely, were able to do that through their subordinates (*vilici*, *actores*, *procuratores*)³⁶⁶. Furthermore, the mentioned estates in Varbovski livadi and Pokrovnik seem to have accommodated individual craftsmen in the adjacent *vici*, so leasing of land and resources to them is a plausible suggestion.

Additionally, the location of some production centres within presumed imperial domains indicate that the state could have also had financial interest in the craft, likewise by lending land and resources to private entrepreneurs or by directly organising production via the imperial *procuratores* or their subordinates.

The available epigraphic records do not provide further assistance in the clarification of this issue. Until now, no data is found for the presence of potter's guilds (*collegia*, *koina*) in Thrace, as the ones attested for example in Roman Egypt³⁶⁷ and *Ephessos* in Asia Minor³⁶⁸. The inscriptions from Thrace contain information for the presence of a number of other craftsmen guilds, for example *collegia* of stone workers (*IGBulg II*, 664) and leather workers (*IGBulg II*, 674) in *Nicopolis ad Istrum* and its hinterland³⁶⁹, producers of woollen fabrics (*IGBulg III.1*, 916) and leather workers in *Philippopolis*³⁷⁰ a fullers guild in *Augusta Traiana* (*IGBulg V*, 5585)³⁷¹, the mentioned *collegium* of Hellenic metal workers near Malko Tyrnovo (*IGBulg III.2*, 1859)³⁷², etc. In addition, one fragmentary preserved inscription from *Serdica* (*IGBulg*

Some of the samples of supposed Butovo and Pavlikeni origin were found in *Novae*. However, the small total number of included samples with certain or supposed origin from Varbovski livadi in particular, for now limits the credibility of the established results for this centre.

³⁵³ IVANOV 2019, 27.

³⁵⁴ HARIZANOV *in press*.

³⁵⁵ SULTOV 1985, 84; KLENINA 2016, 433-434.

³⁵⁶ SULTOV 1985, 21; 93.

³⁵⁷ HARIZANOV *in press*; for the Hotnitsa stone in *Novae*, see BIERNACKI/SKOCZYLAS 2003, 197-203.

³⁵⁸ See PENCHEVA 2014, 4; 9.

³⁵⁹ HARIZANOV *in press*.

³⁶⁰ See HARIZANOV *in press*-2.

³⁶¹ For the latter see ATLI AKBUZ 2008, 19-27; Lev. 5-24.

³⁶² See PEACOCK 1982, 90-103, for the used terminology and examples of individual workshops and also for the so-called nucleated industries throughout the empire. Furthermore, see FÜLLE 1997, 121-127, for extrapolation of evidence for nucleated production of pottery, *amphorae* and ceramic building material through analysis of the mentioned contracts from

Egypt and archaeological data from Spain, Italy and France.

³⁶³ Similar situation is attested in Roman Egypt, where some of the mentioned in papyri potters were even slaves (see MAYERSON 2000, 97-100). However, as pointed by Sc. Gallimore, the papyrological evidence does not mention potters who operated their own workshops (see GALLIMORE 2010, 159).

³⁶⁴ As for example was one of the supposed workshop owners in the production centre at Butovo, judging by the military diploma discovered in one of the excavated buildings (see BOYANOV 2008, 152). However, opposite to the opinion of I. Boyanov, the retired soldier most probably was not the owner of the whole centre but rather the *possessor* of one of the individual workshops there (see HARIZANOV 2019a, 143).

³⁶⁵ For example in the *koinon* of the Thracian cities, like the mentioned *Titus Flavius Dinis*, the supposed owner of the Chataalka villa.

³⁶⁶ See also AUBERT 1994, 204-207, for a discussion on the topic.

³⁶⁷ See GALLIMORE 2010, 161 and the cited literature.

³⁶⁸ See İÇTEN/ENGELMANN 1998, 88.

³⁶⁹ See MITEVA 2019, 51-62.

³⁷⁰ See CHERNEVA 2011, 99-105.

³⁷¹ SHARANKOV 2013, 391.

³⁷² See GEROV 1988, 80-81.

IV, 1922) contains a list of craftsmen and salesmen, who worked in the town³⁷³. However, potters are not among the mentioned there professions either³⁷⁴.

Despite the present lack of epigraphic evidence, it seems very likely that the ceramic producers in Thrace could have had *collegia* of their own, especially in cities like *Philippopolis* and *Augusta Traiana*, where their craft was developed in larger scale, as seen by the available archaeological data.

CONCLUSION

During the first three centuries of Roman rule in Thrace, ceramic production was developed there in an unprecedented scale. Pottery and ceramic building material was manufactured in large quantities by people of different social status and, most likely, also ethnic background³⁷⁵.

The considerable size and complex layout of the workshops from the initial phase of ceramic production under Roman rule could be viewed as a proof for the development of the craft by people with certain financial abilities and social status (local dynasts, immigrant civilians, enfranchised itinerant and indigenous army veterans), who were among the first to perceive and advertise the Roman way of life through, on the one side, the new construction techniques and materials, and, on the other, the concomitant culture of eating and drinking, visible through the archaeological discoveries of pottery and other vessels used for the purpose.

Thus, we can accept as one of the signs of peaceful Romanisation the large scale development of the ceramics' craft in Thrace that occurred in the Second and Third centuries AD and through which both ceramic building material and the usually (but in my opinion wrongly) referred to as "luxury pottery" fineware were able to reach in significant quantities even the simplest villages and households from the interior of the province.

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³⁷³ DETSCHEW 1933, 115-116.

³⁷⁴ I am grateful to Nicolay Sharankov (assistant professor, Sofia University) who drew this list to my attention.

³⁷⁵ The diversity of craftsmen origin is further proven by the various techniques and materials used in kiln construction, where influences from the Western provinces and Italy, nowadays Greece and/or Asia Minor have been attested (see HARIZANOV 2019a, 204-208; HARIZANOV 2019b, 28-30).

https://www.academia.edu/41454904/Roman_pottery_from_Hadrianopolis_modern_Edirne_in_eastern_Thrace_northwestern_Turkey_Hadrianopolis_Roma_D%C3%B6nemi_Seramigi

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Fig. 1. The province of Thrace, AD 136-193 (provincial border after TATSCHÉVA 2000, 76, Obr. 2; design and additions by A. Harizanov).

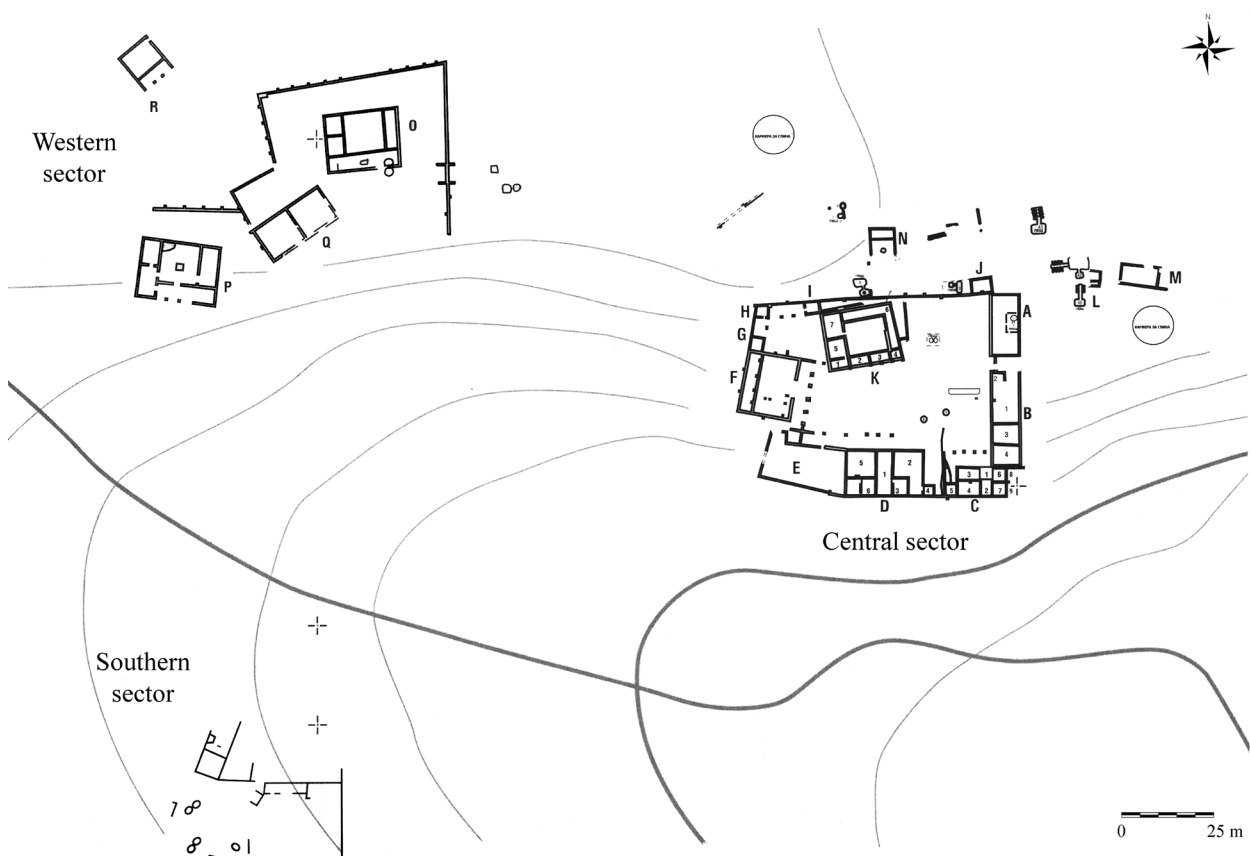


Fig. 2. The villa and possible vicus in the Varbovski livadi locality (after VLADKOVA 2011, 24; additions by A. Harizanov).

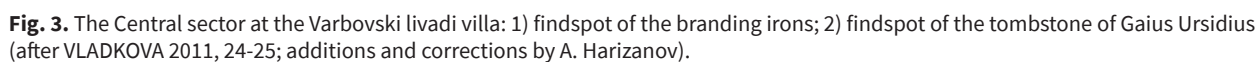




Fig. 4. Possible epigraphic evidence for the landlord of the Varbovski livadi villa (not to scale): 1) branding irons with the letters TFG; 2-3) votive stone tile with inscription; 4-5) tombstone and the preserved upon it inscription (after: MINCHEV 2004, 79, Fig. 1; 95, Fig. 29; KAZAROW 1938, Taff. XLVIII, 285; GEROV 1989, 187, no. 403; CHAKAROV 2018, 82, Fig. 4; 58).



Fig. 5. The archaeological sites in the Chatalka locality: A) *pars urbana* of the large villa; B) *pars rustica* of the large villa; C) smaller villa in the Lambata locality; D) tile kilns; E) pottery kilns; F) *vicus*; G) Medieval fortification; 1-20) burial mounds (after NIKOLOV 1984, 30, Obr. 36; with additions and corrections by A. Harizanov).

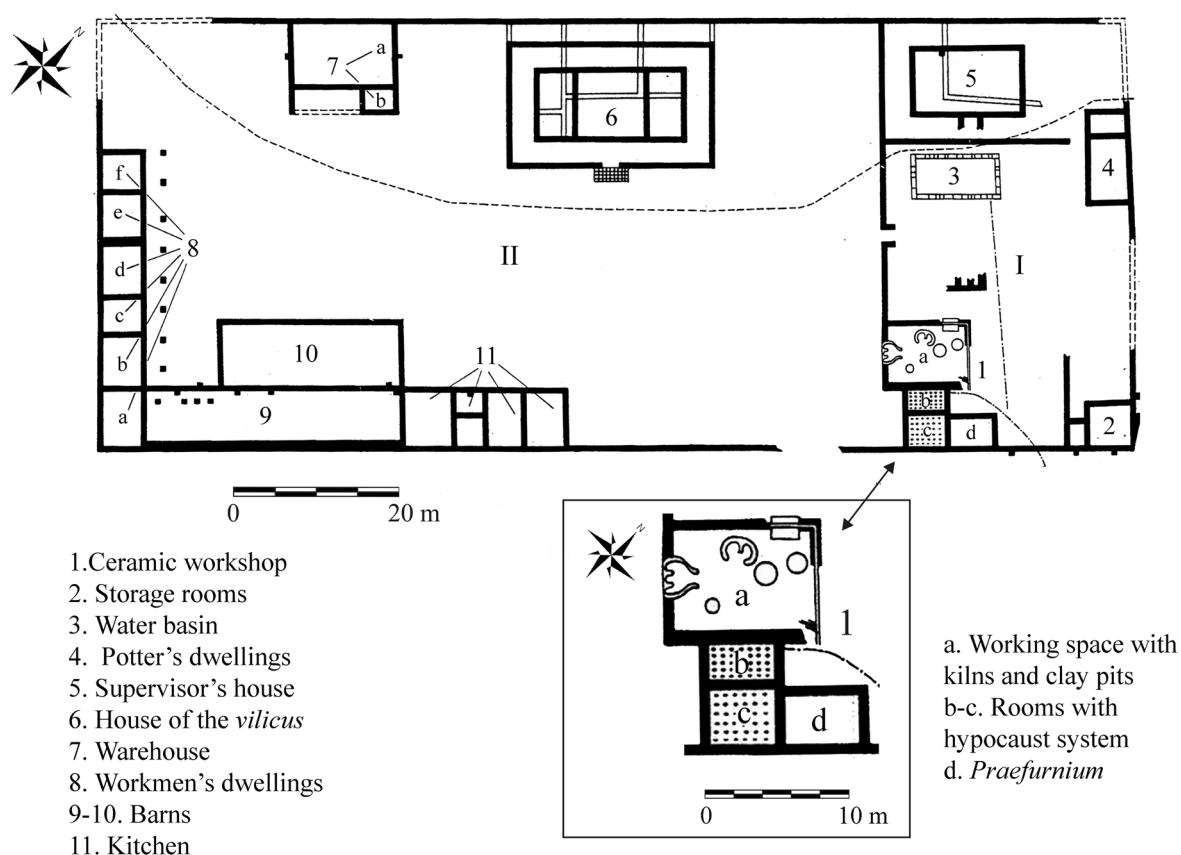


Fig. 6. The Roman villa in the Chatalka locality: *pars rustica* in Delimyonova niva locality and the ceramic workshop (after NIKOLOV 1984, 30, Obr. 36; with additions and corrections by A. Harizanov).

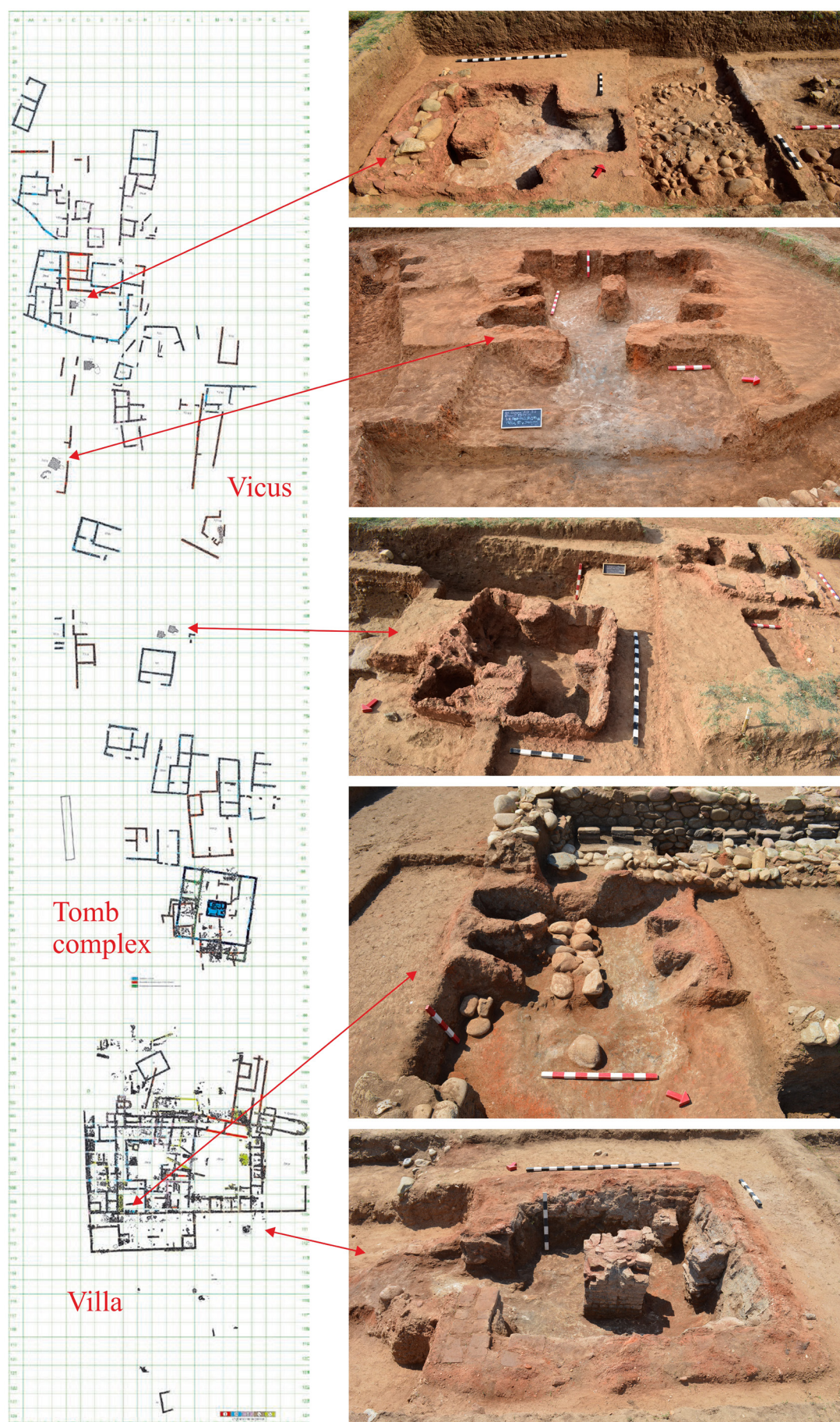


Fig. 7. The Roman complex at Pokrovnik (left) and kilns from the villa and the *vicus* (site plan after DIMITROV/RAYCHEVA/RUSEV 2019, 381, Fig. 1; photos by Z. Dimitrov and his archaeological team).

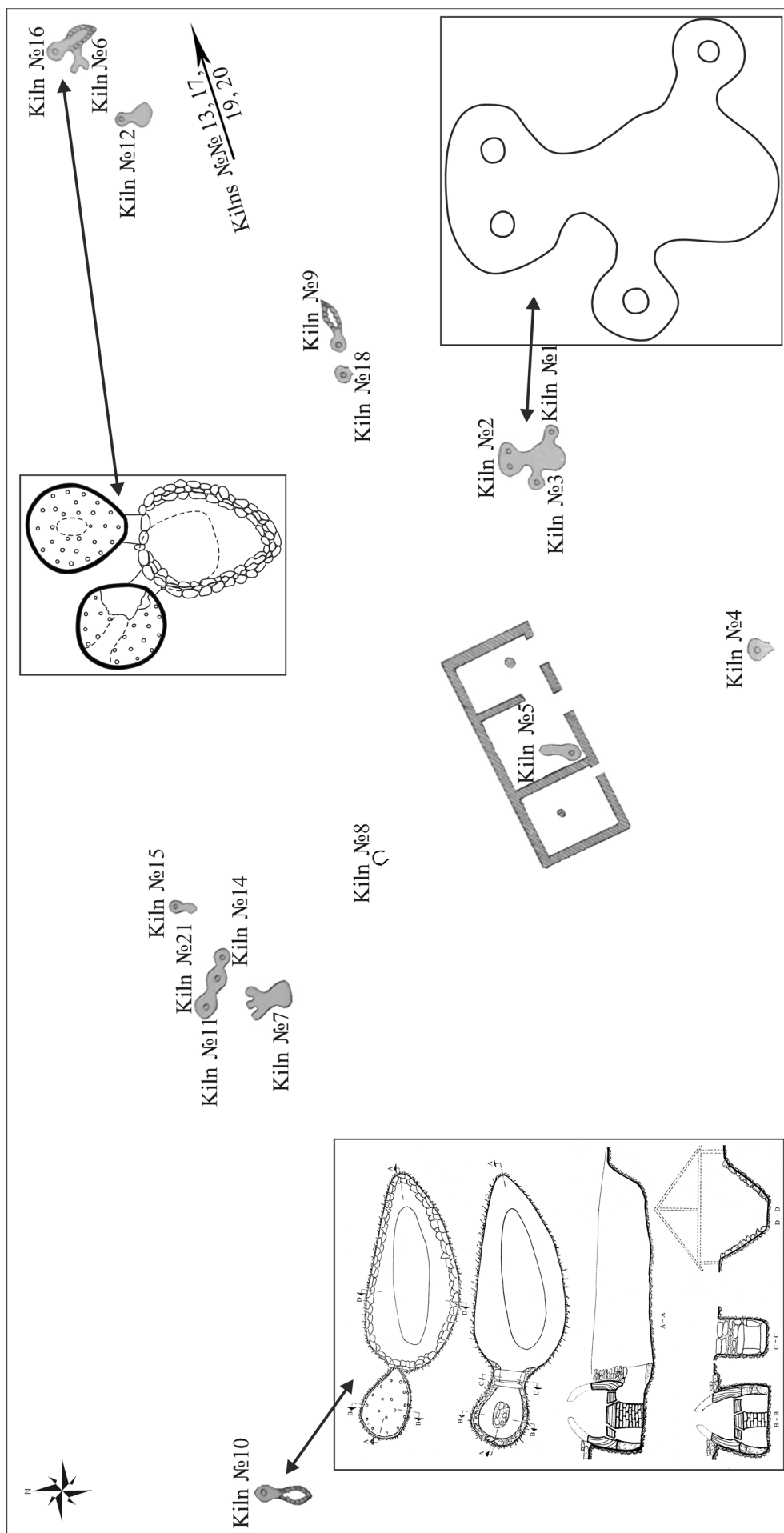


Fig. 8. The kiln site at Hotnitsa (after SULTOV 1969, 13, Obr. 2; SULTOV 1985, Tables II.1, II.3, XII.1; with additions and corrections by A. Harizanov).

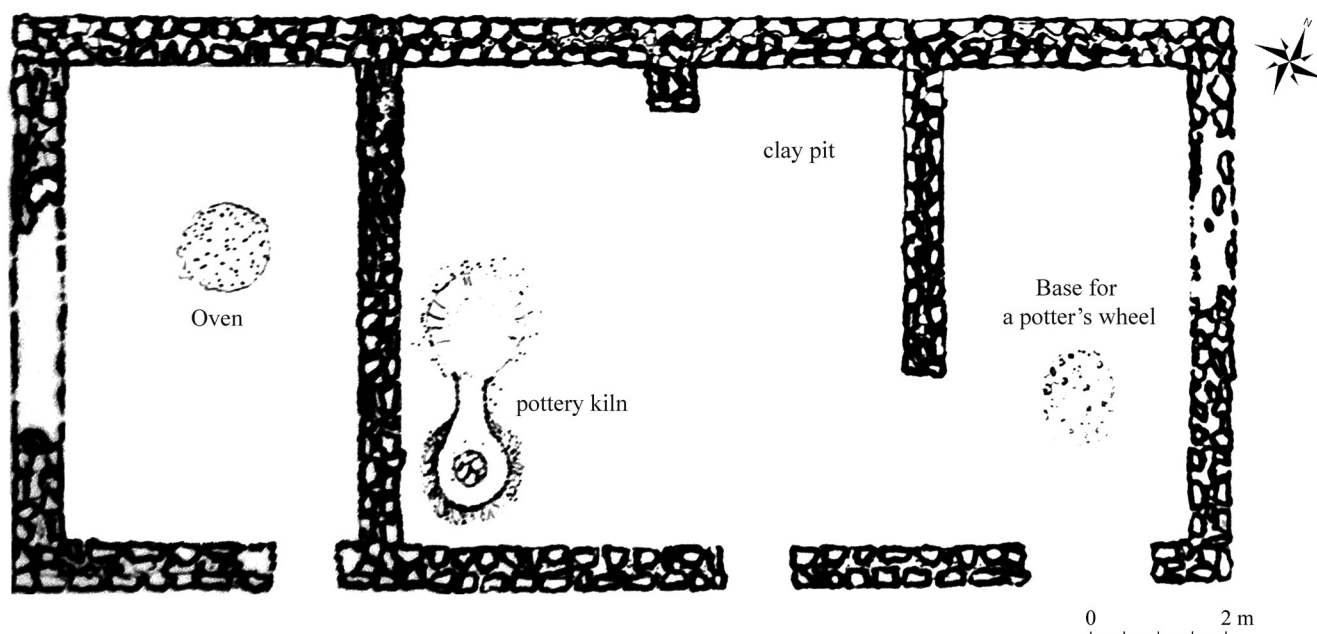


Fig. 9. The workshop building from the kiln site at Hotnitsa (after SULTOV 1985, Table. II.2; additions and corrections by A. Harizanov).

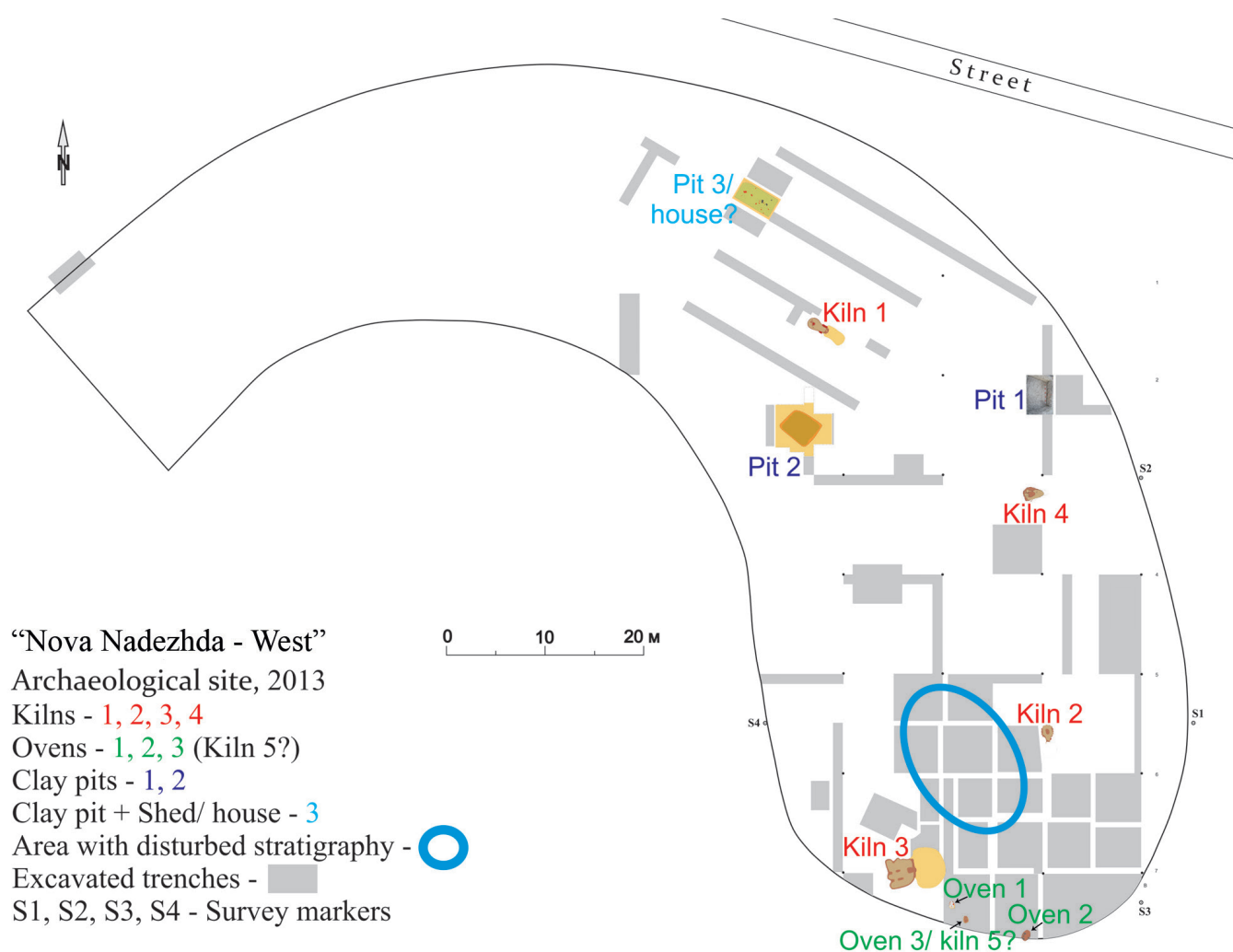


Fig. 10. The kiln site at Nova Nadezhda (after HARIZANOV 2016a, 583, Fig. 2).



Fig. 11. Kiln no. 1 from the Nova Nadezhda kiln site (photo and graphic reconstruction of the perforated floor after HARIZANOV 2016a, 586, Fig. 7).

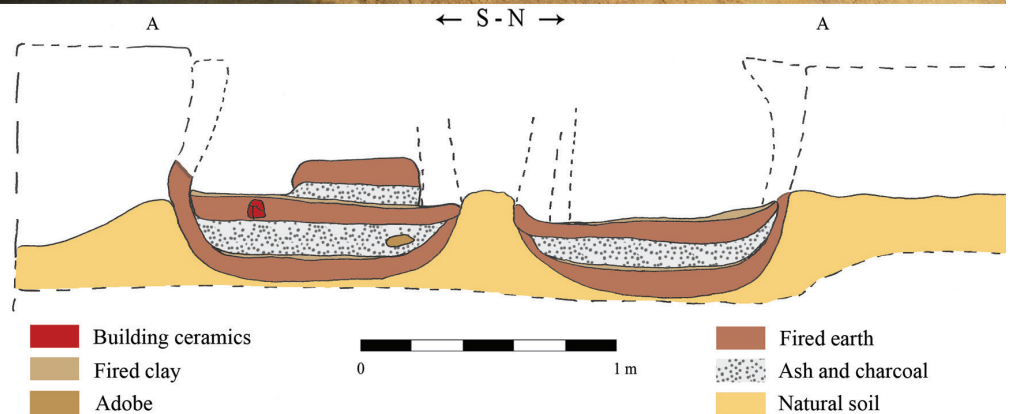
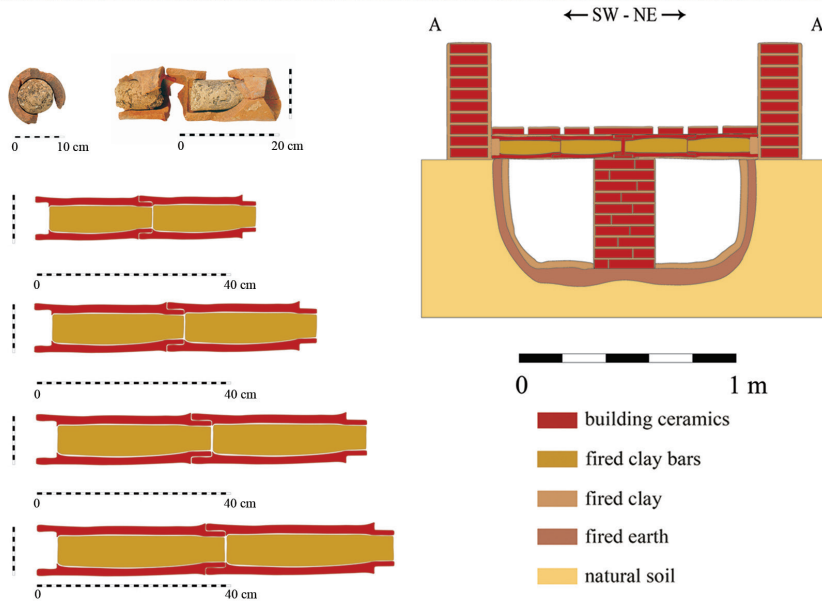


Fig. 12. Kiln no. 3 from the Nova Nadezhda kiln site (photo and drawing after HARIZANOV 2016a, 584, Fig. 4).

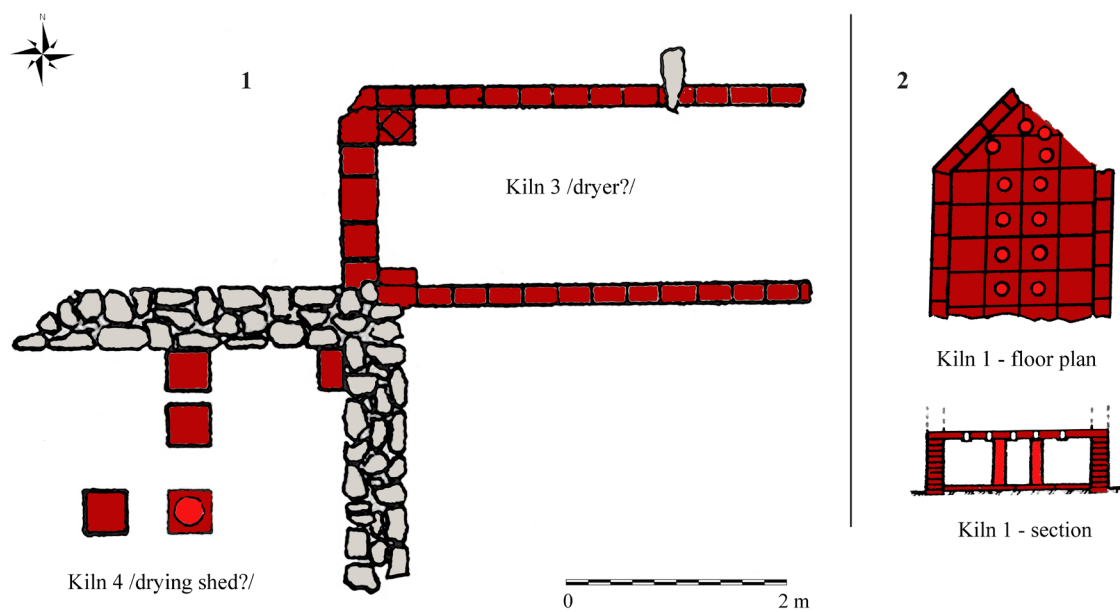


Fig. 13. The presumed drying facilities (left) and kiln (right) from the site at Malko Tyrnovo (after VELKOV 1965, 85, Fig. 15; 82, Fig. 8; additions and corrections by A. Harizanov).

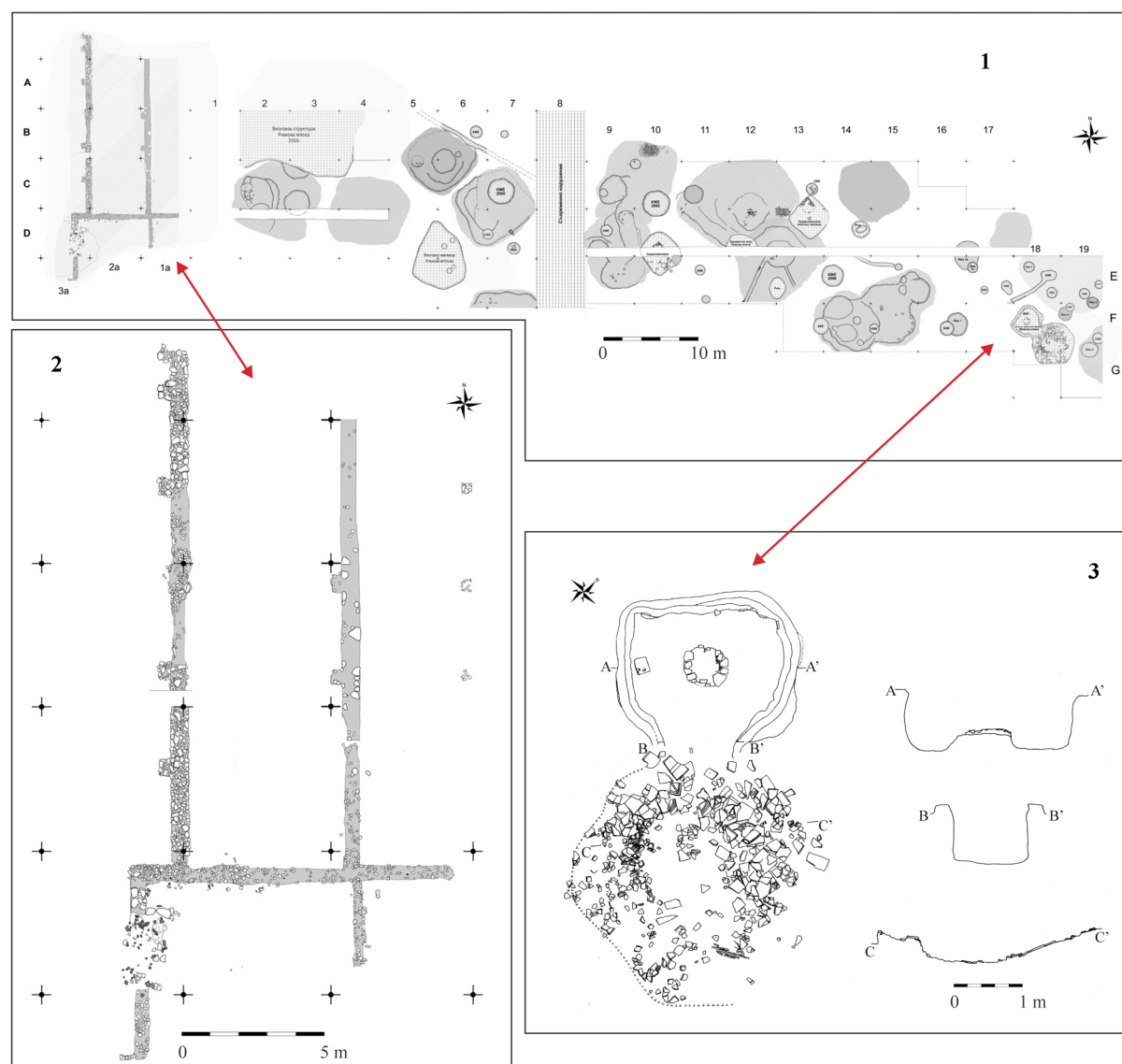


Fig. 14. The archaeological site at Georgi Dobrev: 1) site plan; 2) the *horreum*; 3) the tile kiln (after PENCHEVA 2012, 34, Fig. 1-2; PENCHEVA 2010, 343, tables I-II; additions by A. Harizanov).

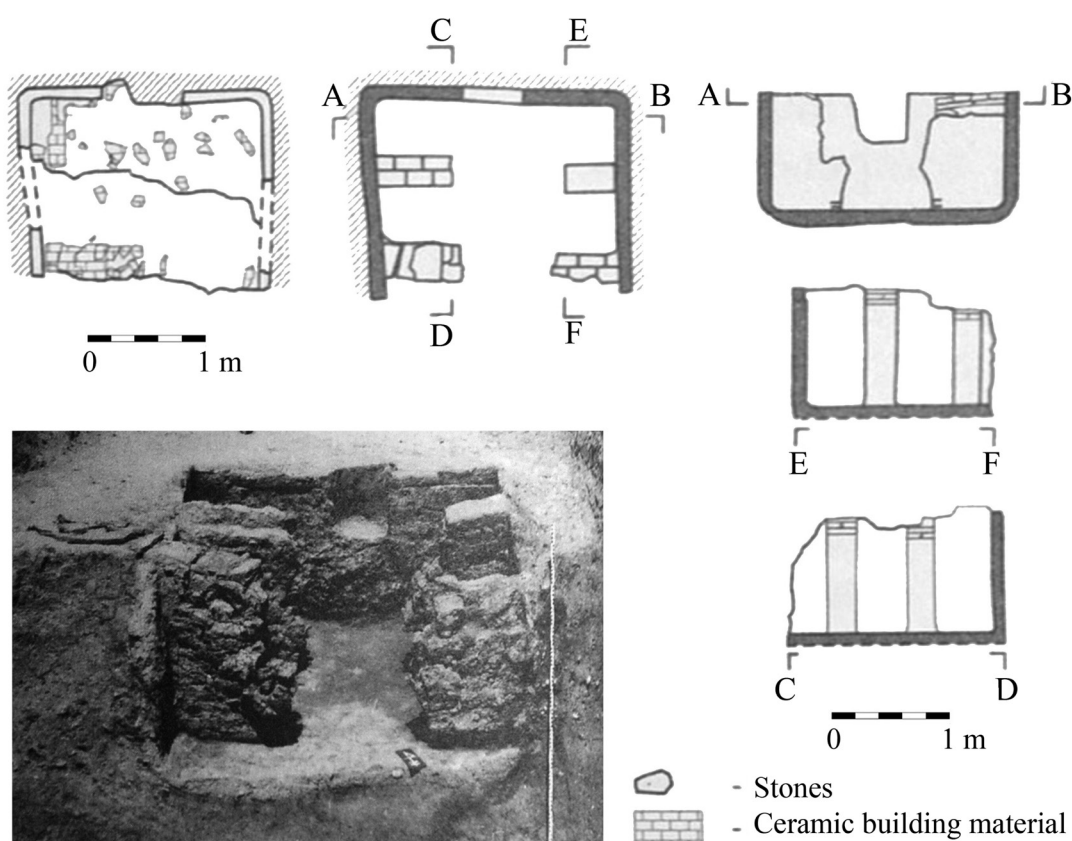


Fig. 15. The ceramic kiln from the site at Poleto (photo and drawings after KULOV 2007, 133, Fig. 3; 134, Fig. 5; additions and corrections by A. Harizanov)



Fig. 16. Kiln no. 2 from the kiln site at Breznik (photos by A. Harizanov).

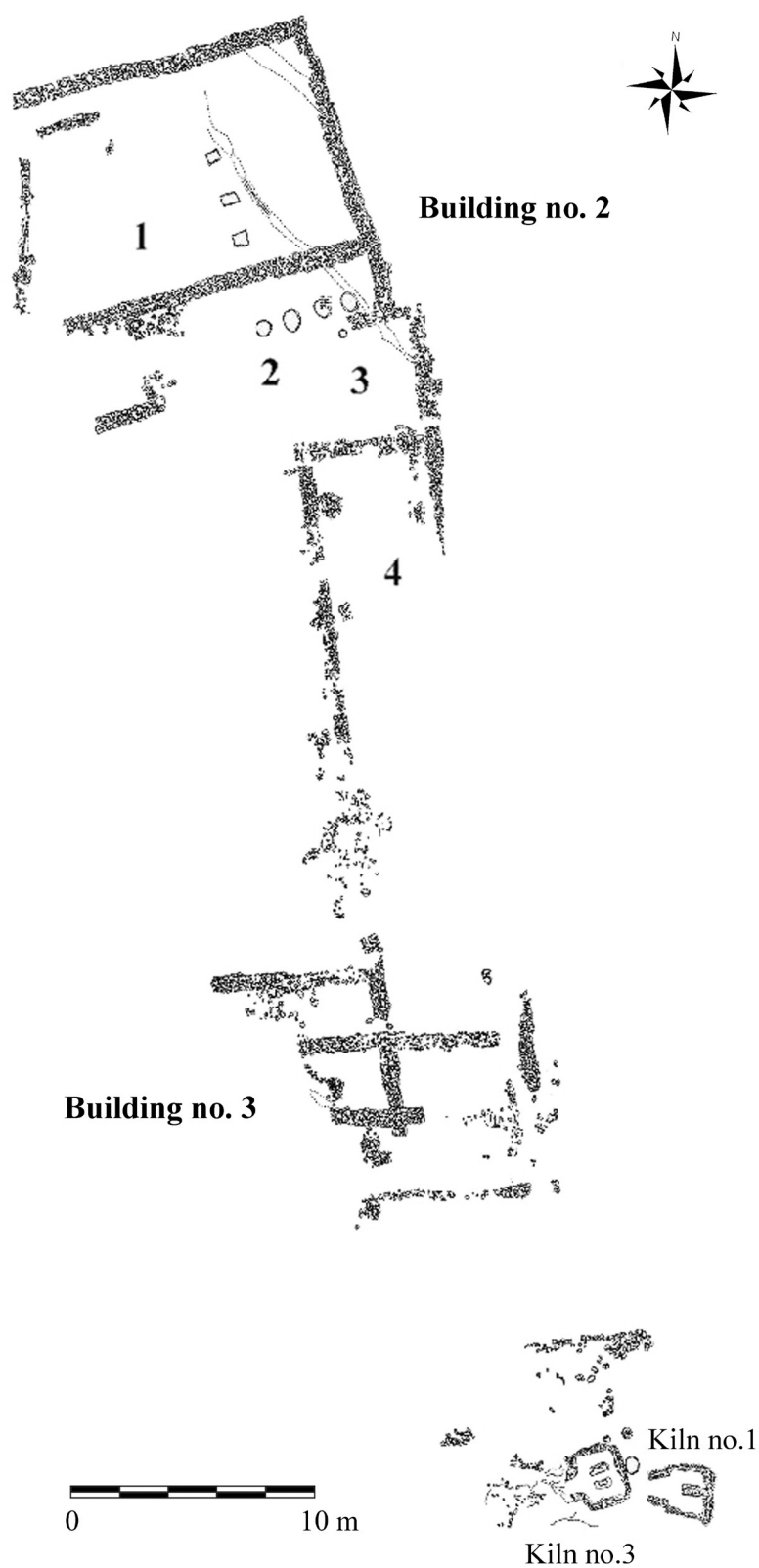


Fig. 17. The western part of the kiln site at Breznik and kilns nos. 1 and 3 (site plan after PAUNOVA 2018, 436, Fig. 1; photos and additions by A. Harizanov).

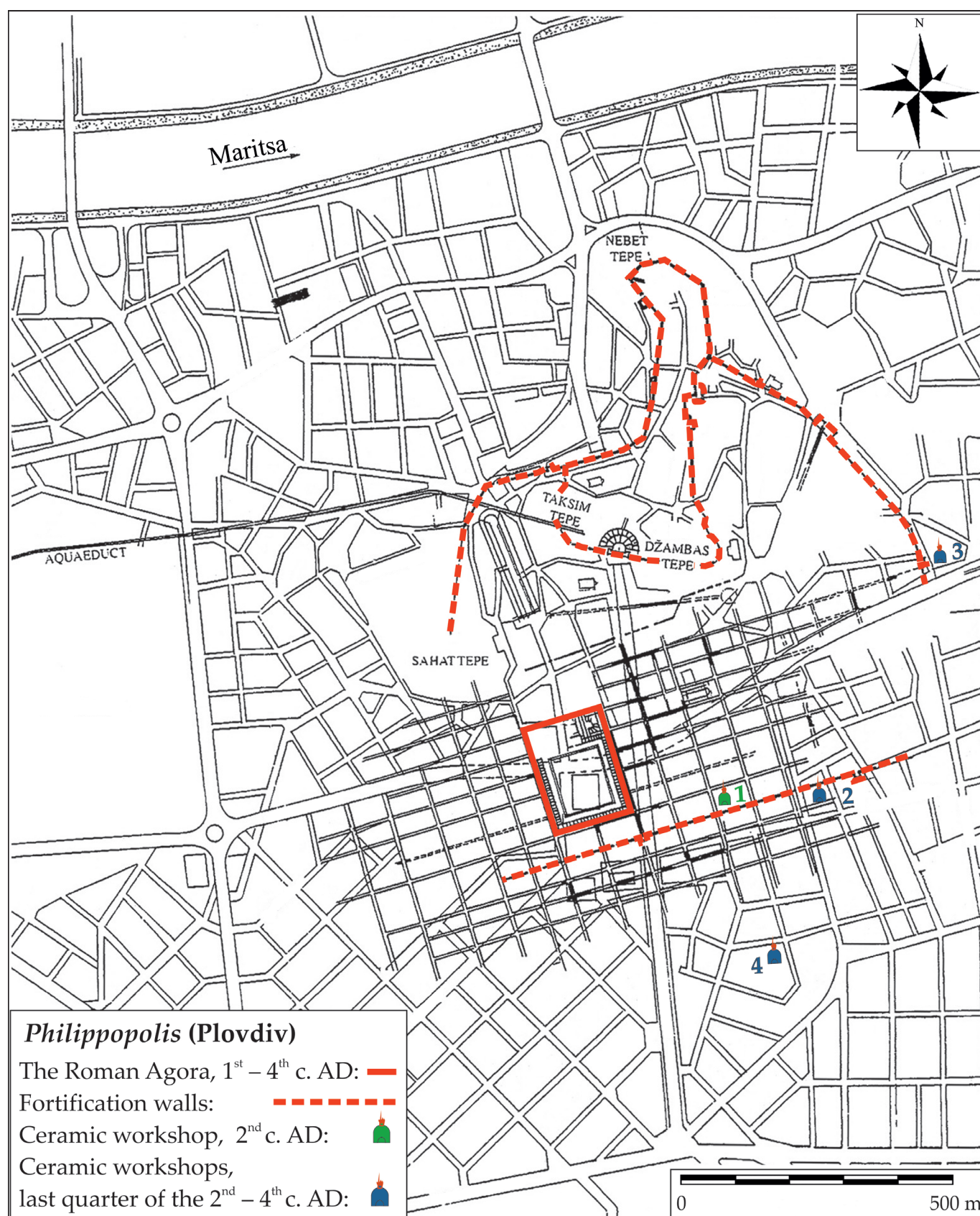


Fig. 19. Ceramic workshops from the Roman period in Philippopolis (after HARIZANOV 2018, 301, Fig. 2).



Fig. 20. Ceramic kilns from the Ph-4 workshop at *Philippopolis* (after BOZHINOVA/HRISTEVA 2014, 392, Fig. 2).



Fig. 21. Kiln sites from the Roman period in *Augusta Traiana* (after HARIZANOV 2018, 303, Fig. 3).

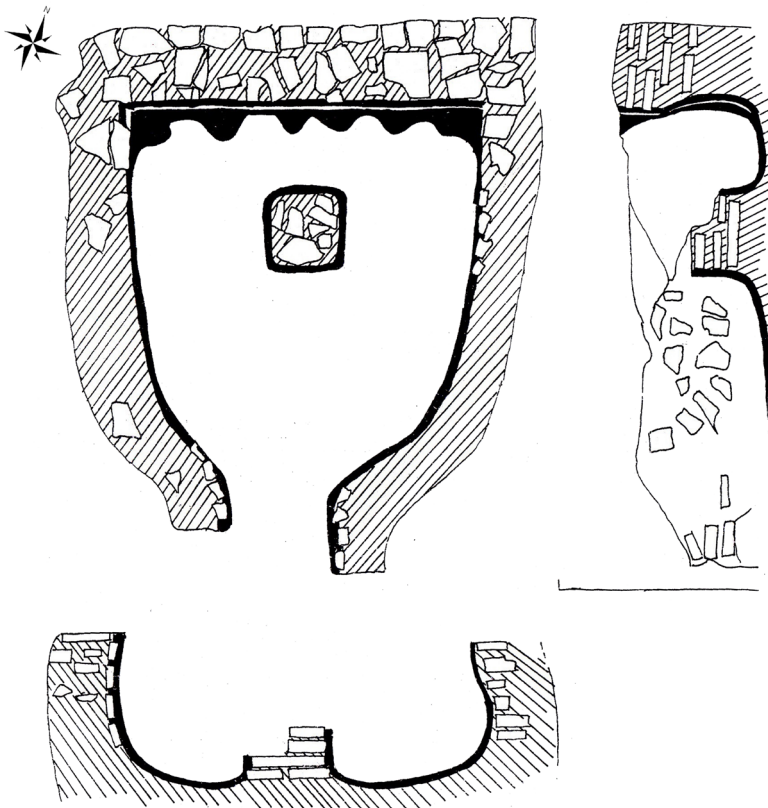


Fig. 22. The kiln from the ATr-2 kiln site at *Augusta Traiana* (after KALČEV 1991, 268, Abb. 21; additions and corrections by A. Harizanov).

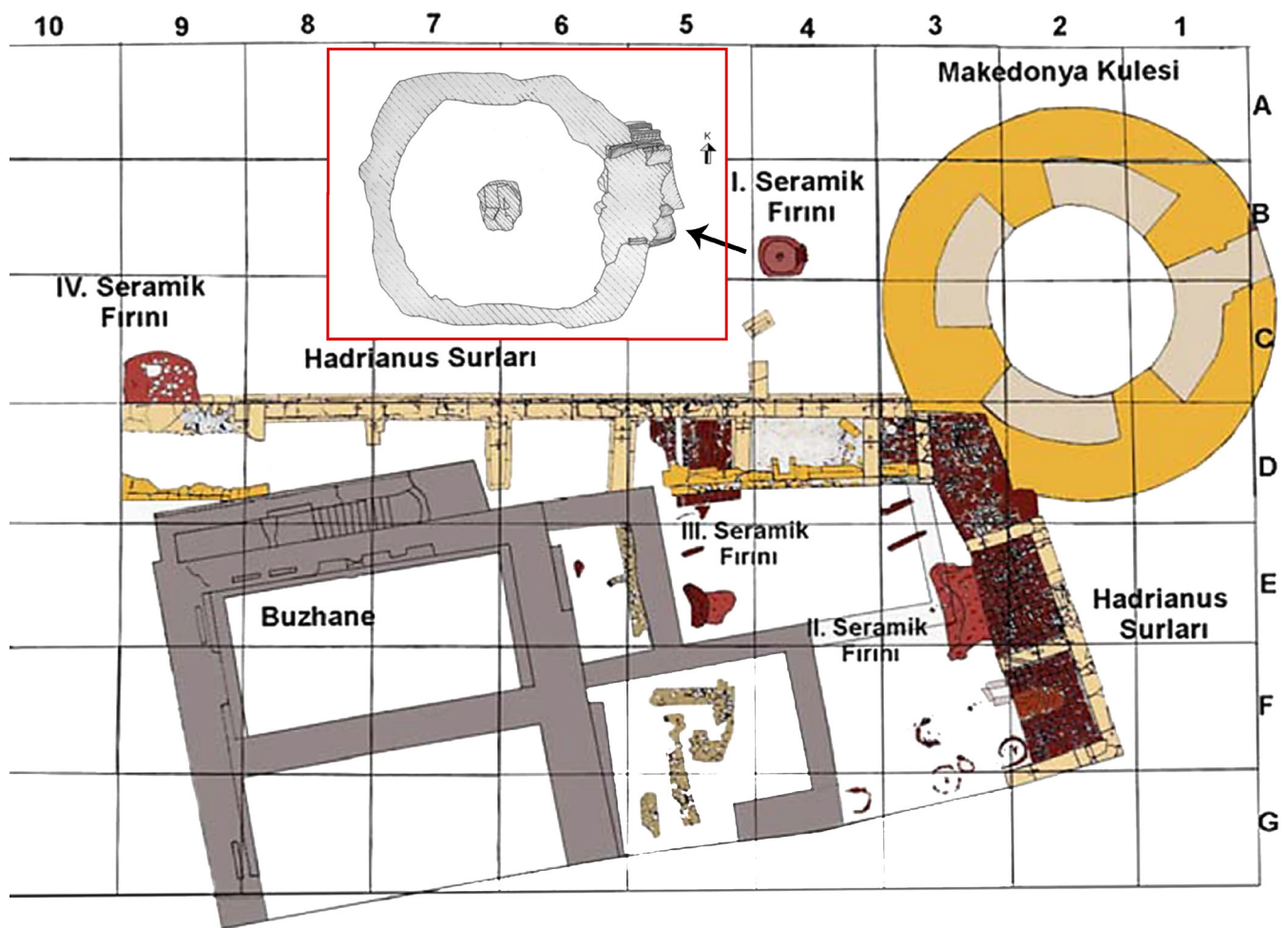


Fig. 23. The “Macedonia Tower” archaeological site and the extramural Roman ceramic kiln in *Hadrianopolis* (after ATLI AKBUZ 2008, Lev 2.1, 3.3; additions by A. Harizanov).