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# A NEW CENTRE FOR CERAMIC PRODUCTION FROM THE ROMAN PROVINCE OF THRACE (2<sup>ND</sup>-3<sup>RD</sup> CENTURY) Preliminary results

### Location

The village of Nova Nadezhda is located in south-eastern Bulgaria, 60 km from the north-eastern border of Greece and 70 km from the north-western part of Turkey. It falls into the district of Haskovo and is situated in a small valley, on the right bank of the River Maritsa. From the geological point of view it is located on a river terrace, a part of the Ahmatovo formation in the Upper Thracian Ditch, composed by conglomerates, sands and clays<sup>2</sup>.

During the Early Roman period the region was part of the *Provincia Thracia*, established between 44 and 46 AD and existed until the reforms of the emperors Aurelian and Diocletian in the last quarter of the 3<sup>rd</sup> century (**fig. 1**)<sup>3</sup>.

# The Site

The archaeological site was situated in the north-western part of the village, 500 meters south of the river. Most of the excavated structures and finds were located in the central and eastern part of the investigated terrain and were dated to the Roman period. Amongst the former ceramic kilns, ovens, clay pits, probable sheds and house were identified (**fig. 2**).

### The Kilns

There were four kilns, located in the central and south-eastern part of the site. They all belong to the two-chambered type with vertical draught.

Kiln 1 was excavated in the central sector of the archaeological site. Parts of the combustion chamber, the stoking channel and the stoke pit were found *in situ*. A single fragment of brick marked the place of the support for the perforated floor. The combustion chamber was dug into the natural soil and its walls were plastered with a rather thick layer of clay. The stoking channel was constructed alongside the previous part of the kiln, with its walls built by mud

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After their removal a plaster of clay was applied for the perforated floor was one oval-planned in the centre of the chamber with its short significant or the perforated floor was one oval-planned in the centre of the chamber with its short significant or the perforated floor was one oval-planned in the centre of the chamber with its short significant or the perforated floor was one oval-planned in the centre of the chamber with its short significant or the perforated floor was one oval-planned in the centre of the chamber with its short significant or the chamber with its short significant or the chamber with its short significant or the perforated floor was one oval-planned in the centre of the chamber with its short significant or the chamber with the chamber with its short significant or the chamber with the cham

bricks and fragments of bricks, bonded and plastered with clay. The stoke pit was formed simply by digging into the surrounding terrain (**fig. 3**).

The position and geometrical plan of the support for the perforated floor was marked by the absence of clay plaster on the bottom of the lower chamber. It had the shape of a central wall, placed with its shorter side against the stoking channel. Judging by the preserved brick and the other parts of building ceramics found inside the chamber and the stoking channel, it can be assumed that the whole element was constructed by fragments of bricks and tiles, bonded and plastered with clay. The debris found inside the installation, and especially those from the stoke pit, enabled the reconstruction of some of the other missing components of the kiln structure. The ceramic pipes and fired clay bars, discovered in the stoke pit, were used for the construction of the perforated floor. The bars were actually formed by the fired filling of the pipes and were composed of clay, sand, pebbles and organic material. The pipes had different length (between 25 and 40 cm) and were well suited for joining with one another. The different length of the elements, respectively couples of elements, was specially designed for the uneven distances between the walls of the combustion chamber and the central support, which were carrying them. The gaps left between these fire-bars were filled with fragments of tiles. Everything was bonded and plastered with clay from the upper side (**fig. 4**).

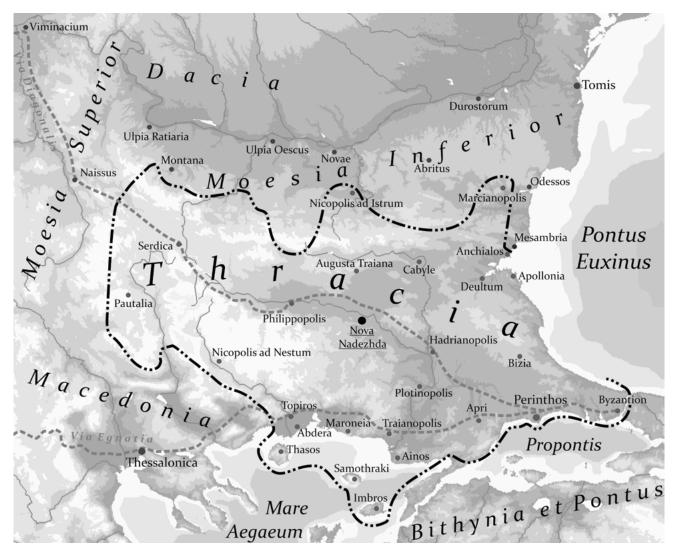
The firing chamber was probably constructed with low vertical permanent walls and had a temporary dome. The walls were built of fragmented and full size bricks, again bonded and plastered with clay. The dome was erected before every firing and consisted of fragments of building ceramics, clay and earth.

Kiln 2 was excavated in the central eastern part of the site. It was very badly damaged during a leveling of the ground terrain for a football field in the 1980s. Partially preserved were the combustion chamber, the supporting pillar and the stoking channel. The former was oval-planned, dug into the natural soil. The curly layout of the chamber walls was achieved by using vertically placed *imbrices* as a framework. After their removal a plaster of clay was applied. The support for the perforated floor was one oval-planned pillar, placed in the centre of the chamber with its short side against the stoking channel. It was formed of natural soil, plastered with clay. The *praefurnium* was dug along with the lower chamber and its walls were also plastered with clay (fig. 5).

the site for this publication.

CHESHITEV/KANČEV 1989

For the establishment of the province and its boundaries see TATCHEVA 2004, 49–75.



**Fig. 1.** The Roman Province of Thrace AD 136–193 and the ceramic centre near the village of Nova Nadezhda (after TATCHEVA 2004, 62 Fig. 3; graphic design and additions by A. Harizanov).

**Kiln 3** was the largest one excavated on the site, situated in the south-western part of the eastern sector. It was also the best preserved of the four structures, with parts of the combustion chamber, the support for the perforated floor, the stoking channel and the stoke pit discovered in situ (**fig. 6**). The lower chamber of kiln 3 was also dug into the ground but in this case there was an additional thick layer of clay applied to the walls. The installation had an unusual ground plan and supporting system. The latter consisted of two tongue walls and two central walls situated in couples with their short sides against the two stoking channels. The supports were formed in the process of digging the lower chamber and were plastered with clay together with its walls and bottom. There were two stoking channels, separated by an oblong pillar, which was probably used as an additional support for the perforated floor. The stoke pit had an irregular oval plan and was dug into the lowest part of the surrounding terrain. It was discovered filled with alternating layers of ash, charcoal, debris and fired earth. The layers were best preserved at the transition between the pit and the channels where three periods of kiln use were distinguished. The latter was possible due to the visible

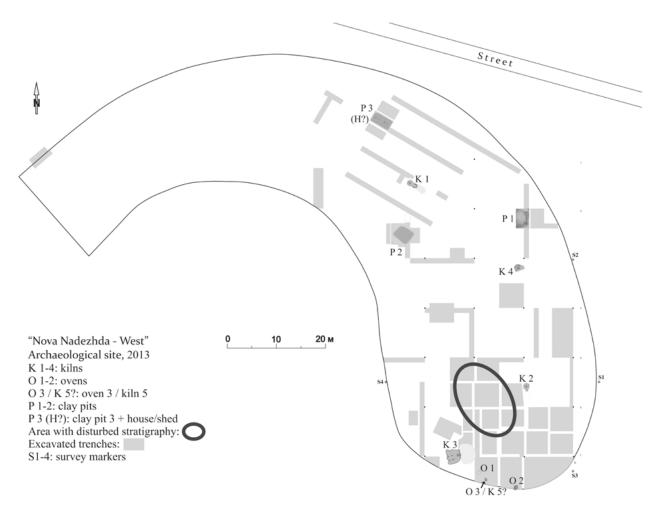
renewal of the pit's bottom with layers of earth, covered with clay plaster (fig. 7).

Only a fragment of one vent hole of the perforated floor was preserved *in situ*, discovered on the south tongue wall. Parts of the oven floor where found inside the lower chamber and the stoking pit. It was built of pieces of tiles, pipes, bricks and clay, many of which were deformed during the firings.

**Kiln 4** was very badly damaged by the above mentioned ground leveling. It was excavated in the north-eastern part of the site and had ground plan and construction very similar to those of kiln 2 (**fig. 8**).

# Other Pyrotechnological structures

In the south-eastern end of the site three smaller pyrotechnological structures were excavated (**fig. 9**). The first (**oven 1**) was probably the oldest one. It was dug into the natural soil few meters south from the stoke pit of kiln 3, and situated near the bottom of the same earth depression into which the latter was incorporated. The structure has probably functioned as an oven for food preparation, used by the potters who worked in



**Fig. 2.** The Archaeological site at Nova Nadezhda, Haskovo region (after Динчев/Иванов 2014, 416 Обр. 1; additions by A. Harizanov).

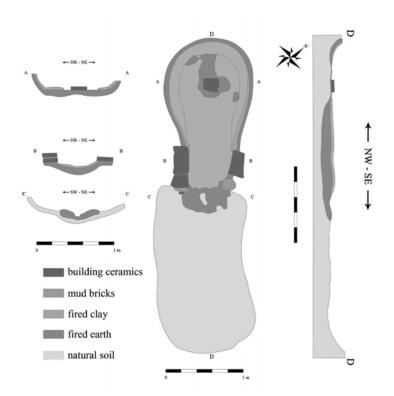


Fig. 3. Kiln 1. Plan and section (drawings by Kr. Koseva, A. Harizanov).

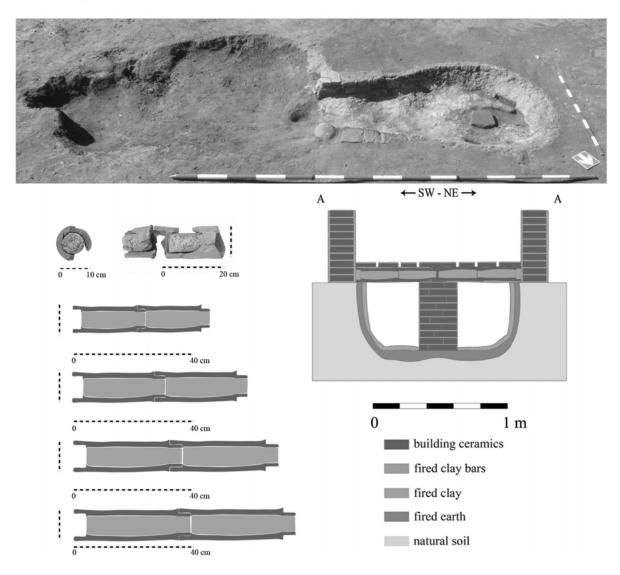


Fig. 4. Kiln 1. Section reconstruction of the perforated floor (photo and drawings by A. Harizanov).

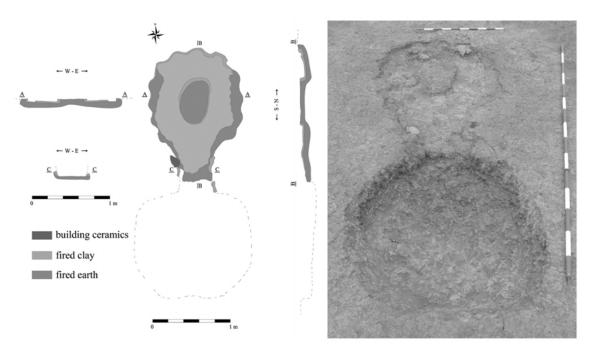


Fig. 5. Kiln 2. Plan and sections (photo and drawings by A. Harizanov).

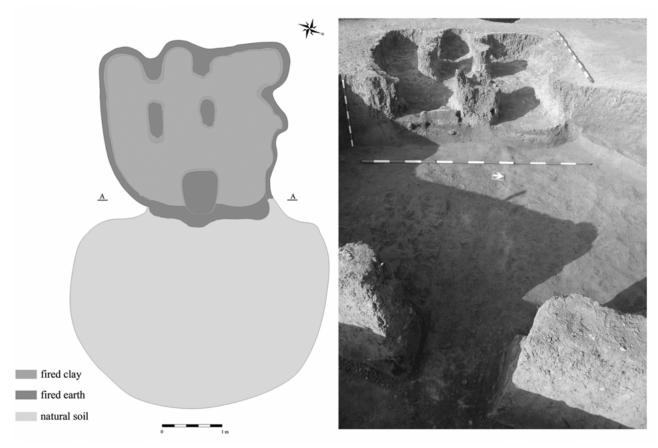


Fig. 6. Kiln 3. Plan (photo and drawings by A. Harizanov).

the area. The construction was reused and remade seasonally, as indicated by the few thin layers of ash, charcoal and fired earth covering its bottom.

The second structure (**oven 2**) was bigger, but probably with similar function to that of the previous one. It was discovered filled with carbonized clay segments, little ash and a lot of charcoal, which led to the assumption that its dome has collapsed during firing.

A third installation (oven 3/kiln 5?) was excavated few meters to the south-east of oven 1. Its stratigraphic position indicated that it was built in a period that the latter was no longer functioning. In contrast to the previous ovens, this one had thick layer of grey-burned clay plaster applied to the inner part of the walls. Samples from that plaster were subjected to chemical and mineralogy analysis. The results indicated temperatures between 570° and 840–850° C. A sample from a terracotta figurine discovered nearby produced a similar outcome. This fact gives ground to a hypothesis that the structure was actually used for the firing of terracotta figurines. The size of the chamber would have allowed faster heating with less fuel than the bigger kilns. However, the lack of remains from the upper part of the presumed kiln, the layout of the channel, which is difficult to distinguish from the chamber, and the absence of finds or wasters securely connected with it restrains that suggestion.

### Clay pits, sheds, house(?)

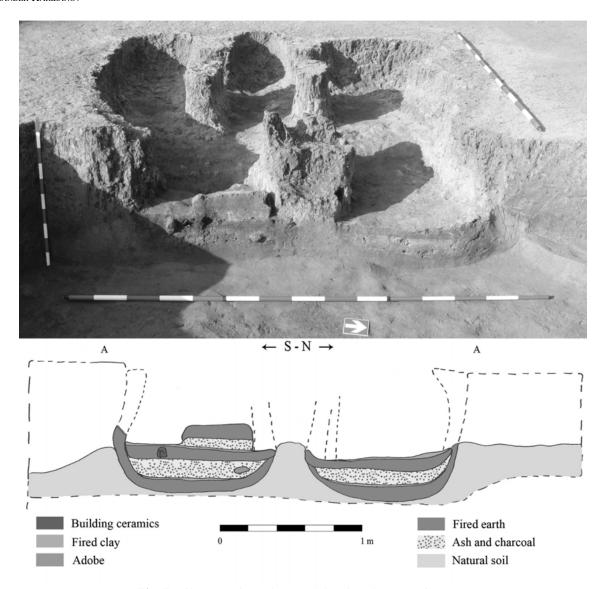
Apart from the different pyrotechnological structures, three pits for extraction of clay were discovered. **Pit 1** was excavated in the north-eastern part of the site, close to kiln 4. It was dated to the Roman period according to the pottery and tile fragments found inside.

**Pit 2** was located in the central part of the excavation area, south of kiln 1. It was reused in the medieval period as a house. Roman materials found beneath the floor level of the dwelling enabled its dating to the time of kiln use on the site.

Pit 3 was discovered in the northern part of the central sector, not far away from kiln 1. The layout of the structure along with the finding of a larger amount of domestic pottery and a loom weight indicated that it was reused as e shed or even a seasonal house at some time during the Roman period. The discovery of fragments of a mill stone and a decorated clay altar in the stoke pit of kiln 1, excavated nearby, could be considered as an additional proof for that hypothesis.

Another area where sheds and pits might have existed was the south-eastern part of the site, between kilns 2 and 3 and the ovens. Unfortunately at this place no secure stratigraphic layers were distinguished. Roman ceramics and finds were discovered at a depth of more than one meter/one meter and a half but there was no structure preserved. It seems that during a preceding time period this area was filled with earth and archaeological materials due to the fact that here was located a natural earth depression<sup>4</sup>.

<sup>&</sup>lt;sup>4</sup> Динчев/Иванов 2014, 417.



**Fig. 7.** Kiln 3. Section (photo and drawings by A. Harizanov).

## The Products

Several types of ceramic products were manufactured on the site. The production of building ceramics is certainly attested by finds of wasters and stacking supports. There were three stacking supports: The first was a L-shaped stylized human foot, the second an L-shaped fragment of a *tegula*, and the third a pre-fired ceramic bar. The building ceramics found on the site included mostly pipes, but *imbrices*, *tegulae* and bricks were also recorded. The largest concentration of these materials was discovered around kiln 3. Combining that with its size and solid supporting system there is no doubt that this was the main (and may be the only) place for their firing on the site (**fig. 10**).

The production of terracotta figurines was confirmed by the discovery of a clay mold, wasters and lots of broken products (**fig. 11**). All of the latter were mold made. The distinctions in the used clays, tempers and achieved color showed that the items were produced in different installations and atmospheric conditions. Given that almost all of the finds were discovered in the area between kilns 2 and 3 and oven 3, it seems logi-

cal that one or more of these structures were the places of manufacture.

Kitchenware was produced in vast quantities by the Nova Nadezhda workshops. The main shapes were jugs, pitchers, deep bowls and especially cooking pots (**fig. 12**). They were all wheel-made, with sand and pebbles used as a temper. This ceramic group was probably fired in all of the excavated kilns, given that fragments of such vessels were found on the whole excavated area, and a waster shard was discovered amongst discarded pieces of building ceramics close to kiln 3.

Table wares were the other major item in the potteries' assortment. Several shapes of drinking cups, bowls and plates were produced on the site (**fig. 13**). Their forms are amongst the most popular in the province.<sup>5</sup> The vessels were probably fired in the three smaller kilns (1, 2 and 4). They were covered (on the outside or on both sides) with either slip or gloss, varying in color from dark orange/light brown to orange-red. Sand was used as temper.

For the different types of red slipped bowls and dishes used in the province see Кабакчиева 1983,1–12.

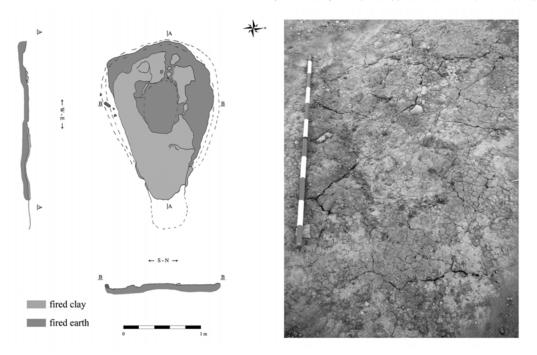
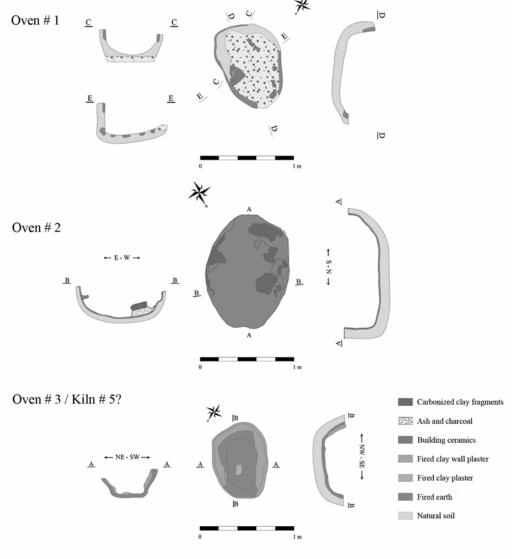


Fig. 8. Kiln 4 (photo and drawings by A. Harizanov).



**Fig. 9.** Ovens 1–3 (drawings by Kr. Koseva, A. Harizanov).

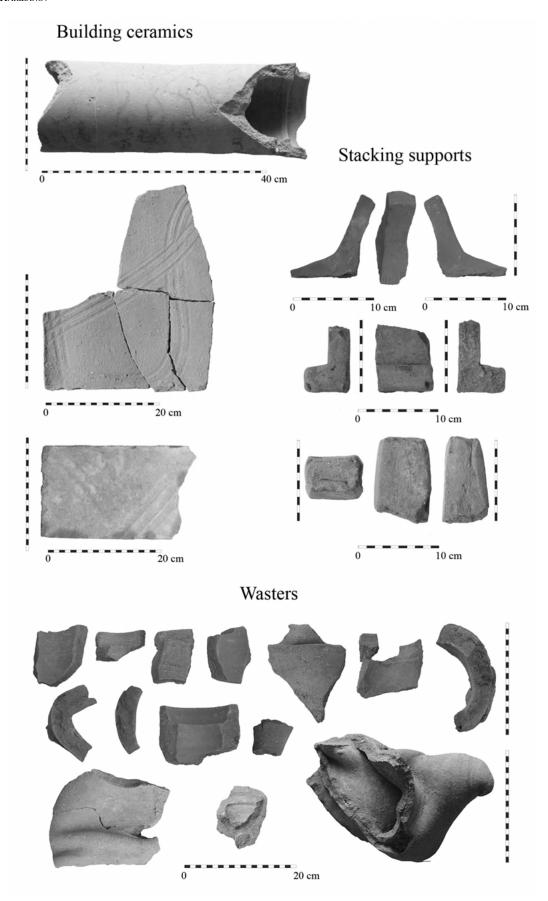


Fig. 10. Products. Building ceramics (photos by A. Harizanov).

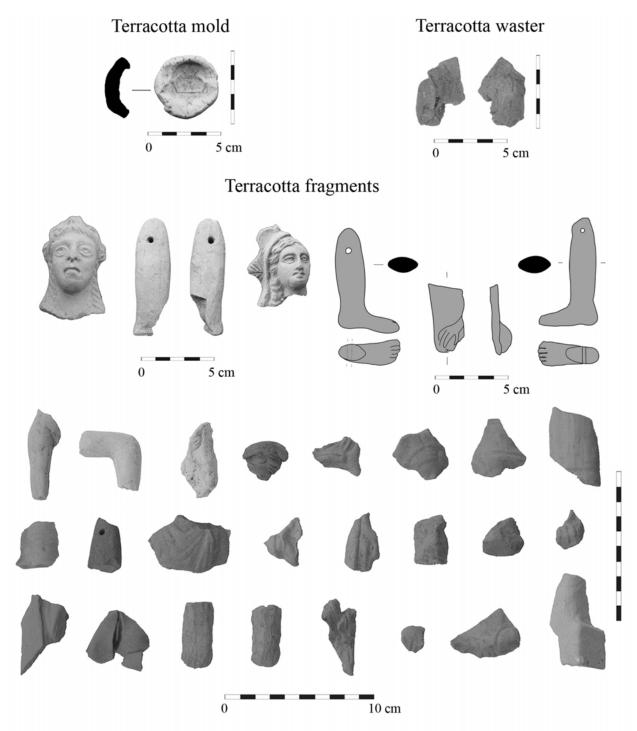


Fig. 11. Products. Terracotta figurines (photos by Al. Manev, V. Dintchev, A. Harizanov; drawings by Dr. Ivanov).

# **Artifacts and dating**

Amongst the datable artifacts discovered on the site were fragments of Chandarli ware, Hayes forms 2 and 3, as well as ten Roman coins<sup>6</sup> (**fig. 14**). The earliest coin was dated to the rule of Emperor Tiberius, but it is the only one minted in the 1<sup>st</sup> century. The second coin was a denarius of Emperor Trajan, two were dated to the time of Antoninus Pius and three to that of Marcus Aurelius. The last three coins were damaged beyond

The coins were identified by Assoc. Prof. Dr. B. Bozhkova, NIAM-BAS.

recognition and were probably issued in the period between the second half of  $2^{nd}$  and first half of the  $3^{rd}$  century AD.<sup>7</sup>

According to J. Hayes form 2 can be dated to the second half of  $2^{\rm nd}$  century, and form 3 from the second half of  $2^{\rm nd}$  to the first half of  $3^{\rm rd}$  century.<sup>8</sup> A set of vessels, including specimens of both forms, was found in a burial mound near Svilengrad, about 60 km away from Nova Nadezhda, together with a coin of Emperor Commodus.<sup>9</sup>

<sup>&</sup>lt;sup>7</sup> Динчев/Иванов 2014, 418.

<sup>&</sup>lt;sup>8</sup> Hayes 1972, 316–322.

<sup>&</sup>lt;sup>9</sup> Велков 1937, 162–164.

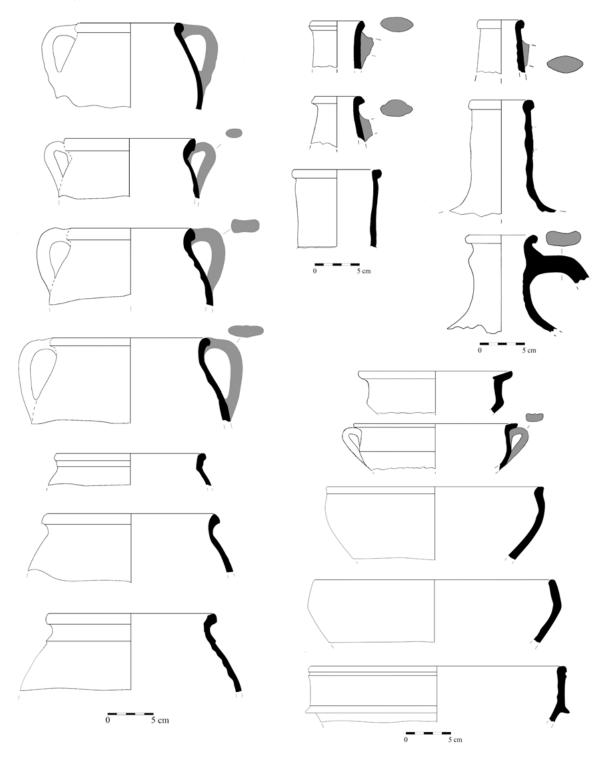


Fig. 12. Products. Kitchenware (drawings by Kr. Koseva, Dr. Ivanov, A. Harizanov).

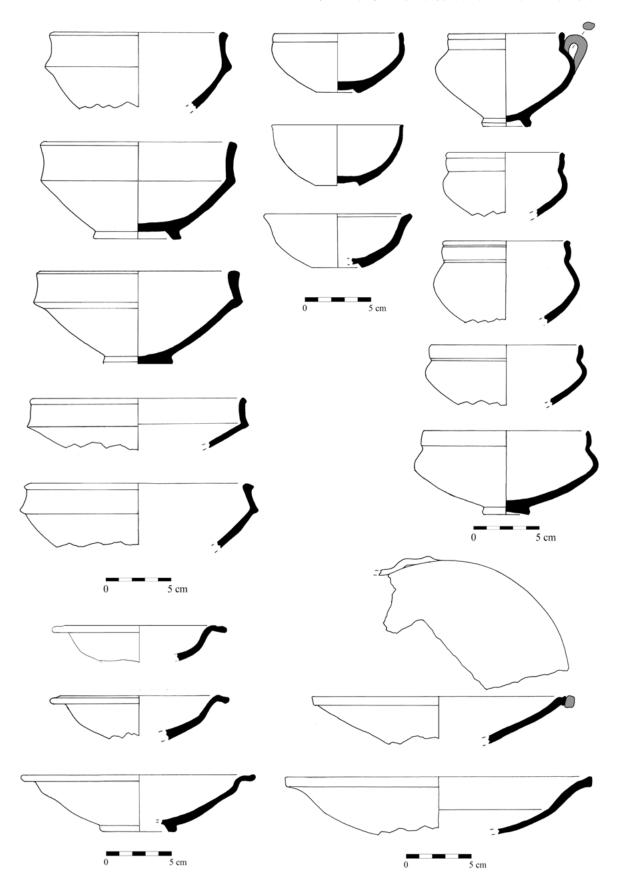


Fig. 13. Products. Table wares (drawings by Kr. Koseva, Dr. Ivanov, V. Dintchev, A. Harizanov).

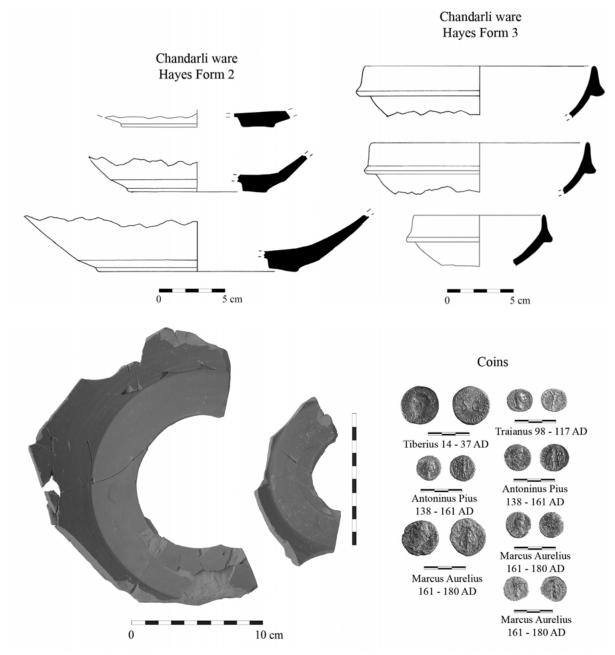


Fig. 14. Artifacts (photos by Al. Maney, V. Dintchey, A. Harizanov; drawings by Kr. Koseva, Dr. Ivanov, A. Harizanov).

It can be assumed that the ceramic centre functioned between the rule of Antoninus Pius and the second quarter or the middle of the 3<sup>rd</sup> century AD. The earliest structures were kiln 3 and the ovens situated nearby. One of the latest was kiln 1 where the shards of Chandarli ware, Hayes form 2, which were found inside the stoke pit can be used as *terminus ante quem*.

## **Distribution patterns**

During the 2<sup>nd</sup> and early 3<sup>rd</sup> century AD ceramic production in this part of the province is securely attested at several places. Two of the major pottery production centres were the cities of *Philippopolis* (Plovdiv) and *Augusta Traiana* (Stara Zagora) where all kind of ceramic products were

manufactured from the beginning of 2<sup>nd</sup> (Plovdiv)<sup>10</sup>/second half of the 2<sup>nd</sup> century (Stara Zagora)<sup>11</sup> onwards. In the same time period ceramic workshops were operational in one of the largest Roman villas in Thrace<sup>12</sup>, situated close to the modern day village of Elhovo, Stara Zagora region. The last Roman settlement where the manufacture of clay artifacts is attested by excavation of kilns is located near the modern day village of Georgi Dobrevo, Haskovo region<sup>13</sup>. The latter, the Roman villa and the city of *Augusta Traiana* were situated between 40 and 45 km away from the site at Nova Nadezhda. The city

<sup>10</sup> Воѕратсніеva 2004, 89–104; Мартинова-Кютова 2011, 341–342; Божинова/Христева 2014, 390–393.

<sup>&</sup>lt;sup>11</sup> Kalcev 1991, 245–273.

For the villa and its production see Николов 1984, 5–73; Буюклиев 1986.

<sup>13</sup> Пенчева 2010, 341–359; Пенчева 2011, 147–171.



**Fig. 15.** The ceramic centre at Nova Nadezhda and the other ceramic producers in this part of the province (after TATCHEVA 2004, 62 Fig. 3; additions by A. Harizanov).

of *Philippopolis* was more distant, located about 80 km to the west of it (**fig. 15**). Having that in mind, it can be estimated that the area of distribution of the products from the Nova Nadezhda workshops had a probable a radius between 20 and 40 km. Very important for the enlargement of the latter was the precise choice of location, on the bank of a big navigable river and only 10 km south of *Via Diagonalis*<sup>14</sup>, one of the two major roads in the region.

### **Conclusions**

The ceramic workshops at Nova Nadezhda are among the first established in the province after its conquest and urbanization during  $1^{\rm st}$  and early  $2^{\rm nd}$  century AD.  $^{\rm 15}$  At this state of research it seems that they were operating seasonally and that their products were distributed in a rural area lacking larger urban settlements.

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 $<sup>^{14}</sup>$   $\,$  For the Roman roads in the province see Torbatov 2004, 76–95.

For the latter see TATCHEVA 2004, 63 - 75.

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