

# Changes in Late Classical and Hellenistic Fine Pottery Production in the Eastern Mediterranean as Reflected by Imports in the Pontic Area

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In the late Classical and Hellenistic periods, the best quality table pottery used in towns and settlements in the Black Sea littoral and its hinterland came, as it had in the preceding centuries, from workshops located in the Mediterranean, primarily around the Aegean Sea. The aim of this paper is to present the connection between the chronological sequence of such imports to the Black Sea basin from their main production centres and changes in the political and economical situation of the Mediterranean region. Its conclusions are based on the data yielded by the observation of archaeological material resulting from the current excavations in the region of the Kimmerian Bosphoros (Kerch Straits) as well as published materials from other sites.<sup>1</sup>

The starting point for this study was an analysis of pottery from the late Classical and Hellenistic layers at Nymphaion in the eastern Crimea (Fig. 1b). A monumental structure has been recently uncovered at that site: an Ionic *propylaion*, dated on the basis of an architrave inscription to the reign of Leukon I (389/388-349/348 BC).<sup>2</sup> The whole area was destroyed – most probably by an earthquake – about the mid 3rd century BC and never rebuilt. On the contrary, it was levelled out and served as an open rubbish dump until the 2nd century AD. Sites of this type usually yield a wealth of material, which may be processed statistically. It is, however, difficult to establish the precise chronology of the materials found here both because of later disturbances such as storage pits dug into the sedimented layers, and because of the large size of the excavated site. It should be noted, though, that a certain continuity could be observed in the depositing – century after century – of waste at this site.

In a second, nearby, trench at Nymphaion, which has been recently investigated, two complexes of pits of unclear function were revealed.<sup>3</sup> The pits contained large amounts of pottery dated to the late 5th–late 4th centuries and at least one of the two complexes (no. 7) was filled at approximately the same time as the construction of the *propylaion* mentioned above. The most common artefacts discovered at these sites were sherds of trade amphorae, but table pottery, strongly dominated by Attic black gloss ware, was also represented (Figs. 2-3).



Fig. 1. The findspots mentioned in the text: a – Black Sea region; b – Kimmerian Bosphoros.

The examination of pottery finds from Nymphaion and other sites in the Pontic region allows us to observe that the Attic black gloss ware occurs everywhere in abundance, even reaching some remote places far away from the littoral.<sup>4</sup> Vessels dated to the late 5th and, especially, to the 4th centuries BC are far more numerous than any other Aegean imports in earlier times. As often happens, however, quantity is the enemy of quality. In this case, the deterioration was restricted to the painted decoration of red-figured vessels. The painted motifs on these vessels became more and more carelessly



Fig. 2. Attic black gloss kylix (cup-kantharos) from Nymphaion, Sector N, 1997 (no. N.97.183), at present in the Kerch Archaeological Museum (photo by K. Domzalski).

executed and simplified, as time went on (Fig. 3).<sup>5</sup> However, the production technology used by Attic craftsmen was still at a very high level: the slip covers the whole surface of the vessels, including the bottom, and is of excellent quality. The vessels are often rouletted, stamped, and sometimes bear white or cream-coloured over-painted motifs.

A glance at the history of the Aegean in the late 5th and 4th centuries BC provides an explanation for these increased exports. While the economy of Athens, unquestionable the leader in tableware production, suffered greatly from the long-lasting Peloponnesian War (431-404 BC), the *polis* still played a major role in 4th century politics, retaining some level of military power and maintaining a merchant fleet. The war did the greatest damage in the *polis'* agricultural areas, which were regularly plundered for many years. Pottery workshops, however, survived together with skilled craftsmen, and tableware continued to be produced. Perhaps the most obvious way for inhabitants of these areas to avoid hunger was to intensify their manufacturing



Fig. 3. Wall fragment of Attic red-figured kylix (cup-kantharos) from Nymphaion, Sector N, 1997 (no. N.97.181), at present in the Kerch Archaeological Museum (photo by K. Domzalski, scale 1:1).

and exchange the resulting products for food. Black gloss pottery may be an excellent example of this practice, as is shown by the abundant presence of these vessels – presumably exchanged for copper during the Peloponnesian War – in Cyprus in the late 5th century BC, and by their intensive export to many other Mediterranean regions in the 4th century BC.<sup>6</sup> Such cases seem somehow to contradict the general opinion that “[fine] pottery may not have been an important part of the economy”, and they can indeed “help us to trace the extent and volume of ancient trade”.<sup>7</sup>

The exceptionally wide distribution of the pottery under discussion in the Black Sea basin suggests another phenomenon connected with its occurrence. The vessels and fragments discovered often bear graffiti, mainly single letters, or, less frequently, names. The high quality of these inscriptions and their unprecedented abundance on the vessels makes one wonder whether they were made by the Pontic users.<sup>8</sup> On table pottery dated to the following centuries graffiti are much less frequent and are usually limited to simple signs. This observation allows us to pose the hypothesis that graffiti on certain Attic vessels were made by the inhabitants of Athens, who were their first owners. The Pontic buyers might have obtained them as “second-hand” commodities.<sup>9</sup> This interpretation seems to be acceptable for crisis situations when the exchange of valuable wares for basic goods such as food becomes a necessity. In the post-war decades, the economic situation of Athens gradually improved, but the political changes, which took place after the Macedonians had conquered Greece, resulted in the loss of the *polis*’ privileged position in the late 4th century BC. Pottery manufacture was, of course, continued but, without any direct links to trade opportunities, it gradually lost its importance



on the broad overseas markets. Fewer and fewer black gloss vessels arrived at the Pontic area in the 3rd and early 2nd centuries BC,<sup>10</sup> and those that did were almost exclusively *kantharoi* and table amphorae with massive cable handles, both forms decorated in the West Slope style characterised by floral and geometric white or yellowish over-painted motifs<sup>11</sup> and replacing earlier red-figured scenes of “vase-painting” tradition.

The changes that took place both after Alexander’s conquests and after his death created a completely different political and economic situation. New, vast kingdoms with an unheard of potential for the development of crafts and long-distance trade were formed around the eastern basin of the Mediterranean Sea. In this area, the kind of fine pottery now referred to as *terra sigillata* first appeared around the mid 2nd century BC. Its specific feature was that its mass-produced vessels were completely covered with slip, similar to that found on Attic black gloss vessels, but of a red colour. This pottery, widely disseminated later by the Romans through the establishment of new workshops across the empire, was produced until late Antiquity, something, which reflects a special attachment to the aesthetic preferences of an earlier age.

The reason for the emergence of *terra sigillata*, however, remains unclear, as observed a few years ago by one of the most eminent specialists dealing with this pottery: “Why the red-gloss ware so rapidly drove the black off the market is however still an unsolved problem in the history of taste”.<sup>12</sup> He noted that in Italy black and red wares continued to be produced side by side for a time until red ware took over the market completely, and furthermore cited a critical opinion of an older theory which suggested that “... the red was meant to imitate gold, as the black imitated silver”, and that “... the riches won in the oriental campaigns of Lucullus and Pompeius led to a change from silver to gold in wealthy Roman households, reflected in a change from black to orange-red pottery in Italy”. Joining the critics of the view quoted above,<sup>13</sup> while at the same time remaining securely within the sphere of ceramological studies, it is worthwhile to consider at this point whether this change was in fact so rapid and to note both that it took place many decades before the campaigns of Lucullus and Pompeius during the Mithridatic Wars, and that it happened in the East, not in Italy. Moreover, the transition from the production of black gloss table ceramics to that of red ware, which took place in Italy around the mid 1st century BC, i.e., after the afore-mentioned campaigns, was caused rather by the fact that in the Hellenistic East, the Romans became acquainted with the already well-developed production of red gloss (*terra sigillata*) vessels.

Describing two late Hellenistic *terra sigillata* wares found around the eastern basin of the Mediterranean Sea, J. Lund, remarked that “Eastern Sigillata A was certainly the ceramic fine ware par excellence of the Seleucid Kingdom, whereas Cypriot Sigillata was mostly distributed in an area that used to be part of what may be called the Ptolemaic Commonwealth”.<sup>14</sup> This situation occurred at a time when the Romans practically controlled

that region, i.e. in the 1st century BC. If, however, we look at the political developments leading up to this situation, we will see that besides the largest Hellenistic kingdoms there were also lesser allies of Rome: Rhodos and Pergamon. The latter of these, Pergamon, developed its own production of terra sigillata (called Pergamene Sigillata) slightly later than the Eastern Sigillata A with its first red vessels dated to around the middle of the 2nd century BC. The distribution of both wares in the Black Sea area will be discussed later, as these imports were preceded by another group of fine vessels that have so far escaped archaeological notice in this region. This pottery group described below was named by the archaeologists working in the Mediterranean as Hellenistic Colour-Coated Ware A<sup>15</sup> and its production, or at least its distribution, might have been connected with the trade activity of Rhodos.

At the time when a new order was emerging after the death of Alexander the Great, Rhodos maintained its independence and – skilfully manoeuvring between the large powers – built its wealth on trade. The island together with its *peraia* profited from its location at the crossroads of trade routes. Having enlarged its merchant fleet, Rhodos developed a trade-oriented mass production of transport amphorae, which peaked in the late 3rd and early 2nd centuries BC.<sup>16</sup> At that time, Rhodos was in the best political position of her history. As the ally of Rome in two Macedonian Wars and in the Syrian campaign, the protectors of Rhodos rewarded her with territorial concessions in the south-west corner of Asia Minor. Rhodos' good times ended with Rome's victory in the 3rd Macedonian War (171-167 BC). Then, after Rome's most important enemies had been defeated, the growing prosperity of a small ally state, which guarded her independence carefully, became unwanted. A free port declared by the Romans at Delos in 166 BC, as well as the loss of the territories in Asia Minor, thus, weakened the economic foundations of Rhodos' prosperity.

Returning from political history to archaeological excavations in the region of the Kimmerian Bosphoros, it is important to note that some lower layers of the rubbish dump covering the destroyed *propylaion* in Nymphaion, mentioned at the beginning of this paper, contained fragments of the most popular Rhodian trade amphorae from the late 3rd and early 2nd centuries, including many stamped handles, as well as sherds of the Hellenistic Colour-Coated Ware A vessels (Fig. 4).<sup>17</sup> The most characteristic vessel belonging to this group is a conical-bodied *skyphos* with two handles attached to the widest point of its body and pressed in the middle to form two small loops (Fig. 4a-c, 5-7). As well, there are also simple bowls with incurved rims, the smaller ones resembling late Classical salt-cellars, other bowls with out-turned walls and rims, as well as plates with flattened rims (Fig. 4d-h). The common feature for all of these vessels, especially the *skyphoi* and bowls, are rather massive, sharply cut feet of a small diameter. The feet of the plates are even more massive and of slightly bigger diameter.

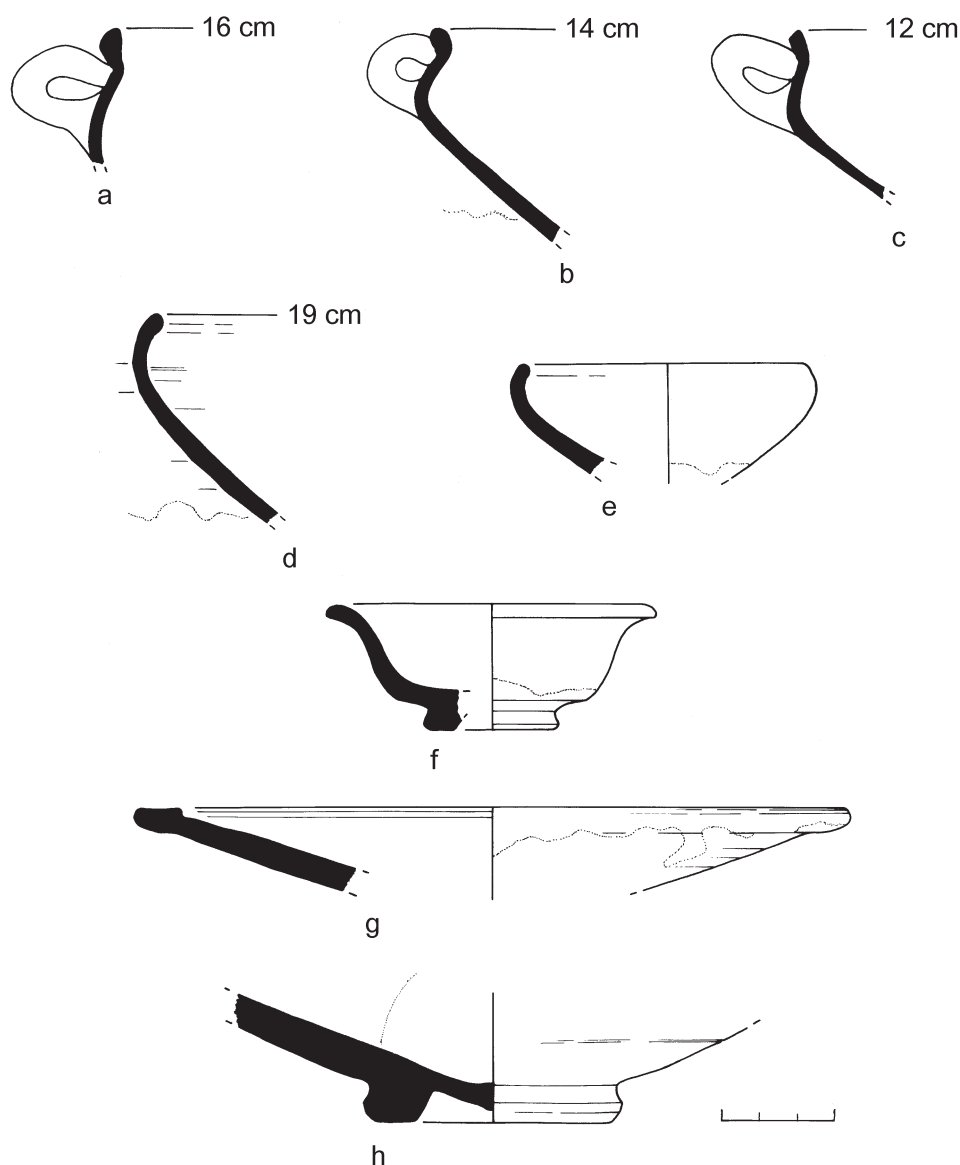


Fig. 4. Hellenistic Colour-Coated Ware A vessels from Nymphaion, 1997 campaign; for a-c, cf. Fig. 7a (drawing by K. Domžalski).

The fabric of the Hellenistic Colour-Coated Ware A vessels from Nymphaion is quite uniform. The clay is medium to hard-fired, buff, cream-yellow or pale-orange in colour (7.5YR 7/4-7/6 and 8/4-8/6)<sup>18</sup>, sometimes with a slightly pinkish hue (5YR 7/4-7/6). There are no visible inclusions except for many small, cream-coloured lime particles and sometimes very small, single flakes of silvery mica. The break is usually quite clean.<sup>19</sup>



Fig. 5. Hellenistic Colour-Coated Ware A skyphos from Pantikapaion. State Museum of Fine Arts in Moscow, inv. no. M 1168 [M 64, cist. no. 1336] (photo by V.P. Tolstikov).

The inner surface of the vessels is entirely covered with slip, whereas on the outside only the upper part is covered. On the lower part of the exterior, an uneven coverage of slip and sometimes runs of slip are clearly visible. This is the result of the potter's immersing a vessel in the slip while holding its foot. The slip is usually bi-coloured: brownish-red or reddish-brown inside (10R 4/4-4/8 or 2.5YR 4/4-4/8), black, dark grey or greyish-brown on the upper part of the exterior (2.5YR N2.5-N3 or 2.5/2-3/2) and red or brown again on the lower part, ending with the uneven extent of the slip. The bottom part of the body and the ring foot remain un-slipped. In the case of plates, the red zone inside is sometimes restricted to a circle (of a diameter approximately equal to the ring foot) in the central part of the floor. The slip is generally slightly lustrous, although in some cases it is dull – and in other instances has a metallic lustre. The bi-coloured treatment is the most popular, but some vessels, usually (or exclusively?) later in the series, have a uniform red or brownish slip. The described vessels were undecorated, but they had a high utility value. Their forms look elegant; they were carefully made and are



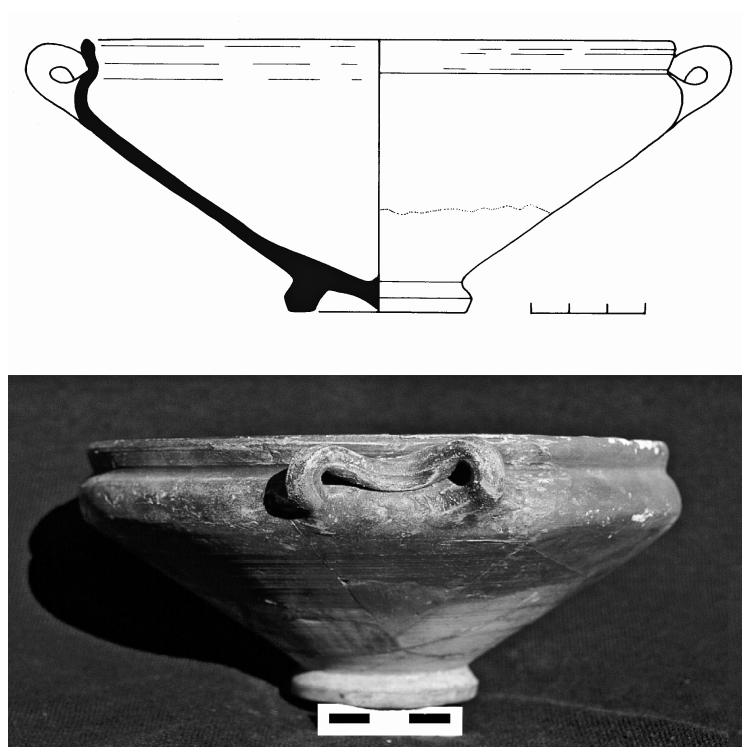


Fig. 6. Hellenistic Colour-Coated Ware A skyphos from Kepoi. State Historical Museum in Moscow, inv. no. Ke-70, r.A (219) no. 590 (drawing and photo by K. Domzalski).

rather thin-walled. The slip can sometimes be compared to that of the Eastern Sigillata in the next centuries, although the average quality is slightly lower, and the external partial slip cover with occasional runs looks rather messy.

The Hellenistic Colour-Coated Ware A has another specific feature which places this group in a special position in the history of the development of fine ware production: it was manufactured in very large quantities and had a broad, pan-regional distribution embracing the remotest parts of the *oikumene*. Originally, the bi-coloured effect may have been obtained unintentionally as the vessels were fired in compact stacks.<sup>20</sup> The shapes of the vessels were designed in such a way as to allow them to be stacked directly on top of each other in order to make stable piles in the kiln. The traditional reduction firing produced the black colour on the outside of the vessels only, while the tightly closed interiors of the vessels and their lower external portions remained in a remnant oxidizing atmosphere, which produced the red colour. The phenomenon may also be explained by an insufficient control of the firing process in the completely oxidised atmosphere as a result of which the grey and black areas simply resulted from exposure to the streams of hot air. All in all, the technology of mass production caused the potters to give up using separators between the vessels, which in turn enable the reduced atmosphere to

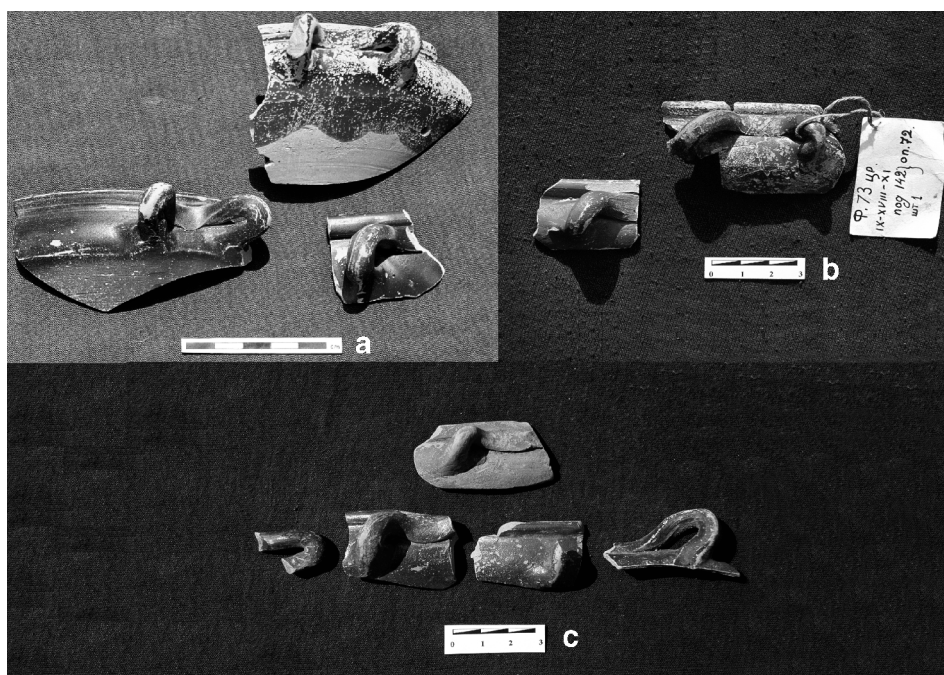


Fig. 7. Fragments of Hellenistic Colour-Coated Ware A skyphoi from: a – Nymphaion (finds from 1997, cf. Fig. 4a-c); b – Phanagoria (finds from 1973); c – Tanais (inv. nos. T-57-VI-N86; T-57-VI-N37; T59-kv.27, ja.24-N415; T-59-kv.31, št.11-N458; T-73-XIV-N289), (photo by K. Domzalski, not to scale).

penetrate their interiors, and the result of this then convinced the potters to put into practice the one-stage firing.

The broad distribution of the Hellenistic Colour-Coated Ware A pottery gradually promoted among the producers across the Greek-speaking world a new tendency of making vessels whose interior was covered with red slip. In time, it resulted in the complete discontinuation of reduction firing. This might have been the outcome of an awareness that firing in a reduced atmosphere was not really necessary any more, as many decades had passed since the time when highly valued Attic red-figured vessels, in which the black background was an inseparable composition element, were produced. As the other, smaller, Attic vessels with no painted decoration were fired in the same kilns together with the painted ones, in order to fill up the chamber, they obtained a uniform black slip. In the early 3rd century BC, when the method of over-painting light motifs on a dark background (West Slope style) became standard, it was probably the inability to depart from tradition which prevented the Attic craftsmen from making any serious changes in the firing process.<sup>21</sup> The first serious step towards the regular production of ceramics covered with red slip was thus made by the potters making the Hellenistic Colour-Coated Ware A vessels. These craftsmen did not have any

artistic aspirations but instead wanted to create several standardised vessel forms that could be mass-produced, retaining their high quality. The bicolour effect to be found on the majority of these vessels implies that the change in the preferences of the customers who first bought black gloss vessels but later became accustomed to the red ones, did not take place rapidly but instead came about gradually.

Archaeologists working in the eastern Mediterranean have clearly underestimated the discussed group of pottery, while in the Black Sea basin it is still almost entirely ignored. A survey of published reports, however, has revealed that the distribution of these vessels embraces Syro-Palestine, lower Egypt, Cyprus and Kyrenaika.<sup>22</sup> Surprisingly, the finds are not so common in the Aegean<sup>23</sup> in contrast to the Pontic littorals where the Hellenistic Colour-Coated Ware A vessels appear at most sites dated to the 3rd and, especially, 2nd century BC, as far as Olbia and Tanais. Although there are very few published finds from that region, the regular distribution of this pottery is confirmed by museum and field observations. The published photographs and drawings of the *skyphoi* with pinched double-loop handles – the most distinctive form of this sort of pottery – quite reliably indicate its presence in the Pontic region. It is not possible to identify definitely the other Hellenistic Colour-Coated Ware A forms without precise descriptions of the fabric and slip, a description, which is lacking in many publications, as their profiles can be easily confused with other pottery groups from less known centres, including the local ones. The collected information on the distribution of the Hellenistic Colour-Coated Ware A vessels around the Black Sea basin is as follows (Fig. 1):

*The Kimmerian Bosphoros:*

Pantikapaion: Zabelina 1984, 140, pl. 2.1 (the author reported more than 50 fragmented *skyphoi* found in the vicinity of the *prythaneion*); Tolstikov & Zhuravlev 2004, 269-275, pls. 94.6, 99.2-4 (fillings dated to the 3rd-2nd centuries BC); moreover, see Fig. 5, vessel mentioned in Korovina 1987, 83, n. 37.

Nymphaion: Domžalski 1996, 108, nos. 91-92, fig. 5.91-92, (incorrectly classified together with terra sigillata); moreover, numerous unpublished fragments in the State Hermitage Museum in St Petersburg; see also Figs. 4, 7a.

Myrmekion: unpublished fragments in the National Museum in Warsaw.

Phanagoria: Korovina 1987, 83, fig. 12 left; moreover, unpublished fragments in the Taman Museum Complex, Fig. 7b.

Kepoi: unpublished *skyphos* stored in the State Historical Museum in Moscow, Fig. 6.

Gorgippia: Zujkov 1987, 73, fig. 1.9.

Lobanovaja Ščel': Malyšev 1992, 55, pl. 1.2; Dmitriev & Malyšev 1999, 33, fig. 15.13.

*Other sites:*

Tanais: Boltunova, Kameneckij & Deopik 1969, 14, fig. 4; moreover, unpublished fragments in the Archaeological Museum at Nedvigovka; see Fig. 7c.

Bizone: Mirčev, Tončeva & Dimitrov 1962, 35, no. 4, fig. 21.1.

Tomis: Bucovaľă 1967, 55, no. 35.d, fig. 35.d.

Tyras: Samojlova 1988, pl. 22.2; moreover, numerous unpublished fragments from recent excavations in the Regional Museum in Belgorod Dnestrovskij.

Olbia: Levi 1964, 252-256, figs. 15.1, 17.2, 18.2-3, (filling dated to the late 3rd-late 2nd centuries BC); moreover, numerous unpublished fragments from recent excavations in the Archaeological Reserve "Ol'vija" at Parutino.

Kamenskoe gorodišče: Grakov 1954, 100, fig. 12.4.

Scythian Neapolis: Zaytsev 2004a, pl. 83.4 (= Zaytsev 2004b, 754, no. 8, pl. 349.4; Zajcev 2005, fig. 4.17), layers dated to the mid- and late 2nd century BC.

Outskirts of Vani: Ličeli 1977, 185, pl. 23.3.

Such a broad north-south distribution with equally numerous finds embracing the whole Pontic basin and the eastern Mediterranean indicates that the production centre (or centres?) must have been located somewhere in the middle. Rhodos or south-western Asia Minor fits this picture perfectly, as has been suggested by J.W. Hayes<sup>24</sup> and confirmed by recently published results of the first physico-chemical analyses.<sup>25</sup>

The dating evidence presented in the above-mentioned reports<sup>26</sup> shows that production of the Hellenistic Colour-Coated Ware A pottery developed at the beginning of the 3rd century BC,<sup>27</sup> and that exports intensified particularly in the late 3rd and early 2nd centuries. A decline took place in the late 2nd century BC. All this also fits well with the outline of economic activity of Rhodos presented above, as is proved by the broad distribution of its trade amphorae.<sup>28</sup> Thus, the described pottery group makes up a bridge between the pan-regionally distributed Attic black gloss ware of the late Classical period and the later terra sigillata produced from around the mid- and late 2nd century BC: Eastern Sigillata A presumably from the Antioch region,<sup>29</sup> Pergamene Sigillata from the eponymic town,<sup>30</sup> and the so-called Cypriot Sigillata from a yet unknown area in the eastern Mediterranean (Cyprus or the southern coast of Asia Minor are most probable).<sup>31</sup> It should not be forgotten that the origins of terra sigillata in all of the centres named above were connected with the production of black gloss pottery, with the ultimate switch to the red colour taking place in the late 2nd century BC in the case of Eastern Sigillata A, and in the mid 1st century BC in the case of Pergamene Sigillata.

When discussing the distribution of the Hellenistic Colour-Coated Ware A vessels, it should also be noted that at the peak of their popularity they were



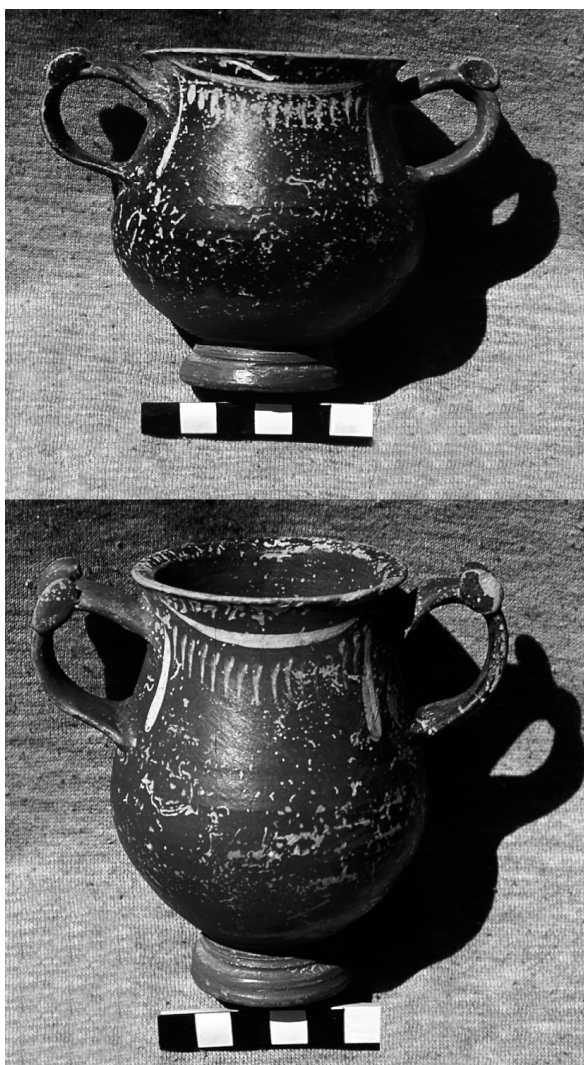
sufficiently widespread to inspire producers from many workshops to copy their forms, as is most evident in the case of the *skyphoi*. This is particularly true of the eastern Mediterranean,<sup>32</sup> but similar cases also occurred, if one is to believe the publications, in Chersonesos and in the Bosporan (Kerch Strait) region.<sup>33</sup> The majority of the vessels found in the Black Sea littoral, and seen by the author at many excavation sites and in museums, seem, however, to have come from one main centre, as is indicated by the homogeneity of the macroscopic features of the clay and slip. The traits of the Hellenistic Colour-Coated Ware A pottery from Nymphaion, mentioned above, match with those of the vessels found at other sites in the discussed region. These observations have been confirmed by the results of the introductory physico-chemical analyses of the few samples taken from sherds found at Nymphaion, Pantikapaion, and – as a distant reference – from Tell Atrib (Athribis) in lower Egypt.<sup>34</sup>

Although Hellenistic Colour-Coated Ware A pottery has a very broad and regular distribution in the Black Sea region, the quantity of this ceramics was always smaller than that of the vessels coming from the main supplier in tableware, which from the 2nd century BC was Pergamon. The Attalid Kingdom had increased its power, by strengthening friendly relations with Rome, and the end of its sovereignty in 133 BC, thanks to a peaceful take over on the part of the Roman state, did not result in a decline of economic importance. Already in the 3rd century BC, the production of black gloss pottery of excellent quality, decorated with over-painted West Slope motifs, was developed in Pergamon, and later on, in the early 2nd century BC, the city became the main producer of vessels decorated in this style in the Hellenistic world (Fig. 8).<sup>35</sup> In the late 2nd century BC, terra sigillata vessels also began to be manufactured there (Fig. 9).<sup>36</sup> Some of them were decorated with residual West Slope style motifs, painted and scratched, but characteristic for these workshops was the newly introduced decoration with the use of relief appliqués, i.e., small plaques impressed in moulds and fixed on the outside walls (Fig. 10a-b).<sup>37</sup>

The production of Pergamene wares (black gloss vessels and terra sigillata) was of a different character than that of the Hellenistic Colour-Coated Ware A pottery connected with Rhodos. To a great extent, it was aimed at customers from the town itself, and export was of lesser importance. That is why great weight was attached to the meticulous execution: the vessels were entirely covered with slip and they were often decorated using the above-mentioned techniques. In the late 2nd and 1st centuries BC, as these vessels began to be produced in larger quantities, they are frequently discovered in distant places. However, their influx into the eastern Mediterranean was lessened by the domination there of Eastern Sigillata A, but in the Black Sea basin this pottery had no serious competitor.

The Pergamene wares are easy to recognise for archaeologists working in the Pontic area, even though only their decorated version has attracted any great interest.<sup>38</sup> It should not, however, be forgotten that the undecorated ves-

*Fig. 8. Pergamene West Slope Ware kantharos from the region of Kimmerian Bosporos, Kerch Archaeological Museum, inv. no. KMAK 484 (photo by K. Domzalski).*



sels, which are distinguished by their very characteristic shapes (Fig. 9), made up a considerable share of the production. The fabric and slip of Pergamene Sigillata<sup>39</sup> are less homogenous and uniform as those of the Hellenistic Colour-Coated Ware A or Eastern Sigillata A, but the ware under discussion may be reliably identified thanks to the regular presence of a few, single, rather large flakes of golden mica.<sup>40</sup> Fortunately, the discovery of a large potters' quarter producing this ware on the Ketios River more than twenty years ago removed all doubt as to its provenance.<sup>41</sup>

The change from vessels covered with black slip through bi-coloured vessels to red ones, as witnessed by the Attic and Hellenistic Colour-Coated Ware A ceramics can also be observed in the case of the Pergamene pottery. Initially these vessels decorated in the West Slope style were classically black, but the



Fig. 9. Pergamene Sigillata skyphos from the region of Kimmerian Bosphoros, Kerch Archaeological Museum, inv. no. KMAK 2787 (photo by K. Domżański).

poorly controlled conditions of firing, connected with intensified production in the 2nd century BC resulted in the appearance of the first bi-coloured versions (Fig. 8). In the case of Pergamene Sigillata, the bi-colour treatment was quite widespread, but it resulted from the arrangement of the vessels in compact stacks, which gave the aforementioned effect of red interior and black exterior (Fig. 9). Ultimately, the red vessels came to dominate the production about the mid 1st century BC.<sup>42</sup>

Of the two other earliest sigillata wares manufactured in the eastern Mediterranean, mentioned above,<sup>43</sup> only Eastern Sigillata A<sup>44</sup> can be found at the archaeological sites around the Black Sea basin and beyond the littorals. The Eastern Sigillata A production is more similar to the presumably Rhodian

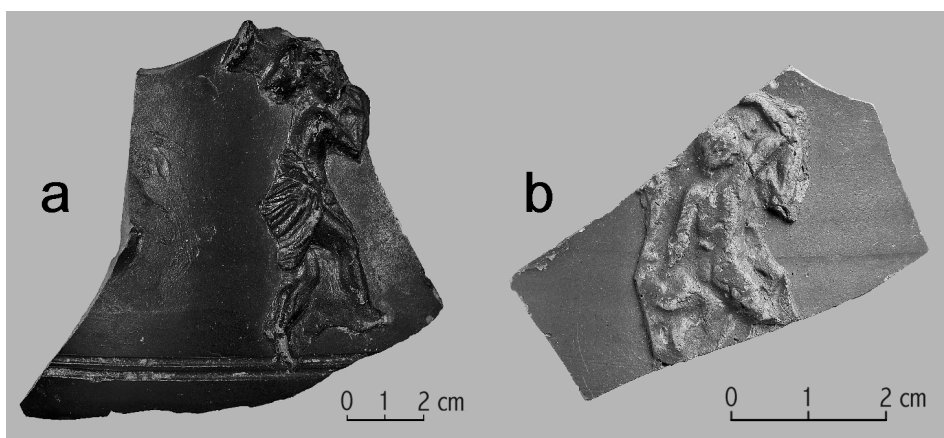


Fig. 10a-b. Pergamene Ware: appliqués of black-gloss and terra sigillata vessels from Myrmekion, National Museum in Warsaw, inv. nos. 225169 and 225170, cf. Michałowski 1958, fig. 87.b, 88, (photo by Z. Doliński).

Hellenistic Colour-Coated Ware A: it clearly contains a higher proportion of plain vessels with only stamped decoration or none at all. Even the colour of the clay, yellowish-cream or pale-pinkish, was similar to that of the Colour-Coated vessels. It seems that the potters from the Antioch region were the first to begin mass production of terra sigillata vessels covered with uniform red slip, a production which may more or less have coincided with the decrease in the production, or at least the broad distribution, of the most recent, also uniformly red, Hellenistic Colour-Coated Ware A vessels in the late 2nd century BC. The Eastern Sigillata A does not have a bi-coloured version and the examples of vessels of this kind with black slip are exceptionally rare.

It is interesting to follow the routes this pottery took, in coming from the north-eastern corner of the Mediterranean to the Black Sea (Fig. 11), where its distribution is surprisingly widespread. Although these vessels, representing the so-called second generation of Eastern Sigillata A shapes,<sup>45</sup> are not very numerous, single finds have been made at many Pontic sites occupied in the 1st century BC, yet the list of published examples is quite short, embracing those from Pantikapaion, Nymphaion, Phanagoria, Chersonesos, Olbia, Beljaus and Vani.<sup>46</sup> Moreover, some unpublished fragments found in Myrmekion and Tanais were noted by the author in museum collections.<sup>47</sup> It is possible that the Eastern Sigillata A vessels were imported using the traditional sea routes, which seem, however, to have been extremely lengthy. Therefore, an overland route should also be taken into consideration, although the lack of evidence within eastern Asia Minor makes it impossible to prove this hypothesis at present. The only hint of this route is the quite frequent appearance of the Eastern Sigillata A in Vani, where it was almost as numerous as Pergamene Sigillata and some Pontic (Bosporan?) wares in an early 1st century BC context.<sup>48</sup>

With our discussion of the two terra sigillata groups found in the Black Sea littorals, we have almost entered the Roman period. The imports of these wares continued after the 1st century BC. This is particularly true of the pottery from the Pergamene region, where production was moved from the Ketios Valley to the seaside Pitane (modern Çandarlı) between the two eras; the vessels made there are called Eastern Sigillata C.<sup>49</sup> On the contrary, early Roman forms of the Eastern Sigillata A, produced in the area of Antioch in the 1st and 2nd centuries AD are exceptionally rare in the Pontic region.

To conclude, it should be stressed that this overview is limited to the main trends in the circulation of highest quality table ceramics from the main workshops of mass-scale production, whose wares were imported to the Black Sea region. The imports of Attic black gloss pottery in the late Classical and early Hellenistic periods as well as similar Pergamene vessels, replaced by the Pergamene Sigillata in the late Hellenistic times, were unparalleled in scale. The Hellenistic Colour-Coated Ware A vessels of possibly Rhodian origin, dated to the late 3rd and 2nd centuries BC, were less numerous, but the true volume of their import still remains to be established, together with a more detailed chronology of their production.



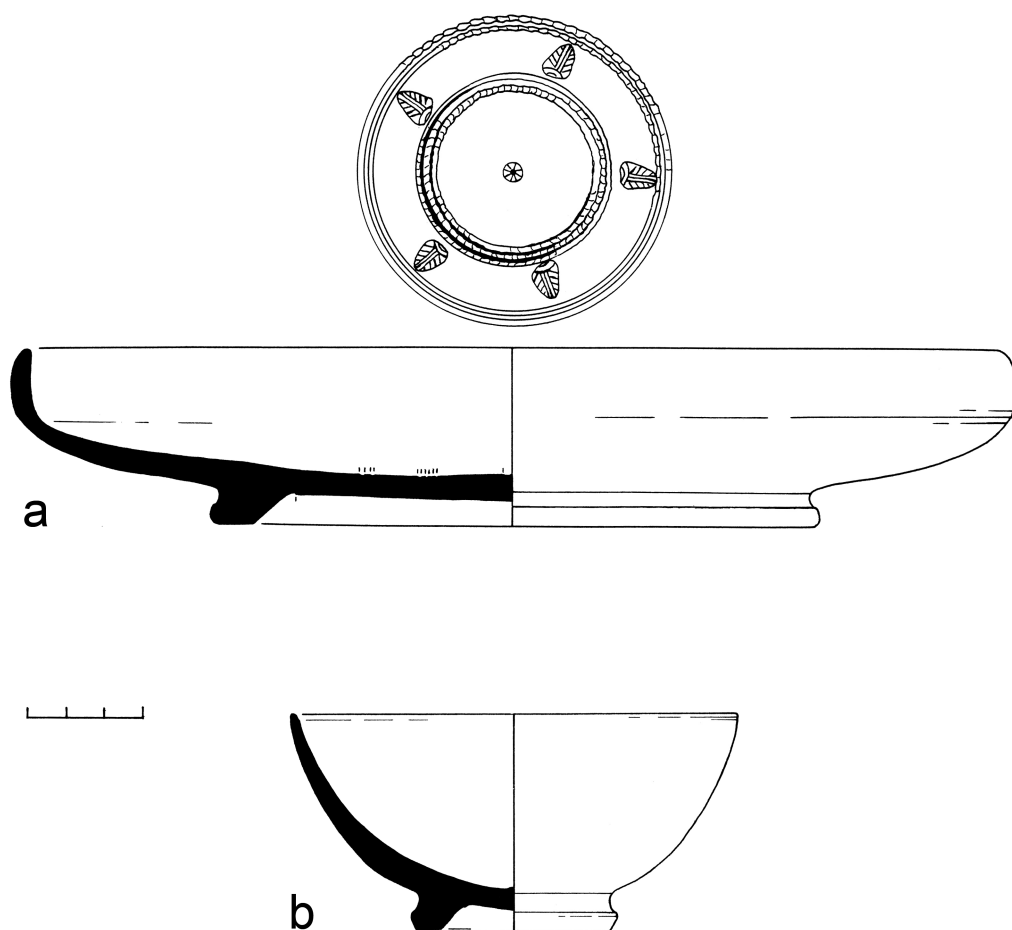


Fig. 11. Eastern Sigillata A: a – plate, form 4A from Phanagoria, State Museum of Fine Arts in Moscow, inv. no. F-1082 [F-64, uč. III, m. 59, no. 261] (cf. Korovina 1987, 84, fig. 13); b – bowl, form 22B from Olbia, Archaeological Reserve “Ol’vija” at Parutino, inv. no. O-2001, R-25/10, (drawing by K. Domžalski).

The imports to the Pontic areas also include wares not discussed here: black gloss vessels from some unidentified workshops, the so-called Megarian bowls from many Aegean – especially Ionian – centres, which were very popular in the Pontic region in the 2nd century BC and later, vessels with the dark-on-white painted decoration, such as *lagynoi*, and, the recently identified production of the Knidian Peninsula workshops, hemispherical bowls of “Megarian” form bearing rouletted bands on the outside of the walls.<sup>50</sup>

To present the trends in the production of these vessels, their distribution in the Black Sea region, and their impact on the local manufacturing of pottery requires a more comprehensive approach, exceeding the scope of this article. The present contribution marks the beginning of the author’s new

project, the aim of which is to collect all the data on the Hellenistic Colour-Coated Ware A, connected with the activity of the Rhodian trade centre. The goal will be to define the ware precisely and to produce a typological classification of the vessel forms, embracing not only the most popular but also all the existing shapes, a task that might hopefully be facilitated by additional chemical analyses. It is also important to gain a more detailed knowledge of the chronology of production of these vessels. For that purpose it will be necessary to search for meaningful contexts outside the Aegean, because the pottery under discussion is not very common there. It is expected that such a study will broaden our knowledge about this hitherto underestimated pottery group, which occupies a key position in the development of the mass production and distribution of table ceramics in the Hellenistic period and is a direct predecessor of terra sigillata.

## Notes

- 1 The author would like to express his gratitude to a number of archaeologists from many expeditions in the Black Sea region and to museums in Ukraine and Russia for granting access to previously discovered and stored pottery materials. Special thanks are due in this respect to Mrs. O.Ju. Sokolova, the head of the expedition working at Nymphaion, for her assistance during the campaigns in the late 1990s. Warm thanks are also owed to S. Twardo and J. Lund for improving the English of this paper, and to A. Nowak for computer processing of the photographs and drawings illustrating the article.
- 2 Sokolova 2004, 91-94.
- 3 Čistov & Domzalski 2001, 100-109, figs. 5-11.
- 4 Presenting a list of all the finds of Attic black gloss pottery from the Pontic region exceeds the framework of this paper, as it would embrace an extremely large number of published excavation reports and many notes on unpublished pieces.
- 5 E.g. Marčenko, Žitnikov & Kopylov 2000, pls. 35-36.
- 6 Gill 1988, 180-181.
- 7 Gill 1988, 181.
- 8 E.g. Solomonik 1978, pls. 1-4; 7-8; Nawotka 1998, pls. 16.1-3, 9-10, 14; 17.3-4, 8-9, 11-15.
- 9 A similar hypothesis was put forward by V.M. Zubar' (2002, 276-277), in his explanation of the presence of graffiti on terra sigillata vessels from the Late Scythian necropoleis around Chersonesos in Crimea and dated to the late 1st-early 2nd centuries AD. Zubar' came to the conclusion that these vessels were earlier used by the inhabitants of the town, who made the inscriptions in Greek, and then later sold to the barbarians. The present author is grateful to Professor T. Sarnowski for drawing his attention to the idea presented by V.M. Zubar'.
- 10 Rotroff 2002, 106, fig. 6.; cf. also notes in Rotroff 2005, 27. The situation was similar in the eastern Mediterranean, where the significant exports of Attic West Slope vessels were almost exclusively limited to mainland Greece and the Aegean islands; cf. Rotroff 2002, 105-107, fig. 6.
- 11 Rotroff 1991.
- 12 Ettlinger, Hedinger & Hoffmann 1990, 24.

- 13 Cf. also later remarks in favour of the connection between gold vessels and red gloss pottery, in Vickers 1994, 239-240, 245-248.
- 14 Lund 1997, 209-210.
- 15 Hayes 1991, 23-24, fig. 12, 1-3; other remarks on that pottery, see below n. 22.
- 16 Lund 1999, with exhaustive literature on the subject; Gibbins 2001, 290-293; cf. also Šelov 1958, 334-336, with remarks confirmed by later discoveries in the Black Sea region.
- 17 Unpublished materials; excavations conducted in the late 1990s by the expedition of the State Hermitage Museum in St Petersburg. The observations presented here are of general character because the excavated site was not a closed deposit and the methods of exploration and documenting were far from exact.
- 18 Munsell Soil Color Charts, 1990 edition.
- 19 Describing the fabric of the Hellenistic Colour-Coated ware A finds from Nea Paphos, J.W. Hayes noted, that "the (...) ware is fairly close to that of Eastern Sigillata A, which may betray similar manufacturing processes (e.g. selection of clay-body), however, this is a distinct ware" (Hayes 1991, 23). The finds from Nymphaion confirm this observation.
- 20 A similar effect was noted on many Attic black gloss vessels dated to the late 4th and early 3rd centuries BC, but the majority of the later ones (until the mid-2nd century BC) were again fired completely black; cf. Rotroff 1997, 11.
- 21 With the exception of an episodic manufacturing of bi-coloured vessels in the late 4th and early 3rd centuries BC, mentioned above, in note 20.
- 22 The finds from several sites in the eastern Mediterranean inspired a certain interest in the discussed pottery. For some basic information, see: Kenrick 1985, 119-121, no. B186, fig. 24.186:1-3; Hayes 1991, 23-24, fig. 12.1-3; Salles 1993, 198, no. 322, fig. 209.322; Papuci-Władyka 1995, 44-46, cat. nos. 65, 149, 154, 281, 315, pls. 9.65; 24.149; 42.315; Slane 1997, 280-281 (TA type 9), pl. 4: FW38-39; Rotroff 1997, 117-118, cat. nos. 391-394, fig. 22.391-394, pl. 38.391-394; Młynarczyk 2000, 231, pl. 118.3-5.9; Młynarczyk 2002, 122-123, fig. 5; Élaigne 2000; Élaigne 2002, 161-163, 165, figs. 5; 10 (top vessels). Some of the publications mentioned above present lists (incomplete) of finds from other sites in the region.
- 23 E.g. Rotroff 1997, 117-118, n. 159.
- 24 Hayes 1984, 96 no. 167, fig. 14.167; Hayes 1991, 23-24, fig. 12.1-3. It should be noted that in describing isolated finds of the pottery under discussion, some of the Soviet archaeologists also suggested a Rhodian origin; cf. Levi 1964, 252-255, figs. 15.1; 17.2; Korovina 1987, 83, fig. 12 (left).
- 25 The analyses showed similarities in the chemical composition of the clay between Rhodian trade amphorae and the named table pottery; Élaigne 2002, 161-163, 165, fig. 5.
- 26 See also above, note 22.
- 27 One of the earliest examples of the described vessels was found in the Serçe Limanı wreck in the South-east Aegean (Pulak & Townsend 1987, 45-46, figs. 16-17), dated to c. 280-275 BC; cf. Rotroff 1997, 118 n. 162.
- 28 See above, note 16.
- 29 Hayes 1985, 9-48, pls. 1-11; Lund 2005.
- 30 Meyer-Schlichtmann 1988.
- 31 Hayes 1985, 79-91, pls. 18-22; Lund 1997.
- 32 Cf. Riley 1979, 281-282, fig. 109.602-605; Hayes 1984, 96, no. 167, fig. 14.167; Kenrick 1985, 101-102, no. B135, fig. 20.135:1-2; Młynarczyk 2000, 229-230, pl. 117;

- Élaïne 2000; Élaïne 2002, 160, 163, figs. 3, 9 (top vessels); Ballet 2002, 90-91, figs. 2-5; Harlaut 2002, 271-272, fig. 11.
- 33 Chersonesos: Belov 1962, 156, figs. 25.e; 27.e; Novo-Otradnoe: Arsen'eva 1970, 104-105, 134, pl. 15.12; Zolotoe: Korpusova 1983, 43, 104, no. 30, grave 50, figs. 7.2 (left); 11.11; pl. 28.6.
- 34 The analyses were conducted by G. Schneider from the Arbeitsgruppe Archäometrie in Berlin. 18 samples from different Hellenistic Colour-Coated Ware A forms were examined by means of wavelength dispersive X-ray fluorescence method (WD XRF), showing a sufficient homogeneity of chemical composition of the clay to suggest that they all originate from one centre. It is planned to compare these results with the analyses conducted by the Laboratoire de Céramologie de la Maison de l'Orient in Lyon (cf. Élaïne 2002, 161-163, 165, fig. 5).
- 35 Schäfer 1968, 45-63, pls. 9-21; Behr 1988.
- 36 Meyer-Schlichtmann 1988.
- 37 Schäfer 1968, 64-100, pls. 22-40; Hübner 1993; 1997.
- 38 For the lists of Pergamene West Slope style vessels found in the Black Sea region, see Behr 1988, 110-111; Rotroff 2002, 104, fig. 5. For pottery with relief appliqués, see, e.g., Michałowski 1958, 72-74, figs. 87-88; Gajdukevič 1959, 76-77, figs. 82-84; Šurgaja 1963 and 1965; Zabelina 1968 (except for fragments in fig. 3.12-13, which seem to be Italian); Kačarava, Kipiani, Lordkipanidze & Puturidze 1979, 143, pl. 67.432-433; Lordkipanidze *et al.* 1983, 146, nos. 216-224, pl. 23:216-224; Gorončarovskij 1983, 121-122, figs. 3, 4.1; Zhuravlev 2000a; Tolstikov & Zhuravlev 2004, 274-275, pl. 99.5-6, 9.
- 39 Cf. Meyer-Schlichtmann 1988, 14-17, colour plate.
- 40 This feature seems to be typical for the whole Pergamene region, embracing also the early Roman Eastern Sigillata C from Çandarlı; cf. Hayes 1985, 71.
- 41 So far, most information about Pergamene pottery comes from excavations conducted in the town itself (cf. above, notes 35-37, and Hepding 1952). The materials from Turkish rescue excavations in the potters' quarter conducted in 1977-1988 have not been published, except for some introductory information, see, e.g., Bounegru & Erdemgil 1998; Bounegru 1999-2000; Bounegru 2003.
- 42 Meyer-Schlichtmann 1988, 15-17, 194-195, colour plate.
- 43 See above, note 14.
- 44 See above, note 29.
- 45 Lund 2005, 234, fig. 10.2.
- 46 Pantikapaion: Zabelina 1984, 144-145, pl. 2.11, 15, 17-20, (described improperly as Rhodian); Nymphaion: Domzalski 1996, 99, fig. 1.17; Phanagoria: Korovina 1987, 84, fig. 13 (centre), (cf. Fig. 11a); Chersonesos: Kadeev 1996, 49, fig. 9; Olbia: Krapivina 1993, 111 (type 8), fig. 50.15 (=Kryžickij, Lejpunskaja, Rusjaeva, Skržinskaja, Krapivina & Anochin 1999, 517, fig. 160.3), moreover, see Fig. 11b; Beljaus: Daševskaja 1976, 56, fig. 4.8; for finds from Vani, see below, note 48.
- 47 A few fragments from Myrmekion are stored in the National Museum in Warsaw, and equally scarce finds from Tanais are kept in the Archaeological Museum at Nedvigovka.
- 48 Matiašvili 1976, pls. 125-126; Kačarava, Kipiani, Lordkipanidze & Puturidze 1979, 143, pls. 65.416,420; 66.416; Matiashvili 2004, 121-123, figs. 1-4, 7-10. In the latter paper, only the Eastern Sigillata A vessels were identified properly. The author's impression concerning the finds of *terra sigillata* in Vani obtained from



the fragmentary publications was confirmed by observations of the materials held in the storage-rooms of the local museum made in autumn 2005.

49 Hayes 1985, 71-78, pls. 16-18.

50 Kassab Tezgör 2003, 41-42, pl. 35.1-2; the scope of these imports in the Pontic region is illustrated by the recently published finds from Istros, Domăneanțu 2000, 112-116, nos. 565-579, pls. 37.565-39.579.