# TABLE OF CONTENTS

## ARTICLES

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biernacki, A. B. / Sharankov, N.</td>
<td>A Hitherto Unknown Aspect of the Military Activity of the <em>Legio I Italica</em> in the Light of a Recently Discovered Pedestal with a Greek Inscription from <em>Novae</em></td>
<td>1</td>
</tr>
<tr>
<td>Grozdanova, G.</td>
<td>Relative Chronology of the Pottery of the Early Medieval Lower Danube Popina-Garvan Archaeological Group</td>
<td>21</td>
</tr>
<tr>
<td>Komar, O.</td>
<td>Archaeological and Archaeomagnetic Dating of Early Medieval Kantsyrka Type Pottery</td>
<td>39</td>
</tr>
<tr>
<td>Khamaiko, N.</td>
<td>The Late Medieval Sites of the Yatseva Balka Type in the Dnieper Rapids Region: Problems of Dating and Interpretation</td>
<td>71</td>
</tr>
<tr>
<td>Komatarova-Balinova, E. / Penkova, P.</td>
<td>The “Horse Amulets” from the Collections of Vidin and Vratsa Museums – a Modest Contribution to a Continuous Discussion</td>
<td>93</td>
</tr>
</tbody>
</table>

Editor-in-Chief: Lyudmil F. Vagalinski PhD (Sofia, Bulgaria)

Editorial Advisory Board: Prof. László Bartosiewicz PhD DSc (Budapest, Hungary); Prof. Florin Curta PhD (Gainesville, Florida, USA); Prof. Falko Daim PhD DSc (Mainz, Germany); Prof. Haskel J. Greenfield PhD (Winnipeg, Manitoba, Canada); Jean-Luc Guadelli PhD (Bordeaux, France); Prof. Boris Magomedov PhD (Kyiv, Ukraine); Prof. J.V.S. Megaw MA DLitt (Adelaide, Australia); Prof. Aristotle Mentzos PhD (Thessaloniki, Greece); Prof. Marcel Otte PhD (Liege, Belgium); Prof. Thilo Rehren (Nicosia, Cyprus); Prof. Mustafa Sayar PhD (Istanbul, Turkey); Nicolay Sharankov MA (Sofia, Bulgaria); Rastko Vasic PhD (Belgrade, Serbia); Prof. Tivadar Vida PhD (Budapest, Hungary); Prof. Jak Yakar PhD (Tel Aviv, Israel).

Language Editors: Sven Conrad PhD (German), Leipzig, Germany; Jean-Luc Guadelli PhD (French), Bordeaux, France; Amber Roy (English), Newcastle, England.

All articles in Archaeologia Bulgarica are submitted to peer review.

On the cover: a brass amulet-horse ridden by a male head, NW Bulgaria; see the paper of Komatarova-Balinova / Penkova in this issue; photo by Krasimir Georgiev.
A Hitherto Unknown Aspect of the Military Activity of the *Legio I Italica* in the Light of a Recently Discovered Pedestal with a Greek Inscription from *Novae*

Andrzej B. BIERNACKI / Nicolay SHARANKOV

Abstract: The paper publishes a recently discovered inscription from *Novae* honouring Emperor Gordian III with a statue in the camp of *legio I Italica*. It was dedicated by the city of *Dionysopolis* as sign of gratitude to the emperor and the legion for saving all citizens, undoubtedly from a barbarian attack. The event must have taken place in AD 242, when Gordian III was in Lower Moesia preparing his Eastern campaign and, according to *Historia Augusta*, destroyed all hostile forces there.

Key words: *Novae*, *Dionysopolis*, Gordian III, *Legio I Italica*, Barbarian invasions

1. Archaeological Context of the Discovery*

Based on a detailed study of the results of the ongoing exploration of the large legionary bath and the early-Byzantine episcopal complex in *Novae*, the decision was taken in 2015 that the function and nature of the block of houses immediately west of the former public edifices was to be conclusively identified. This area is also highly significant for a complete description of the legionary camp in *Novae* (fig. 1).

Before selecting the area of direct archaeological exploration, a thorough interdisciplinary study was made of the earlier results of the investigation of Section X of *Novae* during the previous thirty-five years. Of particular relevance were the enormous rectangular pillars and pilasters discovered in 1997-1999 and at that time prefatorily construed as remnants of the aqueduct which supplied the complex of the large legionary bath in *Novae*. The discovery in 1998 and the further research in 2011 of a similar set of a pillar and a pilaster located parallel to the alleged aqueduct, some 20 m away from it, made it necessary to revise the previous opinions on the layout and application of these structures (fig. 2).

In the seasons of 2015-2017, two further enormous rectangular pillars were excavated. The northern one, of the size of 5.30-5.32 m × 1.45-1.48 m, was made in the *opus quadratum* technique of large, carefully cut cuboidal blocks of stone of the maximum dimensions 1.00 × 0.80 m, joined by ties sealed with molten lead (fig. 3). The faces of the pillar consist of very carefully cut rusticated stone blocks with beveled edges. Two courses of such blocks are extant.

The southern pillar has the dimensions of 5.20-5.25 m × 1.45 × 1.48 m and was executed in a manner similar to the northern one. Only a single overground course of blocks is extant. On all sides of the overground section of the pillar, guard rails are preserved, made of carefully cut stones of an arch-shaped profile, of a height of 0.18 m.

* Parts “1. Archaeological context of the discovery” and “2. Pedestal” are by A. B. Biernacki; “4. Epigraphical commentary” and “5. Commentary” are by N. Sharankov; and “3. Inscription” was written by both authors.

1 The exploration was conducted by the scholarly-and-research team of the International Interdisciplinary Archaeological Expedition “Novae” of the Adam Mickiewicz University of Poznań, headed by Dr. Andrzej B. Biernacki and Dr. Elena Klenina.
Fig. 8. *Novae*. The lower part of the pedestal of the statue with a Greek inscription (photo by A. B. Biernacki)

Fig. 9. *Novae*. The pedestal with a Greek inscription. View from the front (photo by A. B. Biernacki)

Fig. 10. *Novae*. The pedestal with a Greek inscription. View from the back (photo by A. B. Biernacki)

Fig. 11. *Novae*. The pedestal with a Greek inscription. View from the side (photo by A. B. Biernacki)

Fig. 12. *Novae*. The pedestal with a Greek inscription. View from the top (photo by A. B. Biernacki)
Relative Chronology of the Pottery of the Early Medieval Lower Danube Popina-Garvan Archaeological Group

Galina GROZDANOVA

Abstract: The excavated in the second half of the 20th century settlements and cemeteries near Popina village, Dzhedzhovi lozya locality, and Garvan village, Staretsa locality, proved to be among the most important sites regarding the earlier period of the formation of the Bulgarian state. Despite the lively scientific interest, a number of aspects related to the chronology of the sites in question remain disputable and not entirely clear. Pottery appears to be most important for the chronology. The existence of separate layers (archaeological features) that contains exclusively handmade pottery and pottery formed on a primitive wheel is questioned and the simultaneous occurrence of the grey burnished and handmade ceramics is discussed. Working-out of dating markers for relative chronology is an ambitious task that has been carried out in this paper. The results of the analyses of the pottery deposits and their technological, as well as the decorative and formal characteristics are presented, based on publications and artifacts in the collection of National Archaeological Institute with Museum at Sofia.

Two certain chronological periods are distinguished through comparative analyses of the deposits within the sites and in the neighboring regions and the cremation burials south of Danube in particular. The first of them is dated between the second half of 7th c. till the middle of 9th c., and the next one – second half of the 9th till the early 11th century.

The results of the pottery analyses are not as definitive as it might be expected. Future studies will enlighten better some of the questions already raised here.

Key words: pottery, Early Middle Ages, relative chronology, Lower Danube.

1. Introduction

The systematic archaeological excavations, during the second half of the 20th century, of the settlements and cemeteries at Popina-Dzhedzhovi lozya and Garvan-Staretsa (Silistra district, NE Bulgaria) proved to be of great importance for the discussions regarding the earlier period of medieval Bulgaria. There are over 180 settlement features, which have been divided between two main periods (the so-called cultures I and II), the latter of which has (two to four) occupation levels. Several cemeteries have been excavated and attributed to certain periods of the settlement’s existence (Въжарова 1965; Въжарова 1976; Въжарова 1986). They provide the opportunity to put forward the issue of the characteristics of the Slavic culture in the lands to the south of the Danube River, its connections to other pagan cemeteries in that area, and to outline the successive stages of its development – the formation of the so-called “culture II”, or the Bulgarian culture of the 9th-10th to early 11th century. Despite of its methodological shortcomings, the timely publication of the settlements and their respective cemeteries by Zh. Vazharova offers a substantial base for comparative analysis and discussion.

The sites have attracted much scholarly attention, which have resulted in numerous studies and discussions for over 30 years.
8th century that also appears in the 9th century (fig. 3/4; Bekić 2016, 93, 108, 110).

Zh. Vazharova believed that there were two phases in the cemetery she had excavated in Garvan 1. There is no superposition and the distinction between the two phases is based exclusively on pottery typology. Three different categories of pottery could be identified: handmade; grey ware with burnished ornament; and pottery thrown on a slow wheel with combed decoration. Although not explicitly indicated, Vazharova’s interpretation of the site’s chronology attributed to the later phase (the “upper layer,” as she called it) those graves (## 4, 6, 8, 9, 11, 13, 14, 16, 18, 20, 23, 28–30, 32–35, 42, 43, 49–53, 55, 56, 58, 60, 62, 70–73, 78–80, 82 and 83), in which no handmade pottery has been found. On the other hand, it is worth noting how technologically homogeneous the pottery thrown on a slow wheel actually is: a sandy paste with an unevenly grey sherd break, a color after firing which varies from grey-brown to black-brown, and combed decoration. As a result of the forming techniques the walls are typically thick. Most shapes approximate a truncated cone turned upside down, with
Archaeological and Archaeomagnetic Dating of Early Medieval Kantsyrka Type Pottery

Oleksii KOMAR

Abstract: The Early Medieval Alan pottery production center in Kantsyrka valley on Dnieper river was the first evidence of the resumption of mass craft production of goods in the steppe of the Northern Black Sea region during the post-Roman period. This fact, as well as the fact of the unquestionable Alanian North Caucasian origin of the pottery tradition, constantly attract the attention of researchers to the problems of ethnic origin of the population, the reasons for its migration to the Dniepr region, and the lifetime of the settlements.

The question of chronology remains one of the most acute problems. Pottery of the Kantsyrka type was dated to the second half of the 7th – 8th centuries AD soon after its discovery and attribution as an independent cultural type based on analogies and finds of ceramics of this type together with coins in complexes of nomads. After 1973, three archaeomagnetic dates were added to the base of the dating, obtained for pottery kilns from the three workshops of the Lyubymivka settlement in Kantsyrka valley. The initial archaeomagnetic framework proposed for the time of existence of the workshop, “6th – 7th centuries AD”, differed from archaeological dating. This led to the emergence of two trends in the dating and interpretation of the pottery center in the Kantsyrka valley. The first interpretation explained the appearance of Alan pottery centers at the Dnieper region area as the first wave of the resettlement of the North Caucasus population within the Khazar Khaganate (after AD 665), prior to the formation of the Saltiv culture in the Don region in the middle of the 8th century. The second interpretation relied on the archaeo-magnetic dates and assumed the emergence of the center in the framework of the Proto-Bulgarian tribal union in the 6th – 7th centuries AD, with the subsequent transfer of pottery making traditions in the Danube region after AD 681.

Modern analysis of the occurrence of the Kantsyrka type ceramics in the archaeological complexes of nomads and Slavs in the Dnieper region still does not explain the dating of the appearance of the Kantsyrka pottery center to the 6th century. The terminus post quem is determined by Byzantine coins from Kelegei complex, minted in AD 644/645. The upper limit is determined by the similarity of the manufacturing technique of big jugs from Taraniv ravine (Machukhy), the similarity of the small group of jugs from Fedorivka settlement to the three-handled jugs of the Saltiv culture and also by the production of derivates of the Kantsyrka type jugs at the Mayaki settlement in Don region. An archaeological date of the Kantsyrka type pottery can be set within the framework of AD 645-740.

The hypothesis of the transfer of the Kantsyrka pottery traditions to the Danube region by Bulgarian tribes of Asparukh after AD 681 cannot currently be illustrated by real finds of fragments of Kantsyrka type pottery in Bulgaria. Vessels resembling some Kantsyrka elements of the decoration and design of jugs were found in graves of three Bulgarian cemeteries: Bdintsi, Balchik and Kyulevcha, dated from the late 7th till the middle of the 8th century. They correspond to chronological frames of nomad complexes from the Dnieper region with finds of original Kantsyrka type pottery.

Archaeomagnetic dates of Kantsyrka kilns do not contradict the archaeological dating. Yet in 1982 updated archaeomagnetic dating of kilns from Kantsyrka were published: two kilns (# 13 and # 17) were dated to the 7th century, and one (# 12) – to the 8th century AD. Modern verification of the chronological interpretation of old archaeomagnetic data using the Matlab tool for archaeomagnetic dating and ARCH3K.1, SHA.DIF.14K, CAL3K.3 models produced a fully acceptable result in good agreement with archaeological dates: kiln 13 – AD 634-723; kiln 17 – AD 691-770; kiln 12 – AD 704-769. This result can be improved with a further development of archaeomagnetic analysis tools and databases.

Key words: pottery, Early Medieval, Eastern Europe, archaeomagnetic dating.
year 668 as terminus post quem and the 8th century as a basic time of settlement’s existence (Грінченко 1937).

In the manuscript about the Kelegei complex, Oleksandr Tahtai also called the discovered pottery “the North Caucasian type of the 7th – 9th centuries AD” and compared it with finds from Verkhnii Saltiv, Kantsyrka and Machukhy (Taraniv ravine) (Тахтай 1932). He believed that Alan pottery workshops on Lower Dnieper worked for the highest social stratum of the steppe population, and even distinguished a special “Alanian stage” in the history of the steppe region, following the “Sarmatian-Gothic stage”.

Alla Smilenko considered analogies from the excavations of the Verkhnii Saltiv settlement noting that Saltiv jugs differ in the technique of decoration and the shape of the neck from Kantsyrka three-handled vessels. In her opinion, finds of Katsyrka pottery in the Voznesenka complex mean a diffusion of this type of ceramics in the Lower Dnieper region started from the early 8th century (Брайчевська 1961, 117-118). Tatiana Minaeva applied a different approach for dating of the Katsyrka type ware based on a comparison of manufacturing
The Late Medieval Sites of the Yatseva Balka Type in the Dnieper Rapids Region: Problems of Dating and Interpretation

Natalia KHAMAiko

Abstract: A small group of medieval archaeological sites of sedentary population, in the steppe Dnieper rapids region (Yatseva Balka, Petro-Svystunove, Oleksiivka, Perun and others), have long attracted the attention of researchers of different cultures. This has led to contradictory chronological, cultural, ethnic and political attributions.

Local pottery making tradition have been compared with pottery traditions of the Pastyrs'ke and Kantsyrka types, Saltiv culture, Slavic Raiky (Luka-Raikovets'ka) culture, the culture of the First Bulgarian Kingdom and “Balkan-Danubian” sites of the Dniester-Danubian interfluve. It was also considered as a local tradition within the framework of the culture of the Old Rus’ state. Researchers have suggested that the Slavic (Ulitchi tribe), “Alan-Bulgarian”, Alan or mixed Slavic-Nomad are the origin of the population. The various dating of the sites have proposed framework from 7th till 14th centuries. Such heterogeneity of opinions have not allowed this cultural group to be placed in a real historical context.

The main problem is the selective publication of materials from the settlement in Yatseva valley (“Yatseva Balka”), which is the only one excavated within a large area. Analysis of field documentation and the collection of finds testifies that the so called “archaic” pottery of the “Southern Dnieper type” was combined in complexes of the Yatseva settlement with fragments of the “Ganos” type amphorae, “Middle Dnieper type” pottery of the 2nd half of the 13th – first half of the 15th centuries and Crimean glazed ware of the 14th centuries. Settlements of the Yatseva Balka type belonged to a small group of the population, poorly integrated into the economy of the Golden Horde.

The new data compels to exclude the group of Yatseva Balka from the context of the Early Medieval archeology and considers it in the context of complex processes of ethnic and cultural changes in the steppes of Eastern Europe in the Golden Horde period.

Key words: pottery, Late Middle Ages, Dnieper, Golden Horde.

Introduction

The Slavic tribe Ulichi was mentioned by chronicles to be in multiple locations – at Dniester, Bug and Dnieper rivers. In search for their true locations Boris Rybakov created a hypothesis of three stages of the Ulichi migration from Lower Dnieper up to the Danube region (Рыбаков 1950). Imagining an early archaeological culture of Ulichi of the 8th century AD as a mixture of Slavic and nomadic elements, Boris Rybakov named two sites from the Lower Dnieper, where, in his opinion, the combination of the Saltiv and Slavic cultures was observed. The first was the Voznesenka complex (“Voskresenskoe” in Rybakov’s paper), interpreted as “collective cremation burial of horsemen warriors”. The second site was “cremation burials in urns” from Petro-Svystunove. The scientist considered pottery from Petro-Svystunove as a mixture of Slavic and Saltiv cultural features: one-handled pots ornamented with wavy lines reflect the Slavic tradition, but pitchers with two handles reflect the Saltiv tradition (Рыбаков 1950, 11, footnote 3, fig. 5). This population shifted from its residences by Pechenegs.
tery was similar to “urns” from Petro-Svystunove (Брайчевская 1963, 277). Was this the same pottery center as Skrylenko wrote about? And were “cremation urns” really urns or just remains of a similar pottery kiln? The lack of data does not currently allow these questions to be answered.

Perun (Zaporizhia region). Discovered in survey in 1929 by Volodymyr Grinchenko along the left bank of Dnieper remains of pottery kiln opposite the Perun Island (also Zmiinyi Island, nowadays near Perun village). Grinchenko wrote in his diary about two kilns, but the field photo (fig. 3) indicates rather one big kiln with a central pillar in
The “Horse Amulets” from the Collections of Vidin and Vratsa Museums – a Modest Contribution to a Continuous Discussion

Evgenia KOMATAROVA-BALINOVA / Petya PENKOVA

"We resemble those who are trying to restore the play without watching it – on an empty stage with a palace, a lake and a forest painted at its back”.

André Leroi-Gourhan

Abstract: The chemical composition of all artefacts was analysed. The results were compared with other objects dated back to the Middle Ages and the modern times. The analyses of the elementary content of the amulets showing male heads on horseback do not support the suggestion (Валериев 2015a, 436) that the presence of zinc (or any other predominant chemical element) may be used as a chronological indicator of their date of manufacture.

Key words: horse amulets, chemical composition, NW Bulgaria, Early Medieval period.

INTRODUCTION

On April 8, 2011, Vanyo Todorov, an antiques collector, donated a collection of archaeological artefacts to Regional History Museum (RHM) at the Danube city of Vidin, NW Bulgaria. The collection comprised 17770 coins and 324 other artefacts dated to various periods, including nine “horse amulets”, each representing a male head “riding” a horse (fig. 1/1-4, fig. 2/1-3, fig. 3/1-2). Vanyo Todorov claims that all amulets were found in the village of Gradets (Vidin region), at a place called Malata.

The chemical composition of all artefacts was analysed. The amulets in the collection of the RHM in the city of Vratsa, NE Bulgaria, each showing a horse ridden by a male head form, were also analysed to improve the validity of the results, because the greatest number of these artefacts was documented in northwestern Bulgaria, specifically in the Vidin and Vratsa regions. Based on their main indicators, the results were compared with artefacts made in different periods from the Middle Ages to the modern times. The analyses were aimed at testing the approach proposed by Yoto Valeriev (Валериев 2015a, 436) claiming that the zinc in the alloys can be regarded a chronological indicator marking the date of manufacturing.

Over the last few years, an old and very interesting discussion, which has started in the mid-1940s, took again to the front pages of respectable Bulgarian publications, such as academic periodicals and anniversary editions. The subject of this discussion is the so-called “horse-amulets” and their possible chronology (Валериев 2015a). On a broader level, the discussion had also a significant impact on an important problem related to the archaeological methods used for the identification and interpreta-
Fig. 2. Amulets-horses ridden by a male head (averse-obverse): 1-3 from Vanyo Todorov Collection in RHM in Vidin, stray finds; 4 from the exhibition of RHM in Vidin, stray find. Photos by Krasimir Georgiev

Fig. 3. Amulets-horses ridden by a male head (averse-obverse) from Vanyo Todorov Collection in RHM in Vidin, stray finds. Photos by Krasimir Georgiev