

THE BRONZE CAULDRON OF PIATRA ȘOIMULUI (CALU) (NEAMȚ COUNTY, ROMANIA). NOTES ON THE DISTRIBUTION, DATING AND USE OF SUCH TYPE CAULDRONS IN THE SARMATIAN ENVIRONMENT

Vitalie BÂRCĂ

Institute of Archaeology and Art History of Cluj-Napoca
vitalie_barca@yahoo.com

Abstract: We shall discuss here the bronze cauldron discovered in 1932 in the perimeter of the Daco-Getae settlement of Piatra Șoimului (Calu). The vessel was dated by R. Vulpe to the 3rd century AD and the 1st century BC by Gh. Bichir. According to its features, the Piatra Șoimului (Calu) cauldron belongs to type VI, variation 1, subvariation A in S. I. Demidenko's typology. Although the earliest cauldrons of type VI.1.A come from a series of features of the second half of the 2nd century – end of the 1st century BC, they are mainly specific to the mid Sarmatian period, the majority originating in graves dated to the second half of the 1st century – early 2nd century AD. The Piatra Șoimului (Calu) cauldron is the single vessel of the type from the space between the Dnieper and the Carpathians, while the closest parallel is the vessel of Boguslav, a place located to the left of the Dnieper. The remaining cauldrons in type VI (over 60 specimens), come from territories in the Don river basin, the Kuban region and the area of the lower Volga river course. Upon the analysis of the Sarmatian date cauldron finds from Ukraine and the R. of Moldova, the author notes their small number and the fact they belong to types specific to the mid Sarmatian period, representing, together with other item classes, one of the innovations of this period (1st century – mid 2nd century AD). Furthermore, it is mentioned that most come from features and contexts with a marked eastern nature of the period between the second half of the 1st century – first half of the 2nd century AD.

Considering that most cauldrons in type Demidenko VI were discovered in territories inhabited by the Alani Aorsi and Siraces and based on the dating of features containing identical cauldrons and the Sarmatians' entry and settlement of the north and north-west Pontic area, the author concludes that the Piatra Șoimului (Calu) vessel, beside the other cauldrons specific to the mid Sarmatian period from the north and north-west of the Black Sea, reached the east Carpathian area sometime in the second half of the 1st century AD and by no means later than the events by early 2nd century AD.

Keywords: *the Sarmatians, the Alani, the Daco-Getae, bronze cauldrons, the north and north-west Pontic area, the Don river, the Volga river, burials, chronology, Piatra-Șoimului (Calu).*

DOI: 10.14795/j.v7i1.521

ISSN 2360 – 266X

ISSN–L 2360 – 266X

Similarly to the rest of the territory inhabited by the Sarmatians over the course of time and the region between the Carpathians and the Dniester, a special class of objects is represented by metal vessels. The presence of such artefact classes among the funerary items within burials, deposits, hoards or features is substantially reduced, comparable to other cultural environments of the European *Barbaricum*. Nonetheless, metal vessels, either in bronze or silver are of special interest and represent an artefact class of a higher value compared to other products like pottery, amphorae, dress items or glass vessels. Even more, metal vessels, whether Roman, Greek or Barbarian originally often provide, alike other material classes, a more accurate dating of the features of discovery, as well as of other artefacts they were discovered with. Furthermore, it must be mentioned that the use of certain metal vessels after their production cease, especially in the Barbarian world, evidences their value for their owners. The presence of metal vessels within burials is indicative, together with other valuable artefact classes, of the social class of the deceased, and also of the fact that not everybody could purchase and own such products. Repair traces on certain cauldrons also record their value for their owners.

Bronze cauldrons count among the important artefacts of the material culture of the nomad *Sauromatae* and *Sarmatae*. Their find within burials or closed complexes, beside other artefact classes, facilitates the acquirement of additional information which allows clarifications on important aspects related to their dating, assignment and use. Only new finds explain certain details of the funerary rite, where such artefacts were used. The new finds may also supply further information on burial and feature types and classes where they were deposited, as well as the variations of funerary rituals and acts during which cauldrons were used¹.

It is increasingly more obvious today that these bronze vessels were broadly used in the nomad environment of the Eurasian steppes, being multifunctional, as confirmed by the archaeological finds.

Similarly to the Scythian environment, in that Sarmatian, cauldrons were used for boiling the meat of ritually slaughtered animals², as well as for food making and preparing and pouring certain drinks. They were used, as evidenced by a series of finds, in ritual ceremonies, but also as smokers³. Their multifunctional role is confirmed by their find in graves, ritual/votive features or funerary set-ups⁴.

The cauldron of Piatra Șoimului (Calu), a place located by the foot of Tarcău Mountains was discovered, according to R. Vulpe, by chance in the winter of 1932 within the perimeter of the site by the local inhabitant Vasile Blănaru⁵.

¹ For the bronze cauldrons in the funerary rite of the *Sauromatae* and *Sarmatae* see DEMIDENKO 2008, 50-54; DEMIDENKO/MIMOKHOD/USPENSKIJ 2019.

² BOKOVENKO 1977, 234; DEMIDENKO 2008, 58-59

³ DEMIDENKO 2008, 59.

⁴ For the origin, provenance, production and other aspects related to Sarmatian date cauldrons see DEMIDENKO 2008, 55-64, with complete bibliography.

⁵ For further details regarding the find conditions yet also other aspects related to this find see VULPE 1941, 59-60.

Shortly after, following a purchase from the school principal, the vessel entered the possession of priest Vrânceanu, who later donated the cauldron to the National Museum of Antiquities⁶. In 1935, R. Vulpe visited Piatra Șoimului (Calu), occasion when the scholar examined the cauldron and checked the information regarding its place of find, noting it was discovered in the north-eastern side of the settlement⁷. Also, it is mentioned it was discovered deposited base upwards and that inside there were other seven pottery vessels dating to the Graeco-Roman period⁸. The wheel-thrown vessel (*kantharos*) was sold by priest Vrânceanu to the Museum of Piatra Neamț, while the other handmade pottery vessels were deposited in the school of Calu⁹. Without yet mentioning a series of other aspects related to its find, it is worth mentioning that in fact it was discovered following certain unauthorized excavations. This becomes clear from the letter for information of 3 October 1935 delivered to the ministry of the Cults and Arts by Vladimir Dumitrescu, Director of the National Museum of Antiquities¹⁰, and the one sent in December 1936 to minister Alexandru Lapedatu by Constantin Matasă, head of the Museum of Piatra Neamț. The latter imperatively required a more severe law for the protection of the archaeological sites, invoking to this effect the find of the bronze cauldron of Piatra Șoimului (Calu)¹¹. Vladimir Dumitrescu further mentions that the bronze cauldron dated to the 3rd century AD and that it was of a special scientific and museal importance, being unique in the region, and part of a rather rare series of artefacts discovered throughout the country¹². With the support of certain legal provisions, Vladimir Dumitrescu proposed that the vessel be delivered to the Bucharest-based museum and the other 6-7 pottery vessels to the Regional Museum of Piatra Neamț¹³, which at the time, was still unauthorised according to the law¹⁴. On 3 February 1936 the minister ordered the prefect of Neamț to send the objects to Bucharest, being informed shortly after that the bronze cauldron of Piatra Șoimului (Calu) was dispatched to the National Museum of Antiquities via Radu Vulpe¹⁵, who later also published it¹⁶. On 4 November 1936, the minister changed his mind, ordering that the objects be deposited with the museum of Piatra Neamț¹⁷. Once the National Museum of Romanian History of was established in 1970 in Bucharest, the cauldron reached its collections, where it is even today under inventory number 17156.

The cauldron's body is hemispherical to ovoid, with walls tapering towards the mouth. The rim is slightly everted, the shoulders are well-marked, while the foot is biconical.

⁶ VULPE 1941, 59; OPRİȘ 2014, 328.

⁷ VULPE 1941, 21, 59-60, Fig. 7/y.

⁸ VULPE 1941, 60.

⁹ VULPE 1941, 60.

¹⁰ OPRİȘ 2014, 326.

¹¹ OPRİȘ 2014, 328.

¹² OPRİȘ 2014, 326.

¹³ OPRİȘ 2014, 327.

¹⁴ The request for the museum's establishment and authorisation of the archaeological excavations within the range of Neamț County was approved by Alexandru Lapedatu on 7 March 1936 and immediately conveyed (OPRİȘ 2014, 327).

¹⁵ OPRİȘ 2014, 328.

¹⁶ VULPE 1941, 59-67, Fig. 42-44.

¹⁷ OPRİȘ 2014, 328.

It is provided with two arching handles, set vertically and decorated with three biconical projections each. The two handles start from below the rim, slightly extending also on the vessel's body. To these further add two small handles, set symmetrically in the form of loops, connecting the rim to the body. Slightly above the middle body area, the cauldron is decorated with a belt in relief imitating a string. Below the rim in the arching handles' area, as well as around the small handles, there are some circular indentations¹⁸. The biconical foot was riveted to the lower body part, which indicates the cauldron's foot was made separately from its body (Fig. 1-5).

Cauldron sizes are as follows: maximum height -46.7 cm; height to rim - 40.3 cm; maximum diameter -39.9 cm; maximum mouth diameter - 29.1 cm, surviving foot height -3.3 cm; maximum diameter of surviving foot -7.2 cm; wall thickness - 0.5-0.6 cm¹⁹. The vessel was 10.5 kg heavy and had a volume of 20 liters²⁰.

R. Vulpe dated the cauldron to the 3rd century AD or even later²¹, ascribing the settlement of Piatra Șoimului (Calu) to the Carpi and dating it to the 1st - 3rd century AD²², which was also supported by A. Nițu²³. Gh. Bichir dated the vessel to the 1st century BC and believed it reached the area via tribal exchanges or war spoils of the Daco-Getae during Burebista's campaigns²⁴. The same author concluded that the bronze vessel, beside other Sarmatian artefacts (handmade pottery²⁵, mirror) discovered at Piatra Șoimului (Calu), as well as other Dacian settlements from the extra-Carpathian area, record the effective presence of the Sarmatae in Dacian territory²⁶. Also, it is not excluded that the vessel had reached the settlement of Piatra Șoimului (Calu) as trophy, subsequent to an unsuccessful Sarmatian expedition for salt, mined in the area²⁷, a forced view since relations between the Dacians and the Sarmatians were rather good in the second half of the 1st - early 2nd century AD²⁸.

More than four decades ago, the Sarmatian cauldrons were examined in two studies which discussed them typologically and chronologically²⁹. Cauldrons similar to the specimen at Piatra Șoimului (Calu) were framed to type IV in V. M. Kosyanenko and V. S. Flerov's classification³⁰ and to type II in that of N. A. Bokovenko³¹.

¹⁸ For what the indentations or circular projects below the rim and in the handle area see DEMIDENKO 2018, 36-37.

¹⁹ Measurements and photos illustrating the vessel were made by Alexandru Bădescu PhD, Head of the Heritage Department of the National Museum of Romanian History, whom we thank this way for expediency and support.

²⁰ OPRÎȘ 2014, 328.

²¹ VULPE 1941, 62.

²² VULPE 1941, 66-67.

²³ NIȚU 1953, 11.

²⁴ BICHIR 1976, 207; BICHIR 1993, 139 with complete bibliography. This view is not excluded by others either, S. I. Kurchatov and N. P. Tel'nov, dating the Daco-Getae settlement of Piatra Șoimului to the 2nd - 1st century BC (KURCHATOV/TEL'NOV 2010, 140).

²⁵ VULPE 1941, 50, Fig. 26/15.

²⁶ BICHIR 1993, 139.

²⁷ KURCHATOV/TEL'NOV 2010, 140.

²⁸ For relations between the Dacians and Sarmatae see SÎRBU/BĂRCĂ 1999; SÎRBU/BĂRCĂ 2000; BĂRCĂ 2002; BĂRCĂ 2002; BĂRCĂ 2006b.

²⁹ BOKOVENKO 1977, 228-235; KOSYANENKO/FLEROV 1978, 192-205.

³⁰ KOSYANENKO, FLEROV 1978, 197-199, 203.

³¹ BOKOVENKO 1977, 232-233, Fig. 3/II.

Cauldrons ascribed to type Bokovenko II - Kosyanenko, Flerov IV are rather large vessels, with vertical or slightly everted rim, hemispherical or ovoid body, tapering to the base. The ovoid examples have well-marked shoulders. Their body is attached by soldering or riveted to a biconical or flaring foot. They are provided with two arching handles, set vertically and decorated each with three knobs. In some cases, handles extend by belts in relief on the vessel's body. To these also add two small handles, set symmetrically, in the form of loops connecting the rim with body. Most cauldrons of the type are decorated on body with a belt in relief imitating a string³². There are though also cases when the body is decorated with two belts³³. Commonly, these cauldrons are larger compared to other Sarmatian cauldrons, and have a varying height of 35 and 63 cm³⁴. N. A. Bokovenko included in the type also examples without a belt in relief on the body, as well as some which are not provided with two small handles, mentioning that their specific features consist of the arching handles decorated with three knobs and the flaring foot³⁵.

Cauldrons of the type were dated based on the analysis of their find complexes and contexts to the 1st century BC - 1st century AD³⁶.

The many such vessel finds emerging subsequent to the issue of above mentioned studies led to increased interest for their research and valuation. Thus, in 2008 was published a large monograph study drafted by S. V. Demidenko³⁷. Within, there were discussed all cauldrons of Sauromatian and Sarmatian date from the Lower Volga and south the Urals areas. Examples with peculiarities similar to those ascribed to type Bokovenko II - Kosyanenko, Flerov IV were framed by S. V. Demidenko in type VI³⁸. Today, the specimens registered in 2008 were completed by a few other finds from territories left to the Lower Don³⁹. Upon the analysis of a significant number of such cauldrons (56 specimens), S. V. Demidenko distinguishes nine type variations, in some identifying further two subvariations⁴⁰. It was noted that all have their body and foot made separately, alike other cauldron types of 1st century BC - 2nd century AD⁴¹ date.

Cauldrons in type VI were discovered mainly in Sarmatian barrow graves from the Don river basin, the Kuban region and rarely in the Lower Volga area⁴². Two cauldrons in type VI were discovered also in the Sarmatian environment on the current territory of Ukraine (Bulakhovka⁴³ (Fig. 6/1),

³² BOKOVENKO 1977, 232, Fig. 3/II; KOSYANENKO/FLEROV 1978, 197-199, Fig. 4-5.

³³ KOSTENKO 1978, 79-80, Pl. 2/2; SMIRNOV 1984, 110, Fig. 51/1.

³⁴ BOKOVENKO 1977, 232.

³⁵ BOKOVENKO 1977, 232.

³⁶ BOKOVENKO 1977, 233; KOSYANENKO/FLEROV 1978, 203.

³⁷ DEMIDENKO 2008

³⁸ DEMIDENKO 2008, 17-20, 89-98, 113-115, cat. no. 27-70, 152-155, 161-163.

³⁹ DEMIDENKO/MIMOKHOD/USPENSKIJ 2019, 92, 94, 99-100, Fig. 1/2-3, 2/1-2, 3/1-2.

⁴⁰ DEMIDENKO 2008, 15-26, Fig. 8.

⁴¹ For the casting, making and attachment of the two cauldron parts in this type see DEMIDENKO 2008, 37.

⁴² DEMIDENKO 2008, 17-20, 89-98, 113-115, cat. no. 28-70, 152-155, 161-163, Fig. 13, 154, 155, 156, 157, 160, 162; DEMIDENKO/MIMOKHOD/USPENSKIJ 2019, 92, 94, 99-100, Fig. 1/2-3, 2/1-2, 3/1-2; VLASKIN/GLEBOV/KUZ'MIN 2018, 59-60, Fig. 2/1.

⁴³ Cf. KOSTENKO 1978, 78-85, Pl. 1-2; SMIRNOV 1984, 108, Fig. 51/1;

Boguslav⁴⁴ (Fig. 6/1) (left to the Dnieper)). In the Prut-Dniester interflow, this type was not yet discovered, while in the area west the Prut the only specimen in this type is the cauldron of Piatra Șoimului (Calu) (Fig. 1-5). To this cauldron adds that of Avrămeni too (Botoșani county), removed from a barrow cut in 1942, following the route change of the Săveni-Avrămeni road⁴⁵, yet which shall be discussed in another study⁴⁶.

According to its features and specificities, the cauldron of Piatra Șoimului belongs to type VI, variation 1, subvariation A in the typology drafted by S. I. Demidenko⁴⁷. Such specimens are most numerous among type VI examples. They are characterised by the presence of the two arching handles decorated with three knobs, of the small handles below the rim and the relief ornament imitating the string on their body.

The analysis of all archaeological features containing such cauldrons of type VI showed they emerge in the Volga and Lower Don area in the 2nd century BC, while examples dated to the 2nd century – end of the 1st century BC are few⁴⁸. Their number increases significantly in features dated to the chronological interval between the end of the 1st century BC and first half of the 1st century AD, yet most frequently they are found in Sarmatian graves of the second half of the 1st century – first half of the 2nd century AD⁴⁹. Thus, these cauldrons are specific mainly to the mid Sarmatian period. In terms of type VI.1.A cauldrons, the earliest specimens come from a series of features dated to the second half of the 2nd century – end of the 1st century BC⁵⁰. Vessels coming from graves of end of the 1st century BC – first half of the 1st century AD are also not many, most type VI.1.A cauldrons being from graves dated to the second half of the 1st century – early 2nd century AD⁵¹. Interestingly, the specimens from this last chronological interval have more ovoid body and well-marked shoulders.

Regarding type VI cauldrons from the Sarmatian environment on the current territory of Ukraine, the specimens from Bulakhovka (Fig. 6/1) and Boguslav (Fig. 6/2) also belong to variation 1, subvariation A in S. I. Demidenko's typology.

The Bulakhovka cauldron was discovered in a barrow mantle together with three silver cups (*mastoi*)⁵², five gilded

SIMONENKO 1994, 109, Fig. 7/1; SIMONENKO 2008, 55, cat. no. 2; SIMONENKO 2019, 85, Fig. 6/5; DEMIDENKO 2008, 17, 89, cat. no. 28, Fig. 85, 156; BĂRCĂ 2006a, 102-103, 196, Fig. 9/2; BĂRCĂ 2006, 61-64; BĂRCĂ/SYMONENKO 2009, 79-80, Fig. 21/1.

⁴⁴ KOSTENKO/MARINA/ROMASHKO 1998, 48 sqq., Fig. 1/2-5; SIMONENKO 1999, 168, Fig. 28/5; BĂRCĂ 2011, 42, 43, 44, Pl. I/4; BĂRCĂ/SYMONENKO 2009, 183-184, Fig. 68/1.

⁴⁵ NIȚU 1953, 9-11, Fig. 4.

⁴⁶ A. Nițu chose a 1st – 4th century AD dating (NIȚU 1953, 11). A slightly later dating of the cauldron of Avrămeni than that of Piatra Șoimului was also expressed by Gh. Bichir (BICHIR 1976, 207). We thank this way too Mr. Serghei Demidenko PhD for kindly confirming our supposition that the vessel belongs to an earlier type than the chronological interval to which it was framed.

⁴⁷ DEMIDENKO 2008, 17-18, 89-95, 113, 114-115, Fig. 8, Type VI.1.A, Fig. 49/2, 50-51, 52/1, 85-95.

⁴⁸ DEMIDENKO 2008, 17-20, 25, 35. The 2nd – 1st century BC examples as well as those of the first half of the 1st century AD mainly have hemispherical body, without specimens with more ovoid body and well-marked shoulders.

⁴⁹ DEMIDENKO 2008, 18, 25-26, 35.

⁵⁰ See for these finds DEMIDENKO 2008, 17, 89-90, cat. no. 28-33, 161, 163.

⁵¹ DEMIDENKO 2008, 17, 18.

⁵² For the diffusion area and dating of these cups see BĂRCĂ 2007, 89-91

silver phalerae, golden dress appliques as well as harness appliques and links⁵³.

The Bulakhovka complex is part to the group of finds from the area comprised between the Lower Danube and Volga of second half/end of the 3rd century – 1st century BC⁵⁴ date. Amongst, count certain classes of harness items, some of very high value (phalera)⁵⁵ associated with weaponry, appliques, bronze and silver vessels etc. Most such finds from the north-Pontic area were found deposited together in the mantle of certain barrows, on natural heights or narrow valleys and slight slopes⁵⁶. In all these finds there were not identified or traced remains indicative of the fact that the objects were part of graves, being in fact hoards/ritual or votive deposits. With regards to the dating of this complex, views are slightly different, it being dated to the end of the 2nd century – early 1st century BC⁵⁷, end of the 2nd century – 1st century BC⁵⁸, the 1st century BC⁵⁹ or only first half⁶⁰. We believe that the Bulakhovka complex most plausibly dates sometime over the course of the 1st century BC⁶¹.

The Boguslav vessel (Fig. 6/1) was discovered in the mantle of a barrow from the second group of barrows investigated in 1987⁶². At Boguslav, several barrow groups were examined, Sarmatian graves dated to the second half of the 1st century – early 2nd century AD⁶³ being discovered. Based on certain aspects of the funerary ritual as well as the burial goods it was noted that some of them had belonged to certain migrants from the group of Sarmatians arriving in the north-Pontic area from territories east of the Don in the second half of the 1st century AD⁶⁴.

with complete bibliography and main expressed views.

⁵³ KOSTENKO 1978, 78-85, Pl. 1-2; SMIRNOV 1984, 108-110, Fig. 51-52; SIMONENKO 1994, 109, Fig. 7; MORDVINCEVA 2001, 36, 64, 78, Pl. 31; MORDVINCEVA 2013, 402-407; MORDVINTSEVA 2013, 144-156, Fig. 1-6; BĂRCĂ 2006a, 196-197, Fig. 8-9; SIMONENKO 2019, 85, Fig. 6-7.

⁵⁴ Cf. SIMONENKO 1993, 89-90; SIMONENKO 2001, 92-106; SIMONENKO 2015; SIMONENKO, Raev 2007, 268-272; REDINA/SIMONENKO 2002, 78-96; BĂRCĂ 2002b, 215-230; BĂRCĂ 2004; BĂRCĂ 2006, 61-64; BĂRCĂ 2006a, 47-49; BĂRCĂ/SYMONENKO 2009, 95-98; ZAJTSEV 2008, 146-152; ZAJTSEV 2012, 67-72; MORDVINTSEVA 2013, 144-156; GLEBOV 2016, 145-161.

⁵⁵ For *phalera* see MORDVINCEVA 2001; MORDVINTSEVA 2001, 161-166; MORDVINTSEVA 2008, 162-183; SÎRBU/BĂRCĂ 2016, 272-321; SIMONENKO 2015, 274 sqq.

⁵⁶ GLEBOV 2016, 145-161; In territories east of the Don, specimens similar to those in ritual/votive hoards/deposits were discovered also in a series of graves of the same date. In the north-Pontic area west of the Don, only the finds at Balakleya (SHRAMKO 1962, 238-239, Fig. 88; SMIRNOV 1984, 84, Fig. 37/2-4, 38; POLIN 1992, 128-129; SIMONENKO 1994, 108, Fig. 5; MORDVINCEVA 2001, 37, 64, 78-79, Pl. 32-34) and Tvardița (MORDVINCEVA 2001, 37, 64, 80-81, Pl. 43/79-80; BĂRCĂ 2002, 104, 105, Fig. 5-6; BĂRCĂ 2004, 35 sqq., Fig. 15-16; BĂRCĂ 2006, 368, Fig. 132-133) may be related to the graves, however in both cases, information on find conditions are uncertain.

⁵⁷ KOSTENKO 1978, 78-85; DEMIDENKO 2008, 17.

⁵⁸ SMIRNOV 1984, 108-110; SIMONENKO 1994, 109.

⁵⁹ MORDVINTSEVA 2013, 148; MORDVINCEVA 2013, 402-407.

⁶⁰ BĂRCĂ 2004; BĂRCĂ 2006, 2013; BĂRCĂ 2007, 91; BĂRCĂ 2006a, 197; BĂRCĂ 2009, 92; BĂRCĂ/SYMONENKO 2009, 79.

⁶¹ For the dating of the *phalerae* in the stylistic group to which the specimens of Bulakhovka belong see MORDVINCEVA 2001, 37, 64-65; MORDVINTSEVA 2001, 164.

⁶² KOSTENKO/MARINA/ROMASHKO 1998, 48.

⁶³ For the funerary inventory of some of these graves see SIMONENKO 2003, 44, Fig. 3/2; SIMONENKO 2006, 140-141, Fig. 5; SIMONENKO 2008, 61-62, cat. no. 46, 47 Pl 34-36; SIMONENKO 2010, 110, 238-239, Fig. 82/5, 83/8; SIMONENKO 2011, 24, 77, 145, 180, cat. no. 29, 30 Fig. 10/1, 12/3, 51/1, 86/5-7; BĂRCĂ/SYMONENKO 2009, 123, 132, 199, Fig. 39/10, 73/13.

⁶⁴ SIMONENKO 2006, 141; SIMONENKO 2010, 239.

In Ukraine, neither other types of Sarmatian date cauldrons are numerous. Some are chance finds, while other originate in a series of burials (a number destroyed) dated to the chronological timeframe between mid 1st century AD – mid 2nd century AD (Starobel'sk⁶⁵ (Fig. 7/1), Yaroshevka⁶⁶ (Fig. 7/2), T 2 G 2 of Selimovka⁶⁷ (Fig. 8/1), Davydov Brod⁶⁸ (Fig. 8/1), Kal'mius⁶⁹ (Fig. 9), the destroyed barrow of Zaprud'e⁷⁰ (Fig. 10/1), Tsvetna⁷¹ (Fig. 10/2), T 1 G 1 of Verbki⁷² (Fig. 11/1), T 6 of Terny⁷³ (Fig. 11/2), Troyany⁷⁴ (Fig. 12/1), Pavlovka⁷⁵ (Fig. 14/1) and T 2 G 1 at Chuguno-Krepinka⁷⁶ (Fig. 14/2)). To these also adds the cauldron of Velikoploskoe⁷⁷, discovered subsequent farming works carried out in 1964. Adjacently, as well as inside it, there were identified frontal appliques made of silver and bronze, spearheads and arrowheads, a large number of bronze links, harness appliques, several mouthpieces and bits, the bronze sheet of an oval shield plate as well as other objects⁷⁸.

From the Republic of Moldova, Sarmatian date cauldrons were discovered in T 2 G 2 at Mocra⁷⁹ (Fig. 12/2-3), Slobozia⁸⁰ (Fig. 13) (left to the Dniester) and Bubueci⁸¹ (the Prut-Dniester interfluvium).

The vessel of Bubueci was discovered in the mantle of a barrow and had inside a bronze Attic helmet with hemispherical dome and crest, two bronze frontal appliques, horse bronze sheet horse cheekpieces, two phalera and

⁶⁵ SHRAMKO 1972, 240, Fig. 89/15; DEMIDENKO 2008, 21, 107, cat. no. 116, Fig. 113.

⁶⁶ SIMONENKO 2008, 57, cat. no. 18, Pl. 15/2a; DEMIDENKO 2008, 22, 114, cat. no. 157, Fig. 114; BĂRCĂ/SYMONENKO 2009, 184-185.

⁶⁷ SHRAMKO 1962, 241, Fig. 89/13; BOKOVENKO 1977, 232, Fig. 3/2; DEMIDENKO 2008, 22, 109, cat. no. 124, Fig. 115. The place at Selimovka, Izyumsk county, the Kharkov district, today Svyato-Pokrovskoe, Bakhmutsk district, Donetsk region).

⁶⁸ SIMONENKO 1.993, 62, Fig. 19/2; SIMONENKO 2008, 67, cat. no. 72, Pl. 67/2c; DEMIDENKO 2008, 22, 109-110, cat. no. 130, Fig. 117; BĂRCĂ/SYMONENKO 2009, 184-185, Fig. 68/3.

⁶⁹ SHTERN 1911, 43, Pl. V; SIMONENKO 1999, 165-166, Fig. 28/1; DEMIDENKO 2008, 22, 110, cat. no. 132, Fig. 117; BĂRCĂ/SYMONENKO 2009, 184-185.

⁷⁰ SIMONENKO 2008, 68-69, cat. no. 85, Pl. 75/1; BĂRCĂ/SYMONENKO 2009, 184-185.

⁷¹ SIMONENKO 2008, 69-70, cat. no. 87, Pl. 79/3; BĂRCĂ/SYMONENKO 2009, 184-185, Fig. 68/5.

⁷² MUKHOPAD 1986, 136-143; SIMONENKO 2008, 62, cat. no. 49, Pl. 39/3; DEMIDENKO 2008, 23, 110, cat. no. 133, Fig. 117.

⁷³ MUKHOPAD 1986, 136-143, Fig. 1/6-8; SIMONENKO 2008, cat. no. 48, 62, Pl. 38/2a; DEMIDENKO 2008, 23, 110, cat. no. 134, Fig. 118; BĂRCĂ/SYMONENKO 2009, 184-185.

⁷⁴ BOKOVENKO 1977, 232, Fig. 3/1; SIMONENKO 2008, 71, cat. no. 91, Pl. 84/2; DEMIDENKO 2008, 23, 110, cat. no. 135, Fig. 118; BĂRCĂ/SYMONENKO 2009, 184-185, Fig. 68/4.

⁷⁵ SIMONENKO 2008, 78, cat. no. 114, Pl. 124/3-3a; SIMONENKO 2011, 166, cat. no. 1; BĂRCĂ/SYMONENKO 2009, 184-185, Fig. 68/7.

⁷⁶ SIMONENKO 2008, 65-66, cat. no. 70, Pl. 62/8; SIMONENKO 2011, 168-172, cat. no. 5; BĂRCĂ/SYMONENKO 2009, 184-185, Fig. 68/6.

⁷⁷ SIMONENKO 2008, Pl. 9/2.

⁷⁸ For the find of Velikoploskoe see DZIS-RAJKO/SUNICHUK 1984, 148-161; SIMONENKO 1982, 237, 242, Fig. 1/9-10; SIMONENKO 2008, 56, cat. no. 9, Pl. 9-11; SIMONENKO 2011, 227, cat. no. 118; POLIN 1992, 53-55, Fig. 10; GROSU 1995, 167, Fig. 23, 24; BĂRCĂ 2002, 104, 105, Fig. 3-4; BĂRCĂ 2004, 35 sqq., Fig. 11-12; BĂRCĂ 2006, 370-372, Fig. 137-138; BĂRCĂ 2006a, 219-221, Fig. 45-46.

⁷⁹ SHCHERBAKOVA/KASHUBA 1993; KASHUBA/KURCHATOV/SHCHERBAKOVA 2001-2002, 208-209, 231-232, Fig. 14/4; BĂRCĂ 2006, 166, 331-334, Fig. 81/1; BĂRCĂ/SYMONENKO 2009, 184-185, Fig. 68/2.

⁸⁰ KURCHATOV/TEL'NOV 2010, 137 sqq., Fig. 1-3.

⁸¹ Cf. BĂRCĂ 2002b, 215-216, Fig. 1/5; BĂRCĂ 2006, 164-165, 297, Fig. 37/5, 188/3.

four appliques/phalera with a central depiction of a mask in relief⁸². The feature is a ritual/votive hoard/deposit and is part of the same group of finds like the Bulakhovka cauldron. To this group belongs also the ritual/votive hoard/deposit of Velikoploskoe (left to the Lower Dniester). In the case of the two finds, similarly to other such features, views regarding their ethnic-cultural origin and dating differ among the scholars. In the case of the finds of Bubueci and Velikoploskoe, we believe they must be ascribed to the group of ritual/votive hoards/deposits dated to the 2nd – 1st century BC which rather belonged to the Sarmatians than the Late Scythians, as evidenced by the cauldrons which belong to types used by the Sarmatians. Indeed, of the 52⁸³ such ritual/votive hoards/deposits discovered in the area between the Volga and the Lower Danube, part are earlier (second half/end of the 3rd century – mid 2nd century BC), however this does not mean that all such features in the group of finds from the period between the second half of the 3rd century – 1st century BC must be ascribed to the Late Scythians⁸⁴. The archaeological finds of the last decades, supplied enough arguments in favour of the Sarmatian origin of most of the 2nd – 1st century BC⁸⁵ ritual/votive hoards/deposits. The recent find from the mantle of T 1 in the Restumov II⁸⁶ cemetery (left to the Lower Don) or that at Malinovka, a place located to the right of the Lower Dnieper (Kirovograd region, Ukraine)⁸⁷, furthermore confirm such reality.

If one takes into account the very large geographical area where these features were discovered and the fact that in the 3rd – 1st century BC, the Scythians did not inhabit good part of the territories where such ritual/votive hoards/deposits were found, ascribing all these finds to the Scythians is not sustainable. Last but not least, the earliest deposit containing items similar to those in several ritual/votive hoards/deposits from above mentioned area, originates in the Siraces milieu of the Kuban region⁸⁸, where were in fact discovered also items which until not long ago were deemed specific to only the group of ritual/votive hoards/deposits from the north-west of the Black Sea⁸⁹. Without yet further details, it is increasingly obvious that some of the artefacts within these finds were used for a long time, becoming at some point supra-national artefacts, used on a vast area and by individuals from various cultural environments.

Except the specimens of Velikoploskoe (Ukraine) and Bubueci (Republic of Moldova), the other Sarmatian cauldrons on the territory of Ukraine and the R. of Moldova,

⁸² Cf. BĂRCĂ 2002b, 215-230; BĂRCĂ 2004, Fig. 14; BĂRCĂ 2006, 297-298, Fig. 37 with complete bibliography.

⁸³ See ZAJTSEV 2012, Fig. 1; SIMONENKO 2018, Fig. 7/1. For the recent find in the mantle T 1 from the Restumov II cemetery (left bank of river Severskij Donets), whose Sarmatian assignment is certain see VLASKIN/GLEBOV/KUZ'MIN 2018, 58-69.

⁸⁴ For recent views on the Scythian origin of the phenomenon see ZAJTSEV/MORDVINTSEVA 2003, 97-98; ZAJTSEV 2005, 94; ZAJTSEV 2007, 266-267; ZAJTSEV 2008, 148-150; BRUYAKO 2009, 340. For the absolute view on the Scythian origin see TEL'NOV/CHETVERIKOV/SINIKA 2012, 12-13; TEL'NOV/CHETVERIKOV/SINIKA 2016, 998; TEL'NOV/SINIKA 2016, 303.

⁸⁵ For views on the origin and dating of these features see ZAJTSEV 2012 with complete bibliography.

⁸⁶ See VLASKIN/GLEBOV/KUZ'MIN 2018, 58-69.

⁸⁷ Amicable information dr. habil. Oleksandr Symonenko.

⁸⁸ MARCHENKO/LIMBERIS 2009, 69-74.

⁸⁹ VLASKIN/GLEBOV/KUZ'MIN 2018, 63.

mentioned above, belong to types⁹⁰ particular to the mid Sarmatian period and represent, beside other item classes, one of the period's innovations (1st century – mid 2nd century AD) carried, as believed, by the Alani⁹¹. It is noteworthy that in the majority of the cases when they were found in graves, some had marked eastern features, which is also valid for the Sarmatian graves on Ukrainian or Moldavian territories. Furthermore, these cauldrons are smaller than those in type Bokovenko II – Kosyanenko, Flerov IV – Demidenko VI-VII. They are characterised by spherical or hemispherical body, taller foot and zoomorphic handles. In S. I. Demidenko's typology, the specimens from Ukraine and the R. of Moldova belong to type X.4.A (Starobel'sk), XI.1.A (Yaroshevka), XI.2.A (Selimovka T 2 G 2), XI.6.A (Davydov Brod), XI.7.A (Kal'mius⁹²), XII.1.A (T 1 G 1 of Verbki and T 6 of Terny), XIII.1.A (Troyany). The example of Tsvetna (Fig. 10/2) is similar to type XI.2.A. These have spherical body, tall foot and two arching handles decorated with three knobs, small handles below the rim and the relief decoration imitating the string on the body. The specimen of Tsvetna has though also a vertical handle set in the upper half of the body. Such vertical handles are specific to type IX cauldrons, with though a different body shape and spout. The rich funerary inventory of the grave⁹³ dates it to the second half – end of the 1st century AD⁹⁴. The fragmentary cauldron is the Zaprud'e grave (Fig. 10/1) also belongs according to body shape and foot to type XI. The vessel preserves an arched handle decorated with three knobs and one zoomorphic, specimens provided with two arched handles decorated with three knobs and two zoomorphic handles, being framed by S. V. Demidenko into type XI.3.A⁹⁵. In the upper body half it exhibits a zigzag decoration made in relief, like that on cauldrons of type XI.1.V⁹⁶. The Zaprud'e grave dates based on grave goods to the second half of the 1st century AD⁹⁷.

The cauldrons in the rich burials of Pavlovka (Fig. 14/1) and Chuguno-Krepinka (Fig. 14/2) have ovoid body, wide mouth, vertical (Chuguno-Krepinka) or slightly everted rim (Pavlovka) and well-marked shoulders. These were made and used footless. Both recipients have each two handles, arched, set vertically, while midway the body they are decorated with a belt in relief imitating the string. The two cauldrons have on the upper body half above the string-shaped belt, a tamga in relief.

The cauldrons of Pavlovka and Chuguno-Krepinka belong to type III in N. A. Bokovenko's typology⁹⁸ and type

⁹⁰ In N. V. Bokovenko's classification, they all belong to type I (BOKOVENKO 1977, 232-233, Fig. 3/II).

⁹¹ SKRIPKIN 1990, 214.

⁹² The Kal'mius cauldron is provided with a lid and has a zoomorphic spout, depicting a bull head. The zoomorphic handle renders a deer and is set vertically to the body, while on the lid are rendered two figures sitting with crossed legs.

⁹³ For the funerary inventory of this grave see SIMONENKO 2008, 69-70, cat. no. 87, Pl. 77-81; SIMONENKO 2011, 203-206, cat. no. 90, Fig. 7/1-2, 18/6-7, 28, 40; MORDVINTSEVA/TREJSTER 2007, II, 136, no. B46.

⁹⁴ SIMONENKO 2008, 15; SIMONENKO 2011, 40; V. Mordvintseva and M. Trejster date the feature by mid-third quarter of the 1st century AD (MORDVINTSEVA/TREJSTER 2007, II, 136).

⁹⁵ DEMIDENKO 2008, 22, cat. no. 126.

⁹⁶ DEMIDENKO 2008, 22, cat. no. 123.

⁹⁷ See for the funerary inventory of this grave ROMANYUK/SYMONENKO 2001, 19-28; SIMONENKO 2008, 68-69, cat. no. 85, Pl. 73-76; SIMONENKO 2011, 195-196, cat. no. 72.

⁹⁸ BOKOVENKO 1977, 233-234, Fig. 3/III.

VIII.4.1 in that of S. V. Demidenko⁹⁹. These have many parallels in the Sarmatian environment of the Don and Volga river basins, being artefacts specific mainly to the late Sarmatian period, yet they also emerge earlier¹⁰⁰. Similarly to cauldrons from other types they also originate in very rich graves with marked eastern features (Chuguno-Krepinka). The rich inventory within the two graves date them sometime in the first half of the 2nd century AD¹⁰¹ (likely, towards the end of this chronological period) and not by the end of the 1st century – early 2nd century AD as mentioned elsewhere¹⁰².

The cauldron in the Mocra grave (Fig. 12/2-3) has a hemispherical body, everted rim and biconical/flue-shaped foot, while the two handles are zoomorphic. The vessel body has a striated surface with vertical lines, while the only 19 cm high foot is horizontally striated. According to its specificities, the cauldron is close to type Demidenko XII¹⁰³. The eastern elements and features from within the grave as well as its rich inventory¹⁰⁴ dates it sometime in the period between the end of the 1st century AD and the first quarter of the 2nd century AD¹⁰⁵.

The cauldron discovered by chance at Slobozia (Fig. 13) belongs to type Demidenko XIII.2.A. The vessel is hemispherical, with everted rim and taller foot. It is characterised by three zoomorphic handles rendering various animals, the present spout and belt midway the body. Cauldrons with three zoomorphic handles, of which two identical, were discovered in a few Sarmatian graves from the second half of the 1st century – first half of the 2nd century AD, yet belong, except for the specimen in T 9 from the Vysochini VII¹⁰⁶ cemetery, to other cauldron types¹⁰⁷.

Noticeably, the Sarmatian date cauldron finds are overwhelmingly originating in the Sarmatian environment of the Don and Volga river basins, to which add those from the Kuban region. Certain cauldron types are found in farther regions as well, like the lower and mid Ural river courses, from where comes a significant number of finds of Demidenko VIII¹⁰⁸ type cauldrons.

In the territories from the north and north-west of the Black Sea as well as in the east-Carpathian space, the number of Sarmatian date cauldrons is small, while those discovered

⁹⁹ DEMIDENKO 2008, 20-21, 99-105, 160, Fig. 3, 9, 14, 106-110.

¹⁰⁰ BOKOVENKO 1978, 234; DEMIDENKO 2008, 20-21, 101, cat. no. 85.

¹⁰¹ For these graves inventory see SIMONENKO 2008, 65-66, cat. no. 70, Pl. 56-66; 78, cat. no. 114, Pl. 124-125; SIMONENKO 2011, 166, cat. no. 1; 168-172, cat. no. 5, while for the type and dating of the two strongly profiled brooches from the Chuguno-Krepinka grave see BĂRCĂ 2011, 16-19. For the analysis of the metal vessels from the Pavlovka and Chuguno-Krepinka graves see SIMONENKO 2011; BĂRCĂ 2009.

¹⁰² BĂRCĂ 2009, 100, 106; BĂRCĂ 2011a, 16-19 and note 175.

¹⁰³ DEMIDENKO 2008, 23, Fig. 10.

¹⁰⁴ See to this effect KASHUBA/KURCHATOV/SHCHERBAKOVA 2001-2002, 180-252.

¹⁰⁵ Cf. BĂRCĂ 2006, 174, 331-334; BĂRCĂ 2009 (early 2nd century AD); BĂRCĂ 2015, 52 (end of the 1st century AD – first quarter of the 2nd century AD), KASHUBA/KURCHATOV/SHCHERBAKOVA 2001-2002, 242 (first quarter of the 2nd century AD).

¹⁰⁶ BESPALYJ 1985, 168, Fig. 2/2; DEMIDENKO 2008, 110-111, cat. no. 136, Fig. 118.

¹⁰⁷ See SKRIPKIN 1970, 206-208, Fig. 2-3; MORDVINTSEVA/SERGATSKOV 1995, 122; SKRIPKIN 2000, 96, Fig. 1/1; DEMIDENKO 2008, 22, 23, 109, cat. no. 128 (Kilyakovka, type XI.4.A), 21, 106, cat. no. 111, Fig. 112 (Valovj I, T 9, type X.2.A), 22, 110, cat. no. 132, Fig. 117 (Kal'mius, type XI.7.1).

¹⁰⁸ See DEMIDENKO 2008, Fig. 14.

to date, except for the specimens at Avrămeni (Romania), Bubueci (R. of Moldova), Velikoploskoe and Bulakhovka (Ukraine) (Fig. 15/1, 3, 6, 13) are mainly specific to the mid Sarmatian period. Most come from contexts and features from the chronological period comprised between the second half of the 1st century – first half of the 2nd century AD (Mocra, Slobozia, Starobel'sk, Boguslav, Yaroshevka, Selimovka, Davydov Brod, Kal'mius, Zaprud'e, Tsvetna, Verbki, Terny, Troyany, Pavlovka, Chuguno-Krepinka). The Boguslav, Verbki, Pavlovka, Selimovka (Svyato-Pokrovskoe), Kal'mius and Chuguno-Krepinka vessels from the Ukrainian territory left to the Dnieper (Fig. 15/12, 14-19), those of Troyany, Yaroshevka, Davydov Brod, Zaprud'e and Tsvetna are finds from the Dniester-Bug interfluve (Fig. 15/7-11), while the cauldrons of Mocra and Slobozia are from the left of the Lower Dniester (the Bug-Dniester interfluve) (Fig. 15/4-5). The Piatra Șoimului (Calu) specimen, a place located in the Calu river hydrographical basin, a Bistrița tributary, in the sub-mountain Eastern Carpathians area (Fig. 15/2), is the most western find of a Sarmatian date cauldron from the mentioned chronological timeframe. This large cauldron is the single vessel of the type (Demidenko VI) from the area between the Dnieper and the Carpathians. In the north-Pontic area, the closest parallel for the Piatra Șoimului (Calu) cauldron is the Boguslav vessel (Fig. 6/1), located to the left of the Dnieper (Cf. Fig. 15/12). The remaining cauldrons in type VI, summing up over 60 complete and fragmentary specimens come from the Sarmatian environment from the territories in the Don river basin, the Kuban region and the area of the lower Volga course (Fig. 16). More than half of the cauldrons in this type belong to variation 1, suvariation A, while most come from mid Sarmatian period graves, some being identical with the Piatra Șoimului (Calu)¹⁰⁹ specimen.

Another observation worthy of note is related to the inexistence during the first centuries AD of Sarmatian cauldrons in the territory between the Dniester-Prut-the Danube, despite the large number of Sarmatian remains discovered in this area compared to that in the space between the Dnieper-Bug-Dniester. The lack of such vessels is also noted, except for the Piatra Șoimului vessel, also for the plain territories west of the Prut, as well in the Wallachian Plain, where the number of Sarmatian finds is significant. Last but not least, it must be noted that most features with cauldrons were discovered in territories nearby tidal rivers or rivers.

The diffusion of cauldrons with zoomorphic handles of the type like at Mocra (Fig. 12/2-3), Slobozia (Fig. 13), Troyany (Fig. 12/1), Davydov Brod (Fig. 8/2), Zaprud'e (Fig. 10/1), Verbki (Fig. 11/1), Terny (Fig. 11/2) and Kal'mius (Fig. 9) starting with the 1st century AD in the European steppes must be related, in our view, to the entry and settlement in these territories of new migrant groups arriving from the east, who had close contacts and connections with the Central Asia region. Evidence to this effect includes numerous eastern origin artefacts in a significant number of graves dated to the second half of the 1st century AD – first decades of the 2nd century AD from the space comprised between the Volga and the Lower Danube¹¹⁰. Among the cauldrons

is noted to this effect the Kal'mius example (Fig. 9), which is provided with lid and has a zoomorphic spout, depicting a bull head. It has a vertical handle rendering a deer, while on the lid are rendered two figures in a cross-legged pose. The entry and settlement of these new migrant groups in the north-west Pontic area¹¹¹ confirmed by archaeological finds and the accounts in the ancient written sources, occurred once with mid 1st century AD, in the second half of the same century they being present in the north-west Pontic area¹¹². Based on all aspects, we believe that the key role within these new migrant groups settling the north and north-west Pontic area held the Alani¹¹³.

Since the great majority of cauldrons in type Demidenko VI were discovered in territories inhabited by the Aorsi Alani and Siraces and taking into account the dating of the features containing identical cauldrons and the entry and settling by the *Sarmatae* of the north and north-west Pontic area, we may conclude that the vessel of Piatra Șoimului (Calu), together with the other cauldrons specific

in a cross-legged sitting position ("Turkish style") on a decorated pedestal see BĂRCĂ 2013a; BĂRCĂ 2015, 39-42, Fig. 1/1.

¹¹¹ The graves in this eastern features group are significantly different from the remaining Sarmatian burials from the north and north-west of the Black Sea. One peculiarity is their very rich funerary inventory containing eastern origin items (jewellery made in animal style paralleled in the Bactrian art, parade weaponry, mirrors, including Chinese, precious metal vessels, bronze cauldrons with zoomorphic handles etc.) (SIMONENKO 2003a; BĂRCĂ/SYMONENKO 2009; BĂRCĂ 2006; BĂRCĂ 2012; BĂRCĂ 2013 with complete bibliography). Among specific elements also count the main burials in barrows, the large rectangular or almost square gravepits with the deceased placed along the walls or the square gravepits with the dead set on diagonal (SIMONENKO 2000; BĂRCĂ/SYMONENKO 2009). Niche graves might have also belonged to them, yet also a part of common rectangular gravepits broadly spread over the entire Sarmatian history (see to this effect RAEV 1989, 116-117; SKRIPKIN 1990, 207-209, 217-218). The newcomers also spread the custom of using ditched funerary set-ups of various flat shapes, with or without graves inside, discovered below the self-standing barrows or within barrow or flat burial grounds (see for these SIMONENKO 2003b; BĂRCĂ 2015a). Including the tamgas were mainly used by this wave of Sarmatians arriving from the east, they also being those who mostly contributed to their diffusion in Eastern Europe steppes. We wish to mention, as elsewhere (Cf. BĂRCĂ/SYMONENKO 2009; BĂRCĂ 2006; BĂRCĂ 2013; BĂRCĂ 2015), that in the current state of research, it may be argued that graves with obvious eastern features from the north and north-west Pontic space dated to the mid 1st century AD – first decades of the 2nd century AD are very likely mostly Alanic. Even more, it is certain that Chinese (SIMONENKO 2003a, 45-65) and Central-Asian (YATSENKO 1993, 60-72) origin items emerged with the Sarmatians, including those from the north and north-west Pontic area, once with the arrival of the Alani, who used them a long time before reaching these territories. For the graves of the early Alani aristocracy in the north-west Pontic area like those at Kovalevka (Sokolova Mogila), Troyany, Gordeevka, Severinovka, Pisarevka, Porogi, Kozyrka, Vesnyanoe, Cazacia (T 10 G 1), Olănești (T 4 G 4), Hrușca, Mocra (T 2 G 2), Mikhajlovka (T 3 G 3) etc. see KOVPANENKO 1986, 66-72, 127, Fig. 70-73; GROSU 1990, 53, 92, Fig. 16D; SUBBOTIN/DZIGOVSKIJ 1990, 19-21, Fig. 15/10-16, 16/1-9; SIMONENKO/LOBAJ 1991; SIMONENKO 1997, 389-407; SIMONENKO 2008, 71, 73-76, 78-79, Pl. 85-87, 100-111, 118-119, 126-129, 131-133; SIMONENKO/MEL'NIK 2004, 269-280, KASHUBA/KURCHATOV/SHCHERBAKOVA 2001-2002, 200-213, 226-242, Fig. 8-9, 11-17; AGULNICOV/BUBULICI 1999; KURCHATOV/BUBULICI 2003; DZYGOVSKYJ 1993, 74-75, 201, Fig. 33, 36/4-5, 37/2, 6, 8, 38, 43/1-6; BĂRCĂ 2006, 300-302, 319-320, 329-330, 331-334, 348-353, Fig. 41-43, 65, 75-77, 79-81, 97-111; BĂRCĂ/SYMONENKO 2009. S. V. Voronyatov believes the group of graves in the Bug-Dniester interfluve are an unusual cemetery of the Alani clan (VORONYATOV 2013, 156).

¹¹² For the entry and settlement of new Sarmatian tribes in the north-west of the Black Sea, well noted in ancient literary and epigraphic sources see BĂRCĂ 2006, 244-262; BĂRCĂ 2013; BĂRCĂ/SYMONENKO 2009, 348-364.

¹¹³ They were a very powerful group militarily, succeeding to politically control other Sarmatians in the region in a short period of time.

¹⁰⁹ For several see DEMIDENKO 2008, Fig. 51, 52/1, 89/VI.1.A (no. 41), 90-92.

¹¹⁰ For the find at Lehliu (Călărași county), containing a brooch and an amulet-pendant of agate rendering a male figure with eastern facial features

to the mid Sarmatian period from the north and north-west of the Black Sea, reached the east Carpathian area sometime in the second half of the 1st century AD¹¹⁴. When and under what circumstances it reached the Piatra Șoimului (Calu) settlement is difficult to say, yet obviously this occurred no later than the events by early 2nd century AD.

We should also add that together with other object classes of Sarmatian origin or mainly used by the Sarmatians, discovered in the pre-Roman Daco-Getae environment, the cauldron from the Dacian settlement of Piatra Șoimului (Calu) records the Sarmatian presence in the east-Carpathian space in the 1st century AD¹¹⁵. A significant number of tamgas in the pre-roman Daco-Getae milieu, mainly on locally made items, further evidences relations between the two populaces, yet also their cohabiting in the same space during the second half of the 1st century AD¹¹⁶. In fact, it must be mentioned that the tamgas in the milieu of sedentary populations outside the basic area of their use record contacts between the representatives of the nomad and sedentary populations, while their large number is proof of systematic contacts between such populaces¹¹⁷. The settlement of Sarmatian groups in the east-Carpathian area led to a Daco-Getae and Sarmatian cohabiting as well as the establishment of both economic and political-military¹¹⁸ relations which contributed to the set up of alliances recorded by both written sources as well as Trajan's Column and the Tropaeum Traiani.

REFERENCES

- AGULNICOV/BUBULICI 1999
Agulnicov, S./Bubulici, V., Tumulus sarmatic din sec. I p. Chr. de lângă satul Cazaclia, *Thraco-Dacica* 20/1-2, 287-307.
- BABEȘ 1999
Babeș, M., Ein tamga-zeichen aus der Dakischen siedlung von Ocnița (Buridava). In: Boroffka, N./Soroceanu, T. (eds.), *Transilvanica, Archäologische Untersuchungen zur Ältern Geschichte der südöstlichen Mitteleuropa. Gedenkschrift für Kurt Horedt. Internationale Archäologie. Studia honoraria – Band 7* (Rahden: Leidorf), 223-239.
- BABEȘ 2005
Babeș, M., Tamga iz dakijskogo poseleniya v Oknitse (Buridava), *Stratum plus* 4 (2003-2004), 467-479.
- BÂRCĂ 2002
Bârcă, V., Das Eindringen der Sarmaten an der unteren und mittleren Donau und ihre Beziehungen zu den Geto-Daker (1. Jh. v. Chr. – 1. Jh. n. Chr.). In: Rustoiu, A./Urșuțiu, A. (eds.), *Interregionale und kulturelle Beziehungen im Karpatenraum (2. Jahrtausend v. Chr. - 1. Jahrtausend n. Chr.)* (Cluj-Napoca: Nereamia Napocae), 103-150.
- BÂRCĂ 2002a
Bârcă, V., Pătrunderea sarmaților la Dunărea de Jos și de
Mijloc și relațiile cu geto-dacii (sec. I a. Chr. – sec. I p. Chr.), *Ephemeris Napocensis* 12, 45-97.
- BÂRCĂ 2002b
Bârcă, V., *Einige Betrachtungen Betreffend das Fundkomplex von Bubueci (Fundumstände, Forschungsgeschichte, Datierung und ethnische Zuschreibung)*, *Thraco-Dacica* 22, 1-2, 215-230.
- BÂRCĂ 2004
V. Bârcă, Câteva observații cu privire la tezaurele și depozitele sarmatice timpurii (sec. II-I a. Chr.) din spațiul dintre Don și Prut. In: Crînguș, M./Regep-Vlascici, S./Ștefănescu, A. (eds.), *Studia Historica et Arhaeologica. In Honorem Magistrae Doina Benea* [Bibliotheca Historica et Archaeologica Universitatis Timisiensis 6], (Timișoara), 35-63.
- BÂRCĂ 2006
Bârcă, V., *Istorie și civilizație. Sarmatii în spațiul est-carpatic (sec. I a. Chr. – începutul sec. II p. Chr.)* (Cluj-Napoca: Argonaut).
- BÂRCĂ 2006a
Bârcă, V., *Nomazi ai stepelor. Sarmatii timpurii în spațiul nord-pontic (sec. II-I a. Chr.)* (Cluj-Napoca: Argonaut).
- BÂRCĂ 2006b
Bârcă, V., Sarmatii – aliații dacilor în războaiele contra Romei. In: Teodor, E. S./Țentea, O. (eds.), *Dacia Augusti Provincia. Crearea Provinciei* (București: Cetatea de Scaun), 3-28.
- BÂRCĂ 2007
Bârcă, V., Vase metalice de import din mediul sarmatic timpurii (sec. II-I a. Chr.) din spațiul dintre Don și Prut. In: Nemeti, S./Fodorean, F./Nemeth, E./Cociș, S./Nemeti, I./Pislaru, M. (eds.), *Dacia Felix. Studia Michaeli Bărbulescu oblate* (Cluj-Napoca: Tribuna), 88-98.
- BÂRCĂ 2009
Bârcă, V., Câteva considerații privind vasele metalice de import din mediul sarmatic nord-pontic. In: Țentea, O./Opriș, I. C. (eds.), *Near and Beyond the Roman Frontier. Proceedings of a colloquium held in Târgoviște, 16-17 october 2008, (= Supplementum Cercetări Arheologice 16)* (București: Conphys), 85-124.
- BÂRCĂ 2011
Bârcă, V., „Sarmatian” bronze cauldrons in the Sarmatian environment between Don river and the Carpathians. In: Piso, I./Rusu-Bolindeț, V./Varga, R./Mustață, S./Beu-Dachin, E./Ruscu, L. (eds.), *Scripta Classica. Radu Ardevan Sexagenario Dedicata* (Cluj-Napoca: Mega), 41-50.
- BÂRCĂ 2011a
Bârcă, V., The fibulae in the North-Pontic Sarmatian Environment (1st C – first half of the 2nd C CE), *Ephemeris Napocensis* 21, 7-35.
- BÂRCĂ 2012
Bârcă, V., Some Remarks on Metal Cups with Zoomorphic Handles in the Sarmatian Environment, *Ephemeris Napocensis* 22, 185-209.
- BÂRCĂ 2013
Bârcă, V., Nomads of the steppes by the Danube frontier of the Roman Empire in the 1st C CE. Historical sketch and chronological remarks, *Dacia N. S.* 57, 99-125.
- BÂRCĂ 2013a
Bârcă, V., The items in the Sarmatian Grave at Lehliu (Călărași county) and its Dating Issue, *Ephemeris Napocensis* 23, 243-260.
- BÂRCĂ 2015
Bârcă, V., The reinterpretation of the Sarmatian finds from the Romanian Plain (I), *Journal of Ancient History and Archaeology* 2/1, 35-71.
(DOI: <http://dx.doi.org/10.14795/j.v2i1.105>).

¹¹⁴ BÂRCĂ 2013; BÂRCĂ 2015; BÂRCĂ/SYMONENKO 2009, 184.

¹¹⁵ For the 1st century AD Sarmatian funerary remains in territories east of the Carpathians see BÂRCĂ 2006.

¹¹⁶ For the tamgas in the pre-Roman Dacian environment see BELDIMAN 1990, 139-151; BABEȘ 1999, 223 sqq.; BABEȘ 2005; BÂRCĂ 2002, 115-117, Fig. 15-16; BÂRCĂ 2002a, 70-80, Fig. 15-16; BERZOVAN/PĂDUREANU 2010, 57-66; BUDIHALĂ 2012, 93, Pl. XIII/6.

¹¹⁷ For a broader analysis see VORONYATOV 2014.

¹¹⁸ In fact, neither the written sources nor the archaeological finds suggest a massive and violent entry of the Sarmatians on the Daco-Getae territory, but rather via groups of individuals subsequent to trade exchanges or mixed marriages, or larger or smaller groups established among the native communities. For several details related to the Daco-Getae and Sarmatian relations over the 1st century AD see BÂRCĂ 2002; BÂRCĂ 2002a.

- BÂRCĂ 2015a
Bârcă, V., A few notes on the emergence and distribution in the Sarmatian environment of variously shaped ditched enclosures, with or without graves inside. In: Kogălniceanu, R./Gligor, M./Curcă, R.-G./Stratton, S. (eds.), *Homines, Funera, Astra 2. The Archaeology of Death in Ancient Times (Romanian Case Studies). Proceedings of the International Symposium on Funerary Anthropology, 23-26 September 2012, 1 Decembrie 1918 University (Alba Iulia, Romania)* (Oxford: Archaeopress), 103-118.
- BÂRCĂ/SYMONENKO 2009
Bârcă, V./Symonenko, O., *Călăreții stepelor. Sarmatii în spațiul nord-pontic* (Cluj-Napoca: Mega).
- BELDIMAN 1990
Beldiman, C., Semne de tip tamga din Dacia preromană, *Thraco-Dacica* XI, 139-151.
- BERZOVAN/PĂDUREANU 2010
Berzovan, A./Pădureanu, E., A clay pot with tamga signs discovered at Șiria (Arad county), *Annales d'Université Valahia Targoviste, Section d'Archéologie et d'Histoire*, XII/2, 57-66.
- BESPALYJ 1985
Bespalij, E. I., Kurgan I v. n. e. u g. Azova, *Sovetskaya Arkheologiya* 4, 163-172.
- BICHIR 1976
Bichir, Gh., Relațiile dintre sarmați și geto-daci până la sfârșitul secolului I e. n., *Studii și Cercetări de Istorie veche și Arheologie* 27/2, 1976, 203-214.
- BICHIR 1977
Bichir, Gh., Les Sarmates au Bas-Danube, *Dacia, N. S.*, 21, 167-198.
- BICHIR 1993
Bichir, Gh., Date noi cu privire la pătrunderea sarmaților în teritoriul geto-dacic (I), *Studii și Cercetări de Istorie veche și Arheologie* 44/2, 135-169.
- BOKOVENKO 1977
Bokovenko, N. A., Tipologija bronzovykh kotlov sarmatskogo vremeni v Vostochnoj Evrope, *Sovetskaya Arkheologiya* 4, 228-235.
- BRUYAKO 2009
Bruyako, I. V., Ot Skifi k Sarmatii: desyati let spustya, *Stratum plus* 3 (2005-2009), 329-369.
- BUDIHALĂ 2012
Budihală, D., *Influente romane pe Valea Mureșului Inferior (sec. II-IV p. Chr.)*. PhD thesis manuscript (Cluj-Napoca).
- DEMIDENKO 2008
Demidenko, S. V. *Bronzovye kotly drevnikh plemen Nizhnego Povolzh'ya i Yuzhnogo Priural'ya (V v. do n.e. - III v. n. e.)* (Moskva: Izdatel'stvo LKI).
- DEMIDENKO/MIMOKHOD/USPENSKIJ 2019
Demidenko, S. V./Mimokhod, R. A./Uspenskiy, P. S., Novye nalhodki sarmatskikh kotlov na Nizhnem Donu, *Kratkie soobshcheniya Instituta arkheologii* 254, 91-103.
- DZYGOVS'KYJ 1993
Dzygovs'kyj, O. M., *Sarmaty na zahodi stepovogo Prychornomor'ya naprykintsi I st. do n. e. - pershij polovyni IV st. n. e.* (Kyiv: Institut Arkheologii NAN Ukrainy).
- DZIS-RAJKO/SUNICHUK 1984
Dzis-Rajko, G. A./Sunichuk, E. F., Kompleks predmetov skifskogo vremeni iz s. Velikoploskoe. In: Chernyakov, I. T. (ed.), *Rannij zheleznyj vek Severo-Zapodnogo Prichernomor'ya* (Kiev: Naukova dumka), 148-161.
- GLEBOV 2016
Glebov, V. P., O variantakh obryada zakhroneniya "ritual'nykh kladov" III-I vv. do n. e. *Stratum plus* 3, 145-161.
- GROSU 1990
Grosu, V. I., *Khronologiya pamyatnikov sarmatskoj kul'tury Dnestrovsko-Prutskogo mezhdurech'ya* (Kishinev: Știința).
- GROSU 1995
Grosu, V., Sarmatii în spațiul geto-dacic răsăritean, *Arheologia Moldovei* 18, 133-186.
- KASHUBA/KURCHATOV/SHCHERBAKOVA 2001-2002
Kashuba, M. T./Kurchatov, S. I./Shcherbakova, T. A., Kochevniki na zapodnoj granitse Velikoj stepi (po materialam kurganov u s. Mokra), *Stratum plus* 4, 180-252.
- KOSTENKO 1978
Kostenko, V. I., Kompleks s falarami iz sarmatskogo pogrebeniya u s. Bulakhovka. In: Kovaleva, I. F. (ed.), *Kurgannye drevnosti stepnogo Podneprov'ya III - I tys. do. n. e.*, (Dnepropetrovsk), 78-85.
- KOSTENKO/MARINA/ROMASHKO 1998
Kostenko, V. I./Marina, Z. P./Romashko, V. A., Kul'tovye sooruzheniya s kotlom I v. do. n. e. - I v. n. e. u s. Boguslav v Prissamar'e. In: *Istoriya i kul'tura Podniprov'ya* (Dnipropetrovsk: Izdatel'stvo DDU), 48-53.
- KOVPANENKO 1986
Kovpanenko, G. T., *Sarmatskoe pogrebenie I v. n. e. na Yuzhnom Buge* (Kiev: Naukova dumka).
- KURCHATOV/BUBULICI 2003
Kurchatov, S./Bubulici, V., Sarmatskoe pogrebenie iz kurgana u s. Oloneshty - 40 let spustya. In: E. Sava (ed.) *Interferențe cultural-cronologice în spațiul nord-pontic* (Chișinău: Institutul de Arheologie și Etnografie), 285-312.
- KURCHATOV/TEL'NOV 2010
Kurchatov, S. I./Tel'nov, N. P., Sarmatskiy kotel iz Nizhnego Podnestrov'ya, *Stratum plus* 4, 137-144.
- MARCHENKO/LIMBERIS 2009
Marchenko, I. I./Limberis, N. Yu., Plsatichatnye konskie nalobniki iz Prikuban'ya, *Arkheologiya, etnografiya i antropologiya Evrazii* 3 (39), 2009, 69-74.
- MORDVINCEVA 2001
Mordvinceva, V., *Sarmatische Phaleren* [Archäologie in Eurasien, Band 11] (Rahden/Westf: Verlag Marie Leidorf).
- MORDVICEVA 2013
Mordvinceva, V., Der Depotfund von Bulachovka. In: *Die Krim. Goldene Insel im Schwarzen Meer. Griechen - Skythen - Goten. Begleitbuch zur Ausstellung. LVR-LandesMuseum Bonn: 4. Juli 2013 - 19. Januar 2014* (Bonn: LVR-LandesMuseum), 402-407.
- MORDVINTSEVA 2001
Mordvintseva, V. I. Stilisticheskie grupy falarov III-I vv. do n. e. iz muzeev Possii i Ukrainy. In: *Yuvelirnoe iskusstvo i material'naya kul'tura* (Sankt-Peterburg), 2001, 161-166.
- MORDVITSEVA 2008
Mordvintseva, V. I., Falary iz votivnykh kladov Severnogo Prichernomor'ya III- vv. do n. e. I sarmatskaya paradigma, *Vestnik drevnej istorii* 3, 162-183.
- MORDVINTSEVA 2013
Mordvintseva, V. I., Kompleks predmetov iz Bulakhovki i "ritual'nye klady" Severnogo Prichernomor'ya III-I vv. do n. e., *Problemy istorii, filologii, kul'tury* 2 (40), 144-156.
- MORDVINTSEVA/SERGATSKOV 1995
Mordvintseva, V. I./Sergatskov, I. V., Bogatoe sarmatskoe pogrebenie u stantsii Berdiya, *Rossiyskaya Arkheologiya* 4, 114-124.
- MORDVINTSEVA/TREJSTER 2007
Mordvintseva, V./Trejster, M., *Proizvedeniya torevtiki i yuvelirnogo iskusstva v Severnom Prichernomor'e 2 v. do n. e. - 2 v. n. e.*, I-III (Simferopol'-Bonn: Tarpan).
- MUKHOPAD 1986
Mukhopad, S. E., Sarmatskie pogrebeniya s bronzovymi

- kotlami v Orel'-Samarskom mezhdurech'e. In: *Problemy arkheologii Podneprov'ya* (Dnepropetrovsk: Izdatel'stvo DGU), 136-143.
- NIȚU 1953
A. Nițiu, Despre unele urme scitice în Moldova, *Materiale și cercetări arheologice* 1, 1953, 3-11.
- OPRIȘ 2014
Opriș, I. Vasul de la Calu - Iapa (jud. Neamț), *Memoria Antiquitatis* 29-30 (2013-2014), 325-331.
- POLIN 1992
Polin, S. V., *Ot Skifii k Sarmatii* (Kiev: Tipografia FNPU).
- RAEV 1989
Raev, B. A., Alany v evpopejskikh stepyakh: vostok-zapad. In: Vakhtina, M. Yu. (ed.), *Skifiya i Bospor. Arkheologicheskie materialy k konferentsii pamyati akademika M. I. Rostovtseva* (Novocherkassk: Krasnoe znamya), 116-117.
- REDINA/SIMONENKO 2002
Redina, E. F./Simonenko, A. V., „Klad” kontsa II-I v. do n. e. iz Veseloy Doliny v krugu analogichnyh drevnostej Vostochnoj Evropy, *Materialy i issledovaniya po arkheologii Kubani* 2, 78-96.
- ROMANYUK/SYMONENKO 2001
Romanyuk, L. M./Symonenko, O. V., Sarmats'kyj kompleks iz s. Zaprudyya na Serednij Naddniproshchyni, *Arkheologiya* (Kyiv) 1, 19-28.
- SHCHERBAKOVA/KASHUBA 1993
Shcherbakova, T. A./Kashuba, M. T., Sarmato-alanskie drevnosti (Kurgannye zakhroneniya bliz s. Mokra) (Tiraspol').
- SHTERN 1911
Shtern, E. R., Neskol'ko antichnyh bronz iz kolleksii Odesskogo muzeya, *Zapiski Odesskogo Obshchestva Istorii i Drevnostej* 29, 21-44.
- SIMONENKO 1982
Simonenko, A. V., O pozdnieskifskikh nalobnikakh. In: A. I. Terenozhkin (ed.), *Drevnosti stepnoj Skifii* (Kiev: Naukova dumka), 237-245.
- SIMONENKO 1993
Simonenko, A. V., „Klady” Snaryazheniya vsadnika II-I vv. do n. e. Opyt klassifikatsii i etnicheskoy interpretatsii. In: Marchenko, I. I. (ed.), *Vtoraya Kubanskaya arkheologicheskaya konferentsiya. Tezisy dokladov* (Krasnodar), 89-90.
- SIMONENKO 1994
Simonenko, A. V., The Problem of the Sarmanatian Penetration in the North Pontic Area According to Archaeological Data, *Il Mar Nero* 1, 99-134.
- SIMONENKO 1997
Simonenko, A. V., Eine sarmatische Bestattung vom Südlichen Bug, *Eurasia Antiqua* 3, 389-407.
- SIMONENKO 1999
Simonenko, A. V., *Sarmaty Severnogo Prichernomor'ya. Khronologiya, periodizatsiya i etno-politicheskaya istoriya*, Disertatsiya na soiskanie uchenoj stepeni doktora istoricheskikh nauk (mss.), Kiev, 1999.
- SIMONENKO 2000
Simonenko, A. V., Mogilnik Dneprozavodstroy i sarmatskie pamyatniki „vostochnoj volny” v Severnom Prichernomor'e, *Nizhnevolzhskij arkheologicheskij vestnik* 3, 133-144.
- SIMONENKO 2001
Simonenko, A. V., Pogrebenie u s. Chistenkoe i „stranye” komplekсы poslednikh vekov do n. e., *Nizhnevolzhskij arkheologicheskij vestnik* 4, 92-106.
- SIMONENKO 2003
Simonenko A. V. Glass and Faience Vessels from Sarmatian Graves of Ukraine, *Journal of Glass Studies* 45, 41-57.
- SIMONENKO 2003a
Simonenko, A. V., Kitajskie i tsentral'noaziatskie elementy v sarmatskoj kul'ture Severnogo Prichernomor'ya, *Nizhnevolzhskij arkheologicheskij vestnik* 6, 45-65.
- SIMONENKO 2003B
Simonenko, A. V., Eshche raz o rvakh v pogrebal'nom obryade sarmatov. In: Baran, V. D. (ed.), *Starozhytnosti I tsysacholittya nashoj ery na teritorii Ukrainy* (Kyiv: Institut Arkheologii NAN Ukrainy), 148-157.
- SIMONENKO 2005
Simonenko, A. V., Tiraspol'skie kurgany, „strannye” komplekсы i siraki na Dnestre. In: Marchenko, I. I. (ed.), *Chetvertaya Kubanskaya arkheologicheskaya konferentsiya. Tezisy dokladov* (Krasnodar: Izdatel'stvo Kubanskogo gosudarstvennogo universiteta), 255-259.
- SIMONENKO 2006
Simonenko, A. V., Steklo milefiori v sarmatskikh pogrebeniyakh. In: Simonenko, A. V. (ed.), *Liber Archaeologicae. Sbornik statei posvyashchennyj 60-letiyu B. A. Raeva* (Krasnodar), 137-152.
- SIMONENKO 2008
Simonenko, A. V., *Römische Importe in sarmatischen Denkmälern des nördlichen Schwarzmeergebietes*, 1-94, Pl. 1-168. In: Simonenko, A./Marčenko, I. I./Limberis, N. Ju. *Römische Importe in sarmatischen und maiotischen Gräbern zwischen Unterer Donau und Kuban* [Archäologie in Eurasien 25] (Mainz: Philipp von Zabern).
- SIMONENKO 2010
Simonenko, A. V., *Sarmatskie vsadniki Severnogo Prichernomor'ya* (Sankt-Peterburg: Nestor- Istoriya).
- SIMONENKO 2011
Simonenko, A. V., *Rimskij import u sarmatov Severnogo Prichernomor'ya* (Sankt-Peterburg: Nestor-Istoriya).
- SIMONENKO 2015
Simonenko, A. V. *Sarmatskie vsadniki Severnogo Prichernomor'ya. Izdanie 2-e, ispravlennoe i dopolnennoe* (Kiev: Izdatel' Oleg Filyuk).
- SIMONENKO 2019
Simonenko, A. V., Rannesarmatskie pamyatniki Orel'-Samarskogo mezhdurech'ya, *Nizhnevolzhskij arkheologicheskij vestnik* 18/1, 81-96.
- SIMONENKO/LOBAJ 1991
Simonenko, A. V./Lobaj, B. I., *Sarmaty Severo-Zapodnogo Prichernomor'ya v I v. n. e. (pogrebenie znati u s. Porogi)* (Kiev: Naukova dumka).
- SIMONENKO/MEL'NIK 2004
Simonenko, A. V./Mel'nik, A. A., Eine sarmatische Bestattung im Kurgan Kamova Mogila, Krivoj Rog, *Eurasia Antiqua* 10, 269-280.
- SIMONENKO/RAEV 2007
Simonenko, A. V./Raev, B. A., „Strannye komplekсы”: ot epokhi Latena do mogily neizvestnogo soldata, In: Vakhtina, M. Yu./Zuev, V. Yu./Kashaev, S. V./Sokolova, O. Yu./Khrshanovskij, V. A. (eds.), *Bosporskij fenomen: sakral'nyj smysl regiona, pamyatnikov, nakhodok* 2 (Sankt-Peterburg: Izdatel'stvo Gosudarstvennogo Ermitazha), 2007, 268-272.
- SÎRBU/BÂRCĂ 1999
Sîrbu, V./Bârcă, V., Daci și sarmați în zona est-carpatică (sec. I a. Ch.- I p. Ch.), *Istros* 9, 89-98.
- SÎRBU/BÂRCĂ 2000
Sîrbu, V./Bârcă, V., Vzaimootnosheniya mezhdru dakami i sarmatami v Vostochno-Karpatskom regione i na Nizhnem Dunae (I v. do n. e. - I v. n. e.), *Starozhitnosti stepovogo Prichernomor'ya i Krymu / Antiquities of Steppe Black Sea Region and Crimea* 8, 243-263.
- SÎRBU/BÂRCĂ 2016
Sîrbu, V./Bârcă, V., Figurative Representations on the

- Phalerae Found between the Ural, the Caucasus and the Balkan Mountains (2nd - 1st Century BC), In: Nikolova, L./Merlini, M./Comşa, Al. (eds.) *Western-Pontic Culture Ambience and Pattern. In memory of Eugen Comsa* (Berlin/Boston: De Gruyter), 272-321 (DOI (Chapter):[10.1515/9783110500820-012](https://doi.org/10.1515/9783110500820-012)).
- SHRAMKO 1962
Shramko, B. A., *Drevnosti Severskogo Dontsa* (Khar'kov: Izdatel'stvo Khar'kovskogo universiteta).
- SKRIPKIN 1970
Skripkin, A. S., Sluchajnye nakhodki sarmatskikh kotlov na territorii Volgogradskoj oblasti, *Sovetskaya Arkheologiya* 4, 206-209.
- SKRIPKIN 1990
Skripkin, A. S., *Aziatskaya Sarmatiya. Problemy khronologii i ee istoricheskij aspekt* (Saratov: Izdatel'stvo Saratovskogo universiteta).
- SKRIPKIN 2000
Skripkin, A. S., O kitajskukh traditsiyakh v sarmatskoj kul'ture. In: Raev, B. A. (ed.), *Antichnaya tsivilizatsiya i varvarskij mir. Materialy 7-go arkheologicheskogo seminar. Krasnodar, 6-11 iyunya 1999 g.* (Krasnodar: Krasnodarskij gosudarstvennyj universitet kul'tury i iskusstv), 97-99.
- SMIRNOV 1984
Smirnov, K. F., *Sarmaty i utverzhenie ikh politicheskogo gospodstva v Skifii* (Moskva: Nauka).
- SUBBOTIN/DZIGOVSKIJ 1990
Subbotin, L. V./Dzigovskij, A. N., *Sarmatskie drevnosti Dnestro-Dunajskogo mezhdurech'ya II. Kurgannye mogil'niki Divizijskij i Belolesskij* (Kiev: Institut Arkheologii).
- TEL'NOV/CHETVERIKOV/SINIKA 2012
Tel'nov, N. P./Chetverikov, I. A./Sinika, V. S., Skifskij mogil'nik III-II vv do. n. e. u s. Glinoe na levoberezh'e Nizhnego Dnestra (predvaritel'nye itogi issledovaniya), In: Tel'nov, N. P. (ed.), *Drevnosti Severnogo Prichernomor'ya III-II vv. do n. e.* (Tiraspol': Pridnestrovskij gosudarstvennyj universitet imeni T. G. Shevchenko), 5-15.
- TEL'NOV/CHETVERIKOV/SINIKA 2016
Tel'nov, N. P./Chetverikov, I. A./Sinika, V. S., *Skifskij mogil'nik III-II vv do. n. e. u s. Glinoe* (Tiraspol': Stratum Plus).
- TEL'NOV/SINIKA 2016
Tel'nov, N. P./Sinika, V. S., Konskoe anaryazhenie iz skifskogo mogil'nika u s. Glinoe na na levoberezh'e Nizhnego Dnestra. In: Sirbu, L./Tel'nov, N./Ciobanu, L./Sirbu, Gh./Kaşuba, M. (eds.), *Culturi, Procese și Contexte în Arheologie. Volum omagial Oleg Levițki la 60 de ani* (Chişinău: Centrul de Arheologie al Institutului Patrimoniului Cultural), 294-309.
- VLASKIN/GLEBOV/KUZ'MIN 2018
Vlaskin, M. V./Glebov, V. P./Kuz'min, V. N., Ritual'nyj klad iz kurgana 1 mogil'nika Restumov II v Rostovskoj oblasti, *Nizhnevolzhskij arkheologicheskij vestnik* 17/2, 58-69.
- VORONYATOV 2013
Voronyatov, S. V., Lokalizatsiya bastarnov i nekotorye drugie problemy elogiya Plavtiya Sil'vana Eliana, *Arkheologicheskij sbornik Gosudarstvennogo Ermitazha* 39, 148-161.
- VORONYATOV 2014
Voronyatov, S. V., *Formy vzaimootnosheniy kochevnikov s vneshnim mirom v otrazhenii arealov sarmatskikh znakov-tamg*. In: Yablonskij, L. T./Saveliev, N. S. (eds.), *Sarmaty i vneshnij mir. Materialy VIII Vserossijskoj nauchnoj konferentsii „Problemy sarmatskoj arkheologii i istorii”*, Ufa, 12-15 maya 2014 g. (= *Ufimskij Arkheologicheskij Vestnik* 14) (Ufa: Vintazh), 66-76.
- VULPE 1941
Vulpe, R., Les fouilles de Calu, *Dacia*, 7-8 (1937-1940), 13-68.
- YATSENKO 1993
Yatsenko, S. A., Alanskaya problema i tsentral'noaziatskie elementy v kul'ture kochevnikov Sarmatii rubezha I-II vv. n. e., *Peterburgskij arkheologicheskij vestnik* 3, 60-72.
- YATSENKO 1993a
Yatsenko, S. A., Alany v Vostochnoj Evrope v seredine I – seredine IV vv. n. e. (Localizatsiya i politicheskaya istoria), *Peterburgskij arkheologicheskij vestnik* 6, 83-88.
- ZAJTSEV 2005
Zajtsev, Yu. P., Krestovidnye udila Severo Prichernomor'ya, In: Marchenko, I. I. (ed.), *Chetvertaya Kubanskaya arkheologicheskaya konferentsiya. Tezisy dokladov*, (Krasnodar, Izdatel'stvo Kubanskogo gosudarstvennogo universiteta), 88-94.
- ZAJTSEV 2007
Zajtsev, Yu. P., Kompleks iz Gävani (k probleme khronologii III v. do. n. e), In: Vakhtina, M. Yu./Zuev, V. Yu./Kashaev, S. V./Sokolova, O. Yu./Khrshanovskij, V. A. (eds.), *Bosporskij fenomen: sakral'nyj smysl regiona, pamyatnikov, nakhodok* 2 (Sankt-Peterburg: Izdatel'stvo Gosudarstvennogo Ermitazha), 258-268.
- ZAJTSEV 2008
Zajtsev, Yu. P., Votivnye klady Severo-Zapodnogo Prichernomor'ya III-I vv. do n. e. Khronologiya i kul'turnaya prenadlezhnosti, In: Nemchenko, I. V. (ed.), *Drevnee Prichernomor'e VIII* (Odessa: Fridman AS), 146-152.
- ZAJTSEV 2012
Zajtsev, Yu. P., Severnoe Prichernomor'e v III-II vv. do n. e.: ritual'nye klady i arkheologicheskije kul'tury (postanovka problemy), In: Tel'nov, N. P. (ed.), *Drevnosti Severnogo Prichernomor'ya III-II vv. do n. e.* (Tiraspol': Pridnestrovskij gosudarstvennyj universitet imeni T. G. Shevchenko), 67-72.
- ZAJTSEV/MORDVINTSEVA 2003
Zajtsev, Yu. P./Mordvintseva, V. I., „Nogajchinskij” kurgan v stepnom Krymu, *Vestnik drevnei istorii* 2, 61-99.



Fig. 1. The Piatra Șoimului (Calu) cauldron (photo Alexandru Bădescu).



1



2

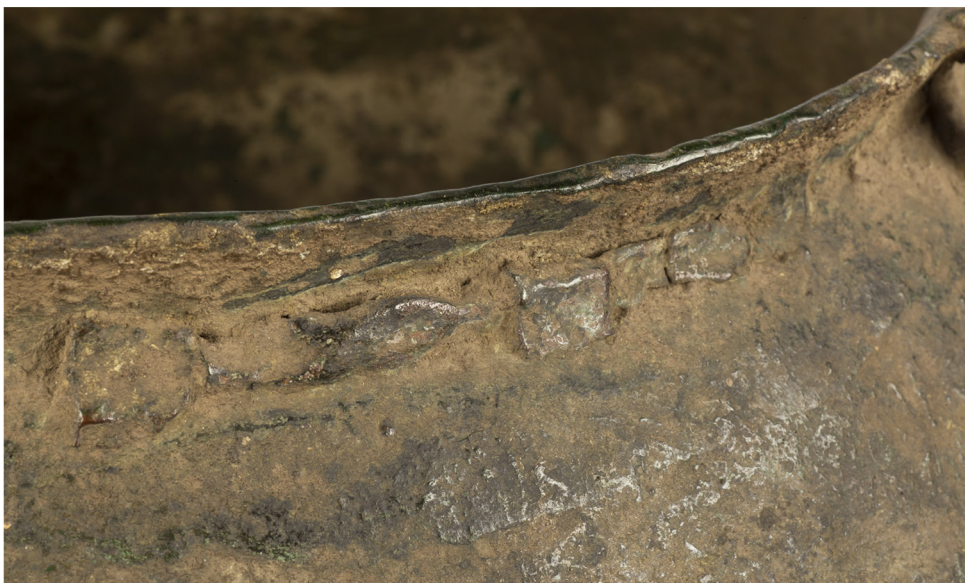
Fig. 2. The Piatra Șoimului (Calu) cauldron (photo Alexandru Bădescu).



1

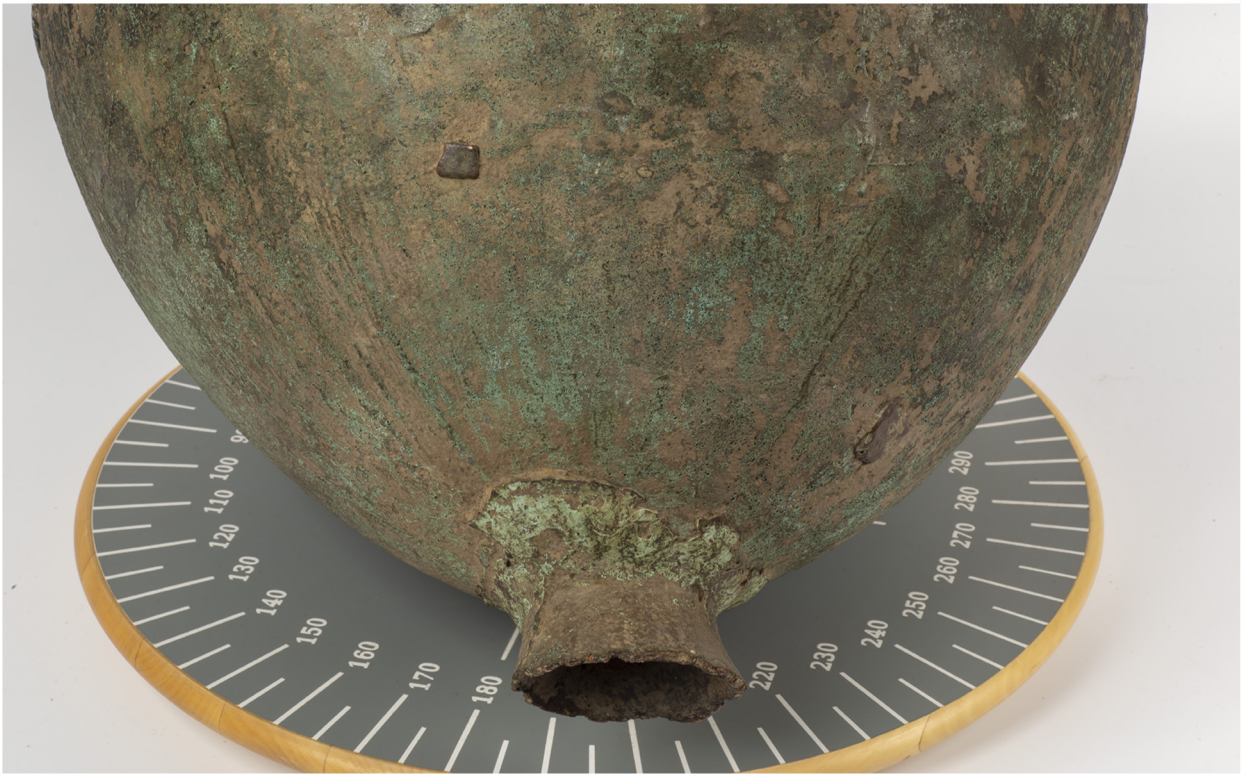


2



3

Fig. 3. The Piatra Şoimului (Calu) cauldron (photo Alexandru Bădescu).



1



2

Fig. 4. The Piatra Șoimului (Calu) cauldron (photo Alexandru Bădescu).

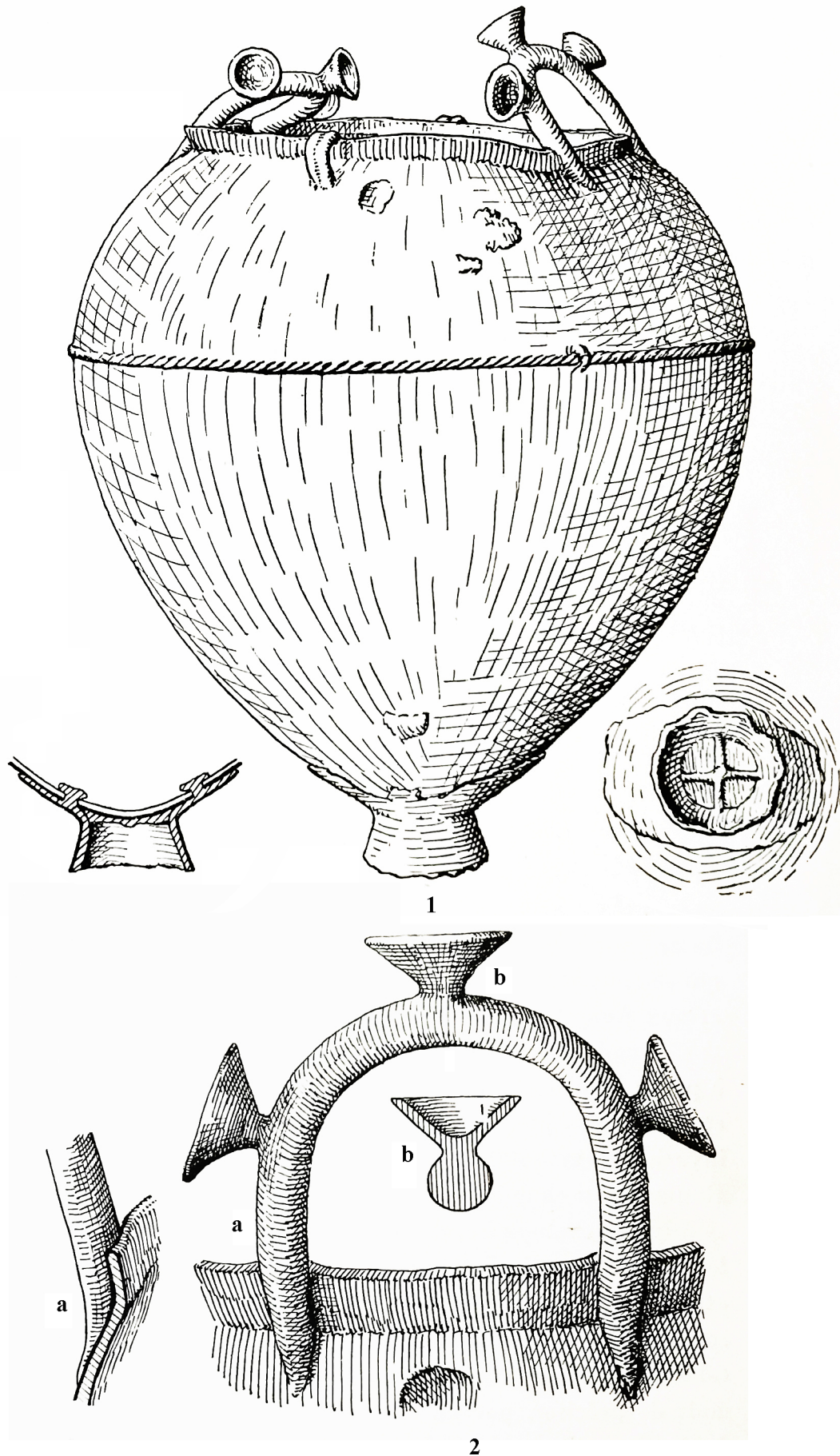


Fig. 5. The Piatra Șoimului (Calu) cauldron (after VULPE 1941).

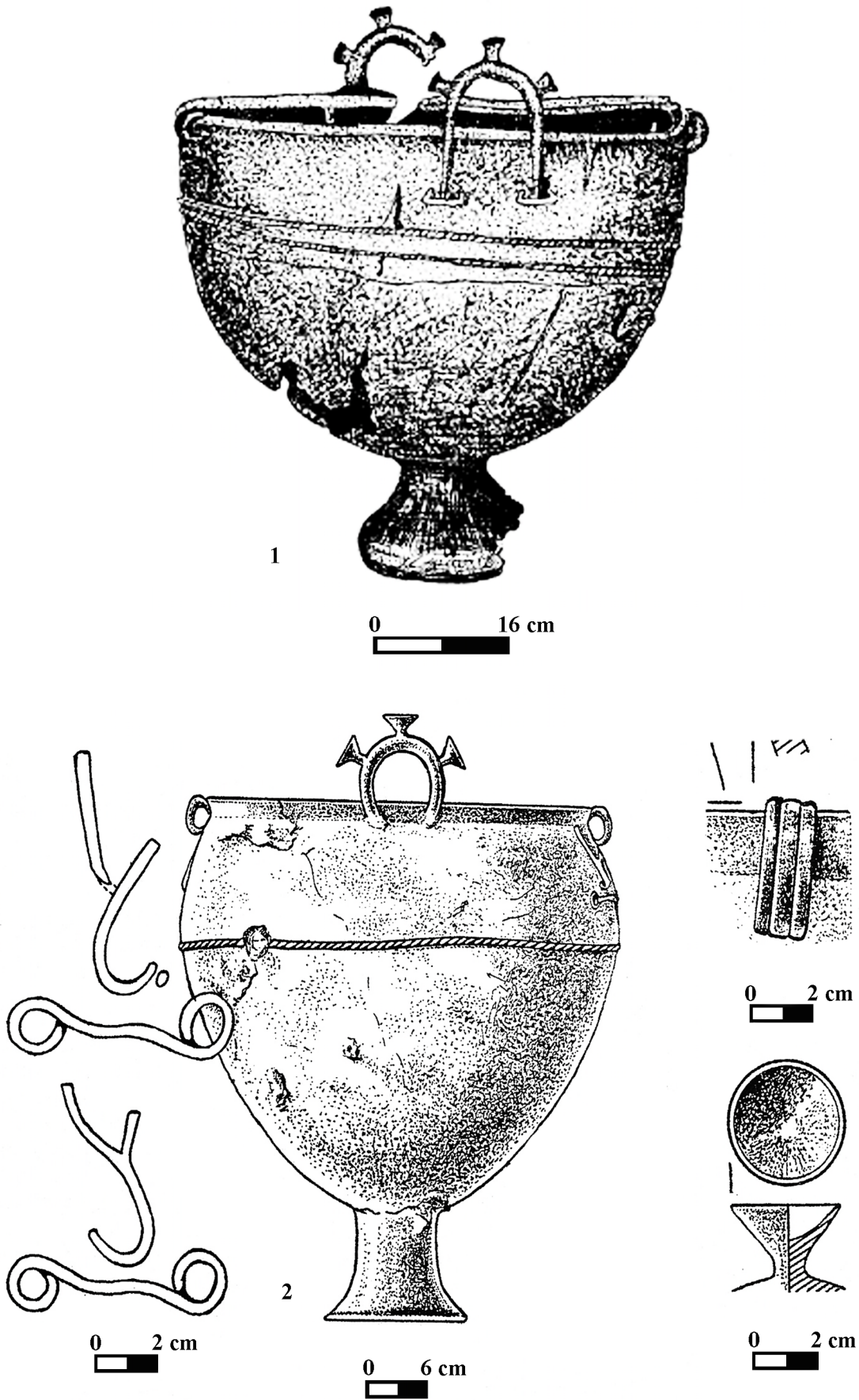


Fig. 6. The Bulakhovka (1) and Boguslav (2) cauldrons (1 – after SIMONENKO 2019; 2 – after KOSTENKO/MARINA/ROMASHKO 1998).



0 10 cm



0 6 cm

Fig. 7. The Starobel'sk (1) and Yaroshevka (2) cauldrons (1 – after DEMIDENKO 2008; 2 – after SIMONENKO 2008).

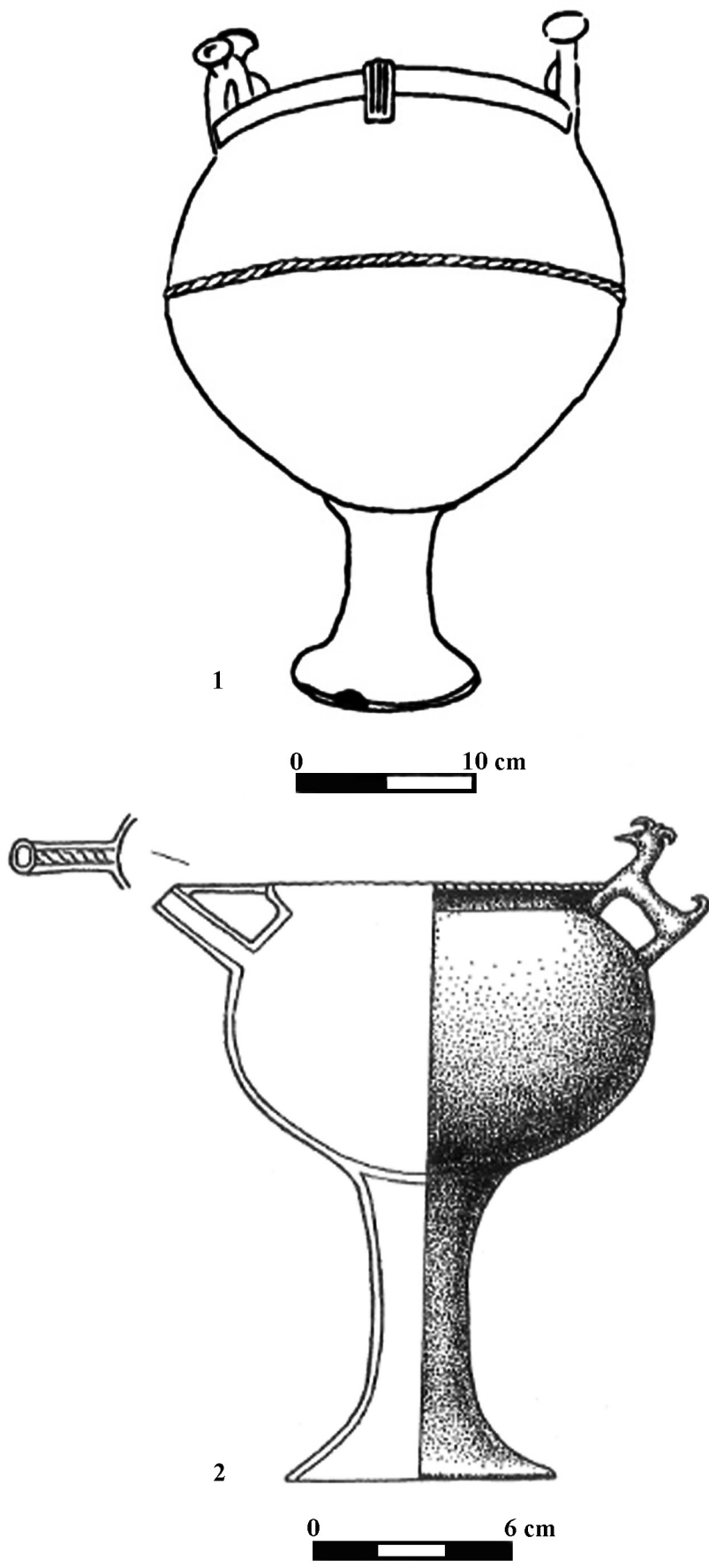


Fig. 8. The Selimovka (1) and Davydov Brod (2) cauldrons (1 – after DEMIDENKO 2008; 2 – after SIMONENKO 2008).

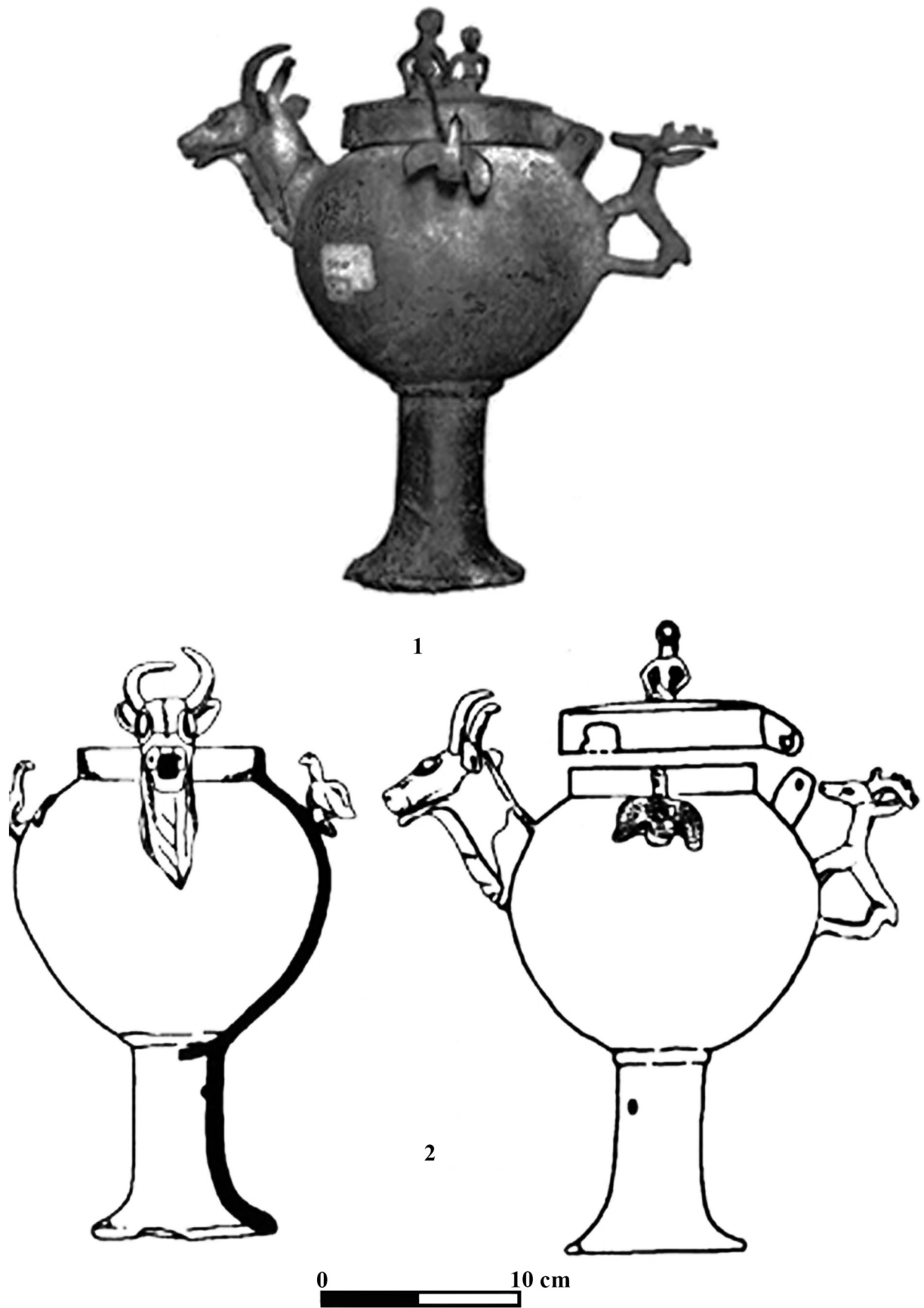


Fig. 9.1-2. The Kal'mius cauldron (1- after SHTERN 1911; 2 – after DEMIDENKO 2008).

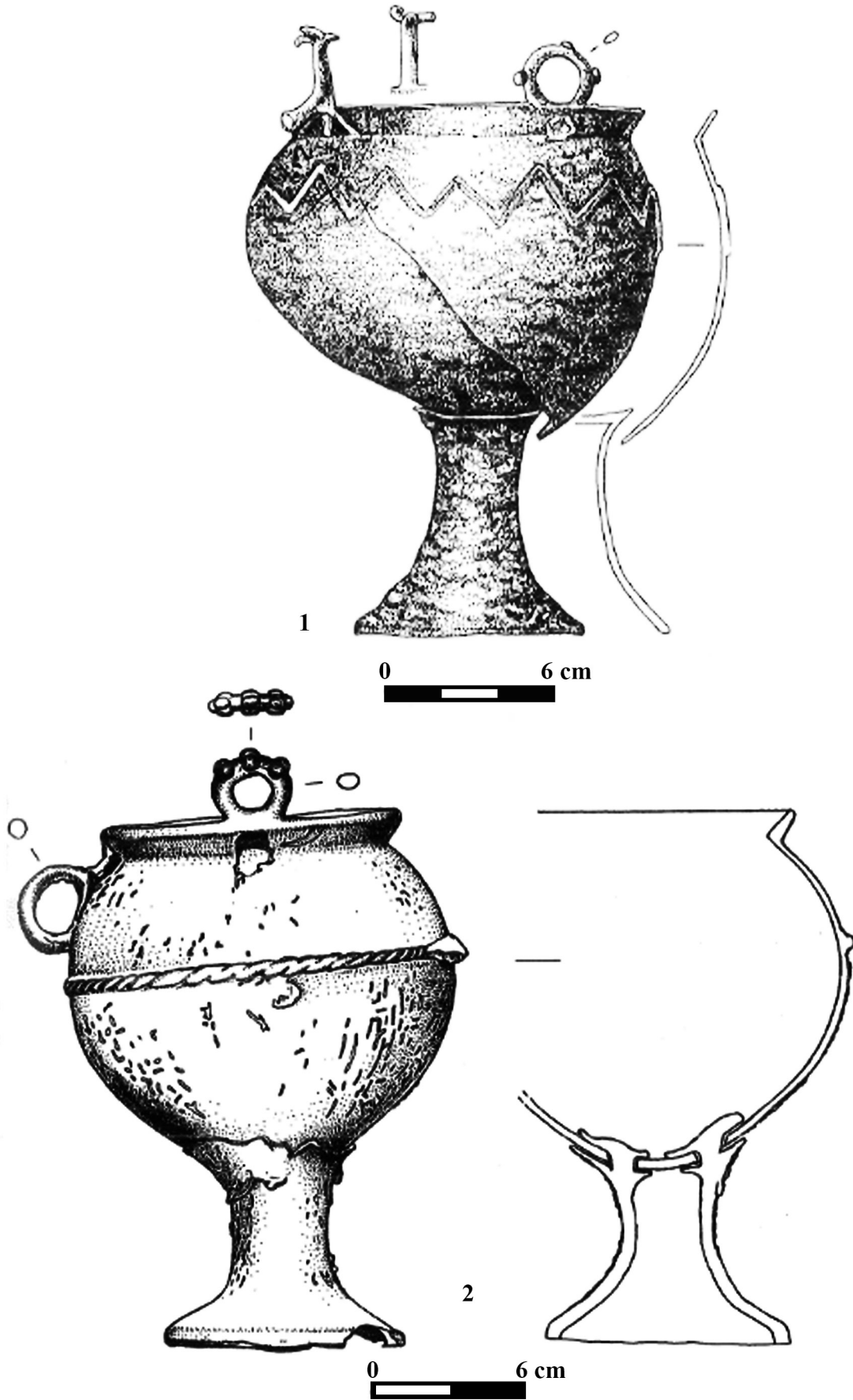
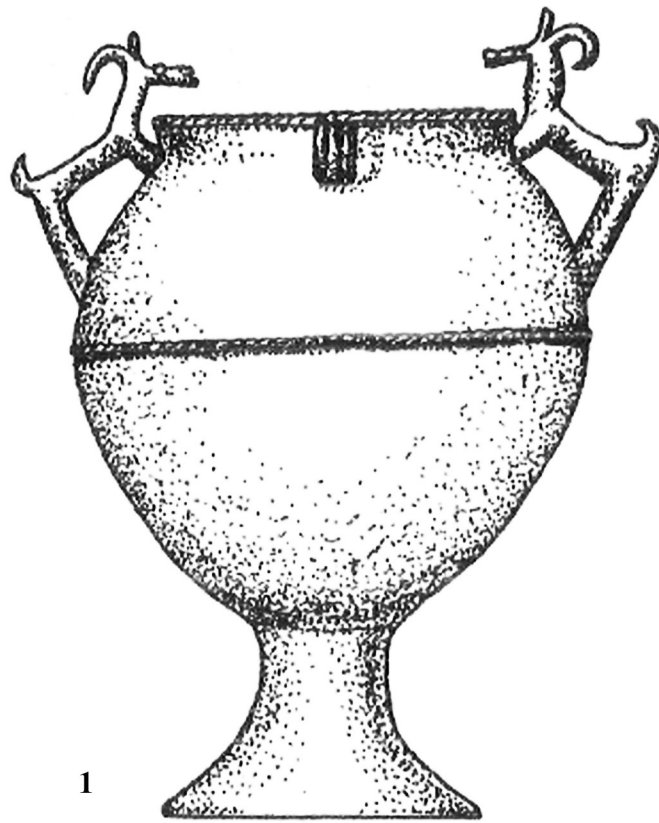
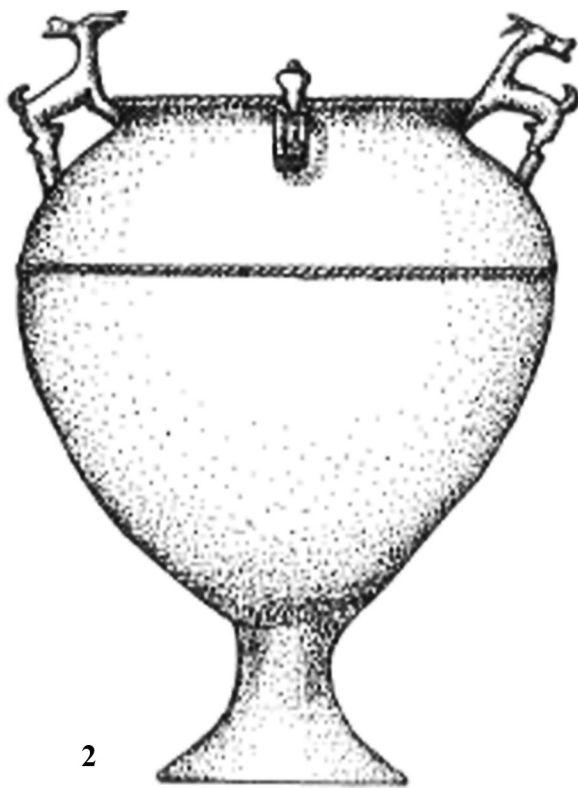


Fig. 10. The Zaprud'e (1) and Tsvetna (2) cauldrons (after SIMONENKO 2008).



0 6 cm



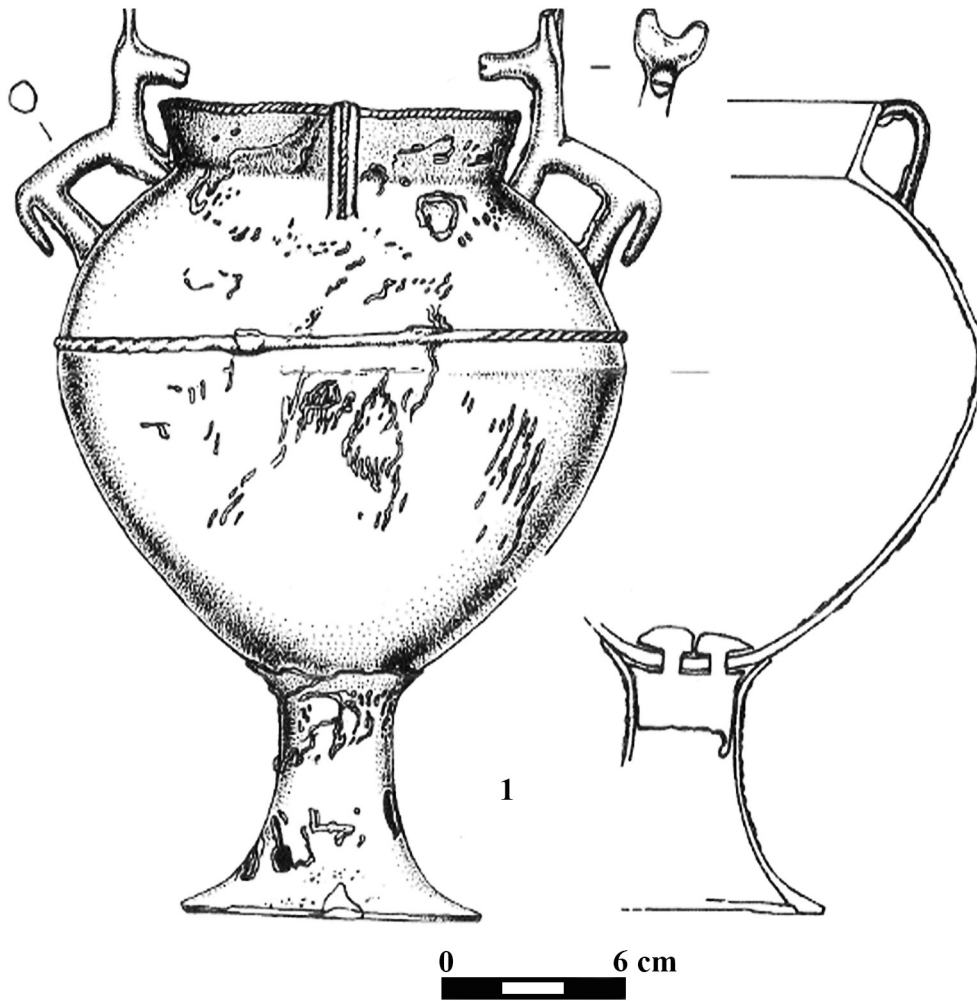
0 12 cm



0 3 cm



Fig. 11. The cauldrons from the Verbki (1) and Terny (2) graves (after SIMONENKO 2008).



2

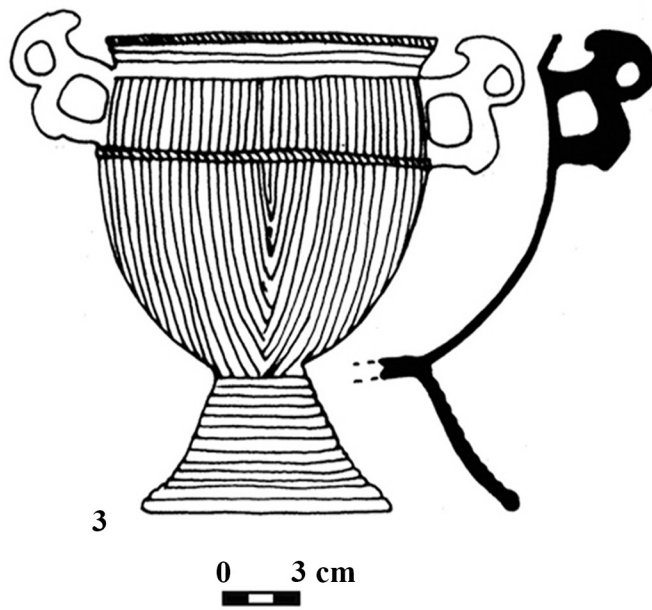
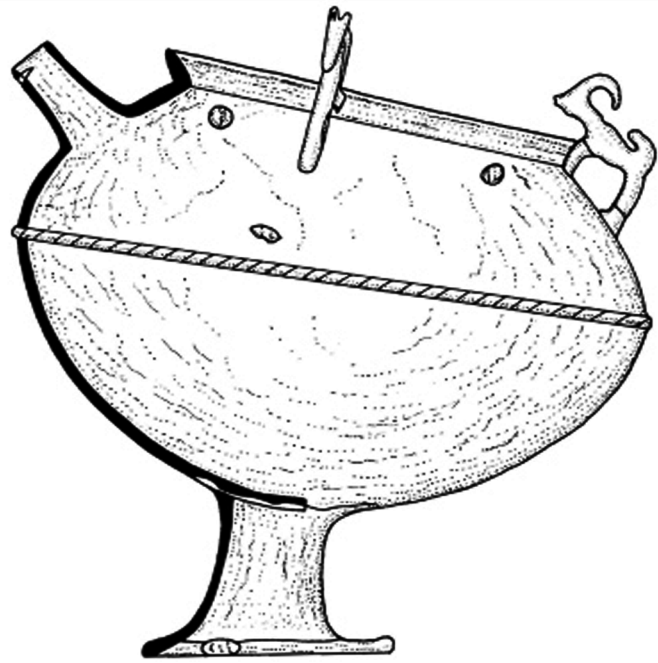
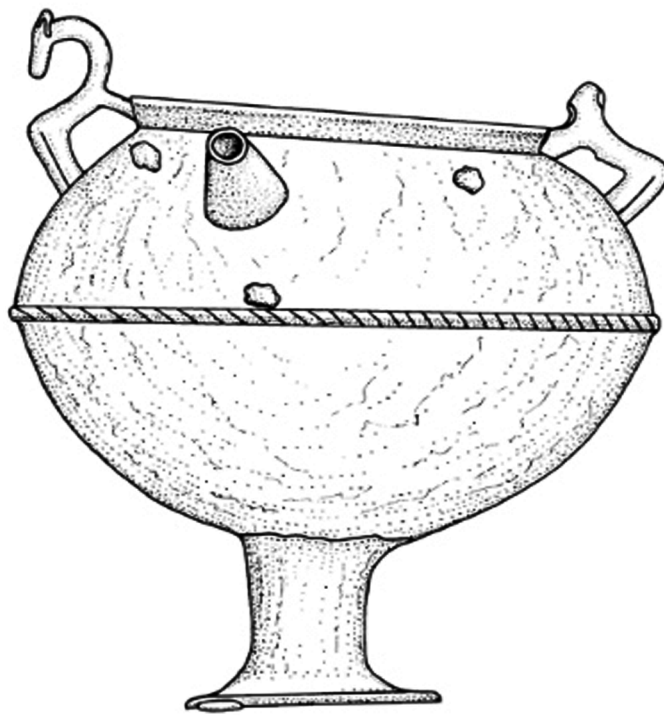


Fig. 12. The Troyany (1) and Mocra (2-3) cauldrons (1 – after SIMONENKO 2008; 2 – after SHCHERBAKOVA/KASHUBA 1993; 3 – after BÂRCĂ 2006).



1



2

0 5 cm

A scale bar consisting of a horizontal line with a vertical tick at the 0 mark and another at the 5 cm mark.

Fig. 13. The Slobozia cauldron (after KURCHATOV/TEL'NOV 2010).

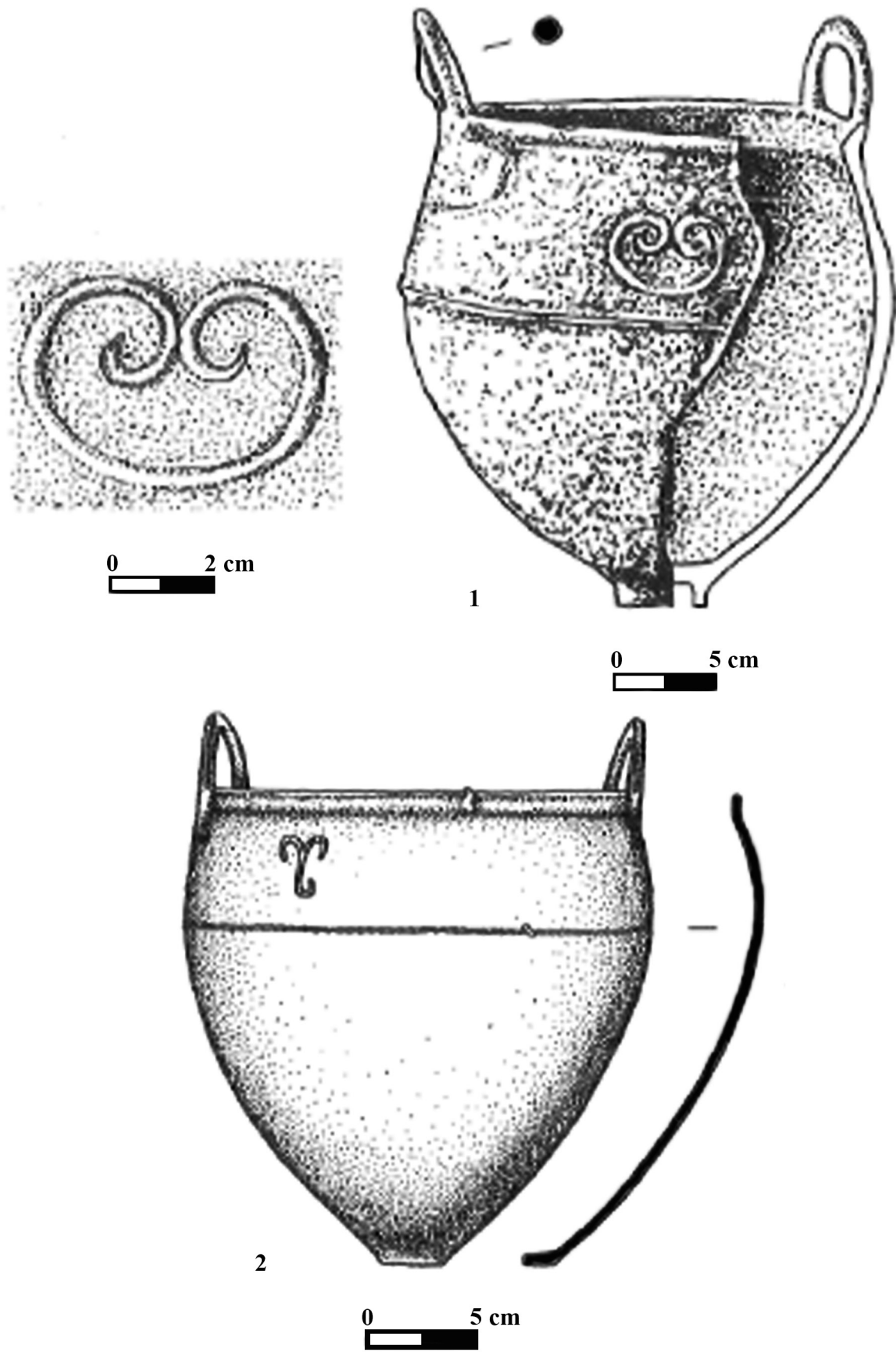


Fig. 14. The Pavlovka (1) and Chuguno-Krepinka (2) cauldrons (after SIMONENKO 2008).

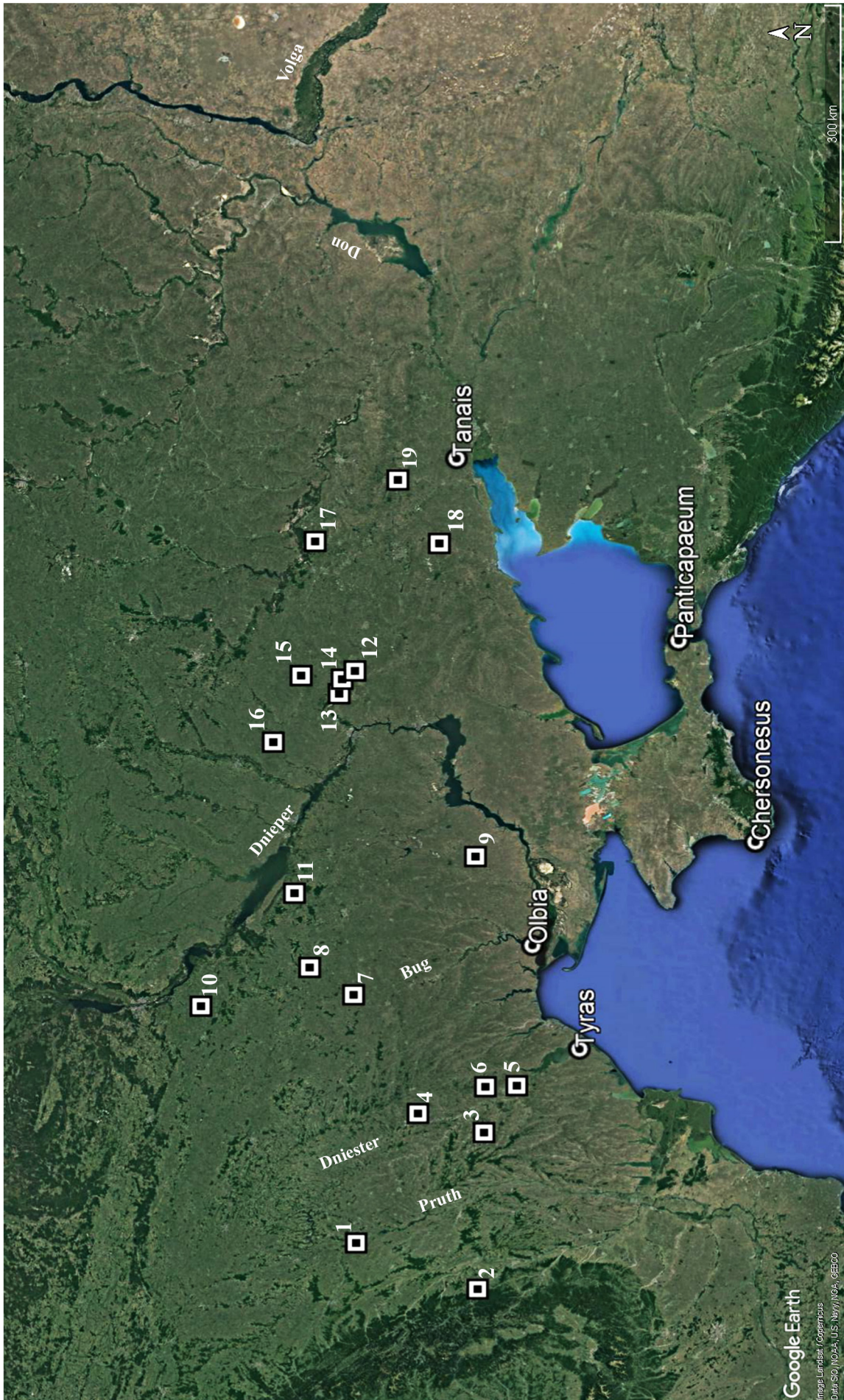


Fig. 15. Map of Sarmatian date cauldron finds from the territory of Romania, R. of Moldova and Ukraine. **1** Avrămeni; **2**. Piatra Şoimului (Calu); **3**. Bubueci; **4**. Mocra; **5**. Slobozia; **6**. Velioploskoe; **7**. Troyan; **8**. Yaroshevka; **9**. Davydov Brod; **10**. Zaprud'e; **11**. Tsvetna; **12**. Boguslav; **13**. Bulakhovka; **14**. Verbki; **15**. Terny; **16**. Pavlovka; **17**. Selimovka; **18**. Kal'mius; **19**. Chuguno-Krepinka.

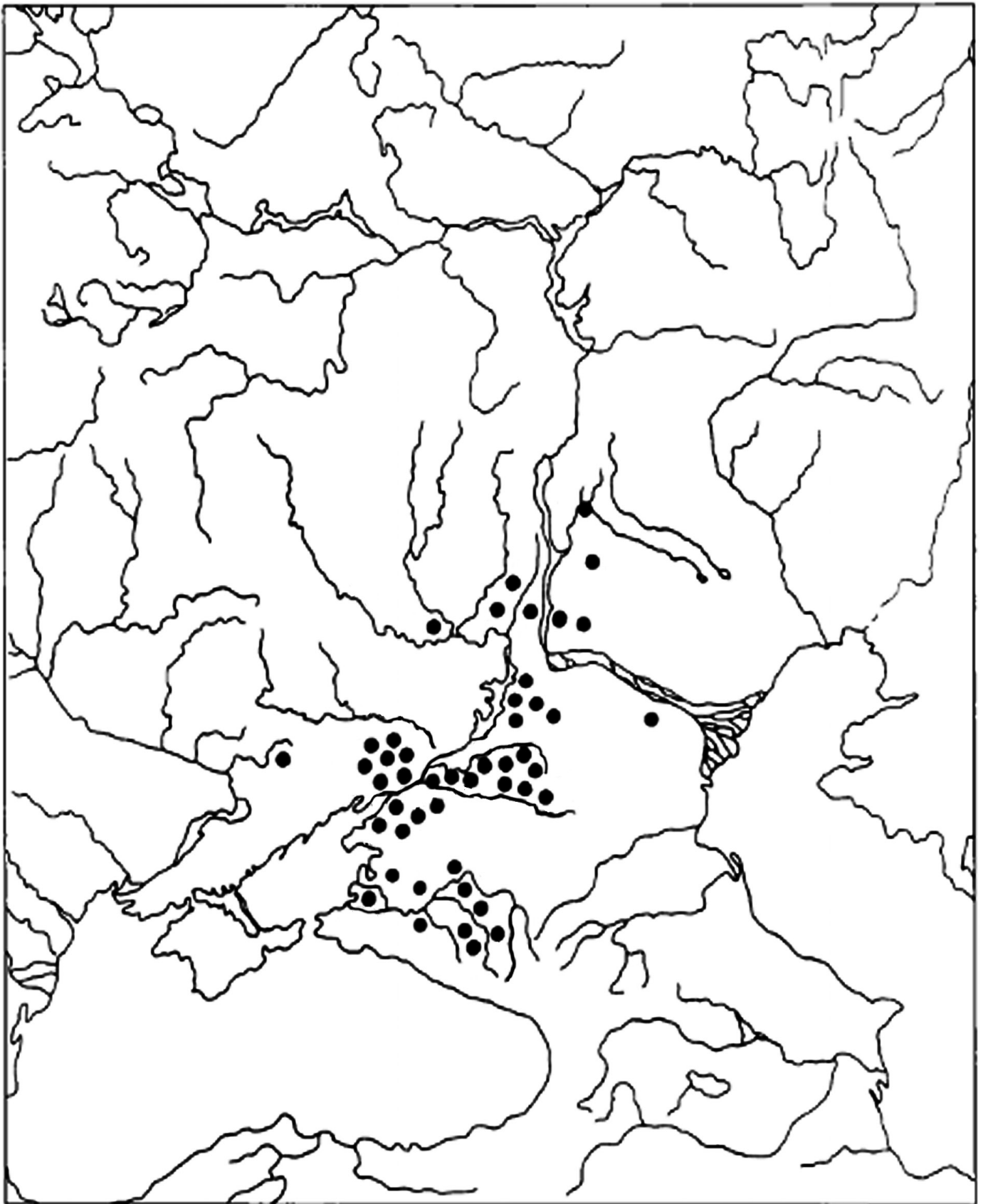


Fig. 16. Map of Demidenko VI type cauldron finds (after DEMIDENKO 2008).