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A SARMATIAN HORSE-RIDER AT THE COURT OF THE DACIAN KINGS. THE SIGN (II)

Abstract: The present article is the second part of a study dedicated to a cheek-piece discovered in the Dacian fortress from Costești-Cetățuie, in south-western Transylvania. The first paper¹, published in the same journal, was dedicated to the typology of horse-bits from Dacia, with a focus on the Werner's types V (variants C-D) and VIII. This time, the spotlight is on a sign incised on the same object, namely a *tamga* pertaining to the Sarmatian *milieu*. Various aspects are discussed in this paper: the appearance and characteristics of *tamga* signs in the north-Pontic area, the association of these signs with certain royal figures and their use in the Dacian environment, the presence of similar horse-bits to the one from Costești in the north Pontic area and, finally, the historical observations this artefact can provide.

Keywords: *Tamga, horse-bit, cheek-piece, Dacian, Sarmatian.*

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INTRODUCTION

The cheek-pieces of the *propeller* type are made of iron and they are never decorated. The iron cheek-piece from Costești-Cetățuie represents an exception to this rule, since it is engraved. On one of its enlarged endings, on the exterior side of the piece, there appears to be a *tamga* sign. The latter has 1.2 cm in length and is composed of three more or less equally sized parts, represented by two volutes (that mirror each other) connected by a straight line (Fig. 13/1). The presence of such a sign on an object from the area of the Dacian kingdom's capital at *Sarmizegetusa Regia* is indeed curious, as no other *tamga* sign has been identified here with certainty before. But first, what do *tamgas* represent and where were they found in Late Iron Age Dacia?

The word *tamga* used to describe these signs is borrowed from Turkic, where it was used to describe the marks used in cattle-branding. A similar term is used in Mongol, while before this the Iranian peoples used the term *nishan*². In present day Romania the word *danga*, of a common Turkic origin³, was used until recently in reference to similar marks made on the skin of cattle and horses. A collection of such signs used by the Sachsen communities in Transylvania had been recently published by L. Muntean⁴. Even if some specific motifs, like cross-signs, appear in the *dangas* of the Christian environment of Transylvania, the resemblance of these marks with the

¹ VASILACHE 2022.

² MANASSERO 2013, 60, note 1; YATSENKO 2010b, 133.

³ Dicționarul explicativ al limbii române 2009, II ed., s.v. *danga*.

⁴ MUNTEAN 2012.

tamgas of the north-Pontic region or even further is at least proof for the wide distribution in time and space of such marks. What is common to most such signs is, essentially, their simpler or more complex geometric pattern, which is composed of straight or curved lines that connect in sharp angles⁵.

Of course, given their wide distribution over space and time, such marks are hard to be classified and interpreted. Nevertheless, it is important to understand that these signs were not meant to be read, but understood through recognition (that is why, in the list of Sachsen *dangas*, I could only recognise the ones from familiar communities like my hometown). Some researchers have argued that these signs can be best understood as ownership and identity marks in traditional societies⁶, although certain magical or apotropaic functions were proposed for specific cases⁷ (like the *tamga* signs incised on *astragali* mentioned further down). Much emphasis has been put, especially by researchers of the Sarmatian vestiges of the North-Pontic area, on their role as markers of affiliation to a clan⁸, especially based on the presence of so-called “encyclopedic” stones that were marked with many different *tamga* signs.

However, before delving into the problematic of Sarmatian *tamgas*, it should be said that many such markers of property and identity were used in different contexts of the past and present worlds⁹. They were identified on territories occupied by both sedentary and nomadic communities, literate or not, and they must have had at least partially different functions in regard to the type of society they were used in. To complicate the situation even further, as we shall see below, such signs appeared during antiquity in sedentary (both illiterate and literate) communities, which were peripheral to the steppe world. It is the case of the Dacian world as well, where such signs have been found. Now, the problem that arises is that many other signs were used by the Dacians at the same time on different categories of objects, such as *graffiti* on ceramic vessels¹⁰, different stamps or inscriptions of property, in Greek or Latin alphabets on ceramic vessels¹¹, Greek letters on limestone blocks in the Orăștie Mountains area¹², not to mention the many different symbols used in the decoration of the ceramic vessels, like the so-called “fir-tree” motif¹³. As such, one should differentiate the decorative motifs from the ownership signs (mostly made by incision after the burning of the vessel – as in the case of *graffiti* and many *tamga* signs) used in the Dacian *milieu*. To complicate things even further, the *tamga* signs of the Sarmatian *milieu* seem to have had a decorative function as well, as suggested by *tamga*-like

decorative elements present on bronze cauldrons¹⁴ and by other objects that represent *tamgas* in a decorative manner, like the gold and bronze buckles and belt endings with *tamga* signs from the Bosporan kingdom area¹⁵.

TAMGAS OF THE NORTH-PONTIC STEPPES

The *tamga* and *tamga*-like signs, as I have tried to suggest before, are widespread on a vast area during a long period of time. For the present subject, it is important to look at the *tamgas* that appeared in the north-Pontic area during the 1st c. BC and have been used until at least the 4th c. AD¹⁶. It has been proposed that these signs were brought further west by the Sarmatian *Siraces*, *Aorsi* and *Alani* in the 1st c. AD¹⁷, during the so-called Middle Sarmatian Period (until the middle of the 2nd c. AD)¹⁸. In the archaeological record, the change is best evidenced by the appearance of rich graves with a specific rite (oriented diagonally) and, after mid-1st c. AD, with many objects of eastern tradition, that have been mainly associated with an *Alanic* presence or influence¹⁹. In such graves from the north-western Pontic area, like those from Porogi or Hrușca, *tamga* signs are represented on rich goods. Although the theory of successive ethnic migrations has been critiqued with some fairness²⁰, the archaeological evidence indicates, nonetheless, the appearance during the 1st c. AD of a new eastern-influenced style in the archaeological material, including the above mentioned *tamga* signs, as far as the north-western Pontic area. This is another reason why the presence of a *tamga* sign on an object discovered in Transylvania, in a Dacian environment (with a certain *terminus ante quem* of AD 105-106 at Costești-Cetățuie), can be of importance in assessing an early appearance of such signs at the western periphery of the steppes.

Regarding the origin of the *tamgas* in the Pontic steppes, an older theory proposed they imitated coin monograms of Greek deities from the Bosporan area, from where they would have spread in the steppes in the 1st c. AD²¹, but this theory has been criticised since then²². There is evidence that shows that such signs were used before that time in the steppes, following the common practice of animal-branding and representation on perishable materials in this environment²³. In this sense, the comparison undertaken by S. Voronjatov between the *tamgas* of the Pontic steppes of the 1st and 2nd centuries AD with similar signs well dated in the same period in Central Asia is relevant. These signs were incised on ceramic and wooden vessels or on bone *astragali* (Fig. 4)²⁴, attesting their use in contemporaneous

⁵ KOZLOVSKAYA/ILYASHENKO 2018, 175.

⁶ MANASSERO 2013, 60-62; MURATOV 2017, 188.

⁷ KOZLOVSKAYA/ILYASHENKO 2018, 181.

⁸ YATSENKO 2001, 31-45.

⁹ PIM/YATSENKO/PERRIN 2010.

¹⁰ FLOREA 2000; FLOREA 2001.

¹¹ The DECEBALUS PER SCORIO stamps on a vessel at Sarmizegetusa Regia – DAICOVICIU et alii 1954, 200-203; the Greek inscriptions of ownership of the basileis at Ocnița – BERCIU 1974, RUSSU 1976 and Cârloamănești – BABEȘ 2010.

¹² DAICOVICIU 1983; GLODARIU 1997.

¹³ COSTEA/BĂLOS 2001; CRIȘAN 1968, 210.

¹⁴ KOZLOVSKAYA/ILYASHENKO 2018, 175.

¹⁵ TREISTER 2011.

¹⁶ YATSENKO 2001, 49; YATSENKO 2010a, 112; at *Tanais*, in the Bosporan kingdom, *tamga* signs appear on objects dated between the 1st c. BC – middle of the 2nd c. AD – KOZLOVSKAYA/ILYASHENKO 2018, 173.

¹⁷ BĂRCĂ 2002, 70; BĂRCĂ 2002a, 115-116; BĂRCĂ 2015.

¹⁸ BĂRCĂ/SYMONENKO 2009, 38; SYMONENKO 2015, 337.

¹⁹ BĂRCĂ 2006a, 248; BĂRCĂ/SYMONENKO 2009, 351-351, 382; BĂRCĂ 2015.

²⁰ MORDVINTSEVA 2013; DAN 2018.

²¹ SULIMIRSKI 1970, 151-152; OPREANU 1998, 100.

²² MANASSERO 2013, 62.

²³ KOZLOVSKAYA/ILYASHENKO 2018, 175; MURATOV 2017, 187.

²⁴ VORONJATOV 2014.

contexts in the *Xiongnu* environment, across the vast steppe area. As such, it could be assumed that *tamga* signs were used initially in the steppes and may have been transferred by nomads in urban, literate societies (like that of the Greek *poleis* of the Pontic area), where they acquired new meanings. This aspect is suggested by the use of these signs as symbols of administration, authority, kinship in the Greek environment²⁵.

Such a transfer can be best exemplified in the Bosphoran kingdom, where its kings had adopted *tamga* signs, some of them being identified with at least four specific dynasts of the 2nd and 3rd c. AD (hence the term “royal” was used in the literature to describe them – Fig. 1/1-5)²⁶. Ten different commemorative or dedicatory slabs with such signs (from *Tanais*, *Hermonassa* and *Phanagoreia*) were found and divided into three categories. The first includes slabs with Greek inscription and *tamga* sign above or in the middle-upper part of the text, probably with the intent of reinforcing the written formula “Under the reign of ...” with which these inscriptions start (CIRB 1241, erected under Tiberius Iulius Eupator – Fig. 1/6 or CIRB 1249, erected under Tiberius Iulius Rheskouporis III – Fig. 1/9)²⁷. The second category is represented by only one slab from *Hermonassa* (CIRB 1053 – Fig. 1/7), with the *tamga* sign of Tiberius Iulius Sauromates II above a short inscription that mentions a building activity by one Herakas, so the *tamga* has been seen as a substitute for the before-mentioned formula associated with the first category of slabs. The third category of slabs has *tamga* signs only, without any associated inscriptions, a fact that made M. Muratov consider them “royal portraits” (like the slabs from *Tanais* – Fig. 2/1, *Phanagoreia* – Fig. 2/2 with *tamga* of Tiberius Iulius Sauromates II or the slabs from Taman peninsula, one of which represents the *tamga* of Tiberius Iulius Eupator flanked by two Victories in traditional heraldic posture, while the other represents Victories holding palm branches and wreaths over two *tamgas* – Fig. 2/3-4)²⁸. An interesting aspect can be noticed in the case of one of the above-mentioned slabs with inscription from the first category: the inscription CIRB 1246 was carved on a stone slab near the southern gate of *Tanais*, under the reign of Rheskouporis III, containing the name of the king and no *tamga* sign (Fig. 1/8). Another building inscription, almost identical, from the norther gate of the city, was inscribed on a marble slab and, instead of the name of the king, his *tamga* is represented (CIRB 1248 – Fig. 1/9). This has been interpreted as a way to transmit royal authority towards the nomadic population that entered the city from the direction of the northern steppes, but it has also been argued that it signifies the kinship ties of the Bosphoran king to the Sarmatian clans²⁹. However, we have to consider the possibility that the Greek population also understood such signs, especially in the case of anepigraphic inscriptions with *tamga* representations³⁰.

The evolution and integration of the *tamga* signs in the visual representations that express and legitimise the political power of the Bosphoran kings during the 2nd and 3rd c. AD and the fact that *tamga* signs appeared earlier in the Pontic steppes (1st c. BC) and in Central Asian contexts, suggest that they spread from the steppes towards the Greek, Dacian and other western peripheral areas. It is probable that in the steppe they were used long before the period in question, but this cannot be confirmed easily by archaeological evidence, since the signs may have been represented on perishable materials³¹. In fact, it seems that most *tamga* signs discovered in the Pontic area come from the Greek settlements and necropolises situated in the contact zones between the *poleis* and the steppe, while other *tamga* signs were mostly preserved in Sarmatian graves further inland³². This can be partly blamed on the better conservation of different objects from the urban contexts, such as the above-mentioned limestone and marble slabs with Greek inscriptions³³. At the same time, the employment of such signs in the contact areas should probably be related to the new meanings that these signs embraced when used in a multicultural context, as a conventional medium of expressing authority towards a *mix-Hellenic* population. Related to the Bosphoran slabs with *tamgas* are the gold and bronze buckles and belt endings that have similar *tamga* signs, which can be connected with the Bosphoran kings. These have been interpreted by M. Treister as military awards offered in the Bosphoran kingdom from the middle to the third quarter of the 2nd c. AD³⁴.

A similar phenomenon is evident in the ways the new Parthian and Sassanid elites manipulated similar symbols. In this case, the use of *tamga*-like signs is best documented by the rock-carvings erected by the Sassanid nobility. The so-called *frawahr* symbol, that appears on different artifacts from the Sassanid Empire, seems to have been employed in a similar manner as the *tamgas* of the Bosphoran kings. The symbol appears in an investiture scene of Ardashir II on the rock-carving at Taq-i Būstān (Fig. 3/1), while the Firuzabad relief (Fig. 3/3) depicts a battle (and dethronement) scene between three pairs of Sassanid and Parthian nobles, with the forefront pair representing Ardashir I, the founder of the Sassanid dynasty, and Artabanus IV, the former Arsacid leader, who is defeated and in process of falling from his horse. For this discussion, the relevant aspect in this scene is that each of the three Sassanid riders has a specific sign, which is represented on their horses' harness, while the last rider's sign is represented on his headpiece as well (Fig. 3/3). The horse of Ardashir I wears the same *frawahr* symbol used in the investiture scenes of the Sassanid dynasty, while Artabanus' horse wears the so-called “Arsacid” symbol, that appears on other items from the Parthian empire, such as seals³⁵. In the investiture scene of Ardashir I from Naqsh-e Rādžāb III (Fig. 3/2), he is represented along the two nobles depicted in the battle scene from Firuzabad, that wear

²⁵ KOZLOVSKAYA/ILYASHENKO 2018, 172-173.

²⁶ MURATOV 2017, 188.

²⁷ MURATOV 2017, 188.

²⁸ MURATOV 2017, 188.

²⁹ VDOVCHENKOV 2023, 23.

³⁰ KOZLOVSKAYA/ILYASHENKO 2018, 180.

³¹ KOZLOVSKAYA/ILYASHENKO 2018, 172.

³² KOZLOVSKAYA/ILYASHENKO 2018, 172.

³³ KOZLOVSKAYA/ILYASHENKO 2018, 172-173.

³⁴ TREISTER 2011.

³⁵ MANASSERO 2013, 65-66.

their specific symbols on their headpieces, while Ardashir receives a *frawahr* sign from Ahura Mazda himself. It is clear the use of representative symbols for specific clans and their leaders is meant to express their authority, and this propagandistic value should not be overlooked.

Another situation, this time back in the Pontic region, can be related to a similar behaviour regarding authority. I am referring to the well-known gold and silver coins minted by Olbia in the name of kings Pharzoios and Inismeos, dated somewhere between the end of the '50s-end of the '70s (AD), end of the '70s-beginning of the '80s (AD) respectively³⁶. On the reverse of Pharzoios' gold coins a *tamga* sign, identical to the one present on the cheek-piece from Costești-Cețățuie, is represented in the claws of a vulture (Fig. 5/8). The purpose of the association between the vulture and the sign is evidently related to authority and divine right. On the silver coins of Inismeos, a closely related *tamga* sign (different from Pharzoios' through the addition of a circle in the line between the two opposing volutes – Fig. 5/1-7, 9) is represented on the obverse, near the kings' portrait and in continuation of the legend. These signs are not monograms, as on some of the coins Olbia's city name is abbreviated and the archon's monogram appears together with the *tamga* signs³⁷. The *tamga* signs on the coins of Pharzoios and Inismeos are clearly meant to express the authority of the king and his clan (or supporters), offering legitimation and conveying propaganda through the spread of coins with representative iconography. The "bilingual" character of these coins, as in the case of the slabs with inscriptions from Bosporus, was needed for relating to a *mix-Hellenic* crowd, while the iconographical composition of the coins is relevant for the political situation in Olbia at the time. The fact that Olbia's monogram appears on the same coins with the *tamgas* could indicate that Olbia's political structures were maintained to a certain degree, while the use of the term *basileus* in reference to Pharzoios and Inismeos should probably be seen as a reference to the power structures that those kings held in their hands, symbolically represented through their *tamgas*. From this perspective, the relation between Olbia and these two kings should probably be seen as closer to a formal union, and not to an act of subordination³⁸. The integration of Sarmatian groups and identity in the political structures of Olbia at this time is not as profound as it will be in the case of the Bosporan kingdom during the next two centuries.

Most researchers have related Pharzoios and Inismeos with the new eastern groups of Sarmatians that moved towards the West during the 1st c. AD, where their presence is attested in the same area of distribution of the above-mentioned coins and *tamgas* specific to these kings³⁹.

Different propositions have been made regarding their identification as possible leaders of either a group of *Aorsi*, *Siraces*, *Alani* or *Alanorsi*⁴⁰, based on the corroboration of different types of sources. Tacitus tells us about the Bosporan succession war that took place between AD 45-49, in which the Sarmatian *Aorsi* were allied with Rome, while the *Siraces* supported their opponent⁴¹. M. B. Ščukin considered that this event determined the movement of the *Aorsi* west of the Dnieper, that determined in turn the movement of the *Iazyges* towards the Pannonian Plain⁴². Much has been speculated about the nature of the relationship between Pharzoios' establishment with Olbia and their former allies, the Romans, once they moved closer to Olbia⁴³. Some researchers consider the fact that they minted coins in Olbia with the support of the Romans, others suppose it is an anti-Roman gesture on part of the Sarmatian kings⁴⁴. Ščukin considered that they had conquered and subordinated the city, and minted coins in an act of defiance towards the Romans; other researchers prefer a version in which the Sarmatians and Olbia were allied and pursued an anti-Roman agenda, while others consider that Pharzoios and Inismeos were imposing a protectorate over Olbia; the list could go on⁴⁵. As V. Bârcă has observed, there is no certain evidence for many of the assumptions used in these scenarios (like the association of Pharzoios and Inismeos to the *Aorsi*)⁴⁶. They have been considered father and son, based mostly on the close similarities between their two *tamgas* (in the sense that the second evolved from the first – Fig. 5/1-7) and on the common mint place of their coins⁴⁷. Yatsenko observed how *tamgas* evolve from one another, having a certain grammar that allows a trained eye to observe different relations within a clan or between different clans through this⁴⁸.

The *tamga* evolution from Pharzoios to Inismeos is relevant from different perspectives – the use of Pharzoios' *tamga* as a root for the new representation denotes continuity, while the addition of a new element is meant, at the same time, to reflect individuality. From the many *tamga* schemes identified in the north-Pontic area, this is one of the few that can be related to certain historical figures or clans. The other well-known, relatable scheme is the already discussed "royal" Bosporan *tamgas*, which denote a similar evolution (Fig. 1/1-4). What is intriguing regarding the evolution of the Bosporan "royal" *tamgas* is the use, by Tiberius Iulius Ininthimaios (Fig. 1/5, 2/5), of a *tamga* sign different from the general scheme used by his antecessors. Coincidence or not, his sign is closely related to Pharzoios' scheme, while his name is somewhat similar to that of Inismeos⁴⁹. The chronological difference between these kings is evident, so a direct connection cannot be implied. Still, could this mean

³⁶ BÂRCĂ 2014, 178.

³⁷ BÂRCĂ 2014, 178; the differences between monograms or *tamgas* on coins has been largely debated, because their form and purpose is somewhat similar; many *tamga*-like signs appear on Central Asian coins, such as those from the Kushan kingdom – MANASSERO 2013, 62-63; BÂRCĂ 2018, 44; the situation in the closer Bosporan kingdom is somewhat stranger, as *tamga*-like signs appear on coins sometimes, but the very same "royal" *tamgas* that appear on inscriptions are not represented on the coins of those kings – YATSENKO 2010b, 145; MURATOV 2017, 187; VDOVCHENKOV 2023, 20.

³⁸ BÂRCĂ 2014, 178-179.

³⁹ BÂRCĂ 2014, 180.

⁴⁰ BÂRCĂ/SYMONENKO 2009, 352; BÂRCĂ 2015.

⁴¹ GROSU 1996, 250.

⁴² GROSU 1996, 250; BÂRCĂ/SYMONENKO 2009, 34, 351; BÂRCĂ 2013, 102-103.

⁴³ BÂRCĂ/SYMONENKO 2009, 361.

⁴⁴ BÂRCĂ/SYMONENKO 2009, 361.

⁴⁵ BÂRCĂ 2014, 179.

⁴⁶ BÂRCĂ 2014, 179.

⁴⁷ BÂRCĂ 2014, 178; BÂRCĂ 2018, 43.

⁴⁸ YATSENKO 2001, 15-16; MANASSERO 2013, 64.

⁴⁹ Sometimes, his name is spelled *Inensimeos* on Olbian coins – BÂRCĂ 2013, note 172.

that Ininthimaios was a representative of another faction or clan of the Bosporan kingdom, different than the traditional factions of the so-called Tiberian-Julian dynasty, having a certain Sarmatian background, perhaps being far related to Pharzoios and Inismeos? There is an apparent contradiction between the use of a new type of *tamga* and the fact that he maintained the royal name of his predecessors (although this could be expected, as the continuation of the royal lineage should be seen as a way to ensure legitimation, while the different *tamga* could indicate his individuality in opposition to his predecessors). Yatsenko sees the resemblance between these *tamgas* and suggests that Ininthimaios was a usurper coming from the *Alanic* nobility⁵⁰. Nevertheless, it is evident that the Tiberian-Julian dynasty had a “barbarian” character even before, as names like Sauromates or Rheskupouris suggest, together with the use of *tamga* signs⁵¹.

There are two other epigraphic sources that have been used to explain the relationship between Olbia and Pharzoios and Inismeos – the Tiburtine inscription of Tiberius Claudius Aelianus⁵² and the Mangup inscription from Crimea, which probably originated from Olbia⁵³. The first inscription is dated to AD 74-79, while its text refers to actions undertaken by Aelianus as legate of Moesia between AD 57/60-67 in the Lower Danube and north-Pontic areas⁵⁴. His actions are well-known, as he mentions the relocation of 100.000 Transdanubians in Roman lands, as tax payers. Afterwards, probably during AD 62, he mounted an offensive against the Sarmatians, being allied to the *Bastarnae*, *Roxolani* and the *Daci*, to whom he returns hostages or captives taken during the conflict. Together with this, it is mentioned how Aelianus brought unknown or enemy kings of the Romans to the side of the Danube he defended and made them bow to the Roman standards⁵⁵. The opposing Sarmatians from the inscription had been related by Ščukin to the establishment of Pharzoios’ kingdom that had an anti-Roman agenda, with him as leader of either an *Aorsi* or a *Siraces* group⁵⁶. Because the inscription mentions unknown or enemy kings brought under the Roman standard, Bârcă argued that these could not have been the *Aorsi* or *Siraces*, as they were already familiar to the Romans after the Bosporan conflict, while the *Roxolani* enjoyed good relations with the Romans, at least at that moment, as implied by the same text, so that leaves the *Alani*⁵⁷.

The other inscription from Mangup is not as important for reconstructing the general political situation in the region after mid-1st c. AD, but it is more important because it relates Olbia with the *Aorsi*. In the first part of this fragmentary inscription we find out that an Olbian citizen obtained grain during a period of hardship for the town, crossing the enemy territory for this. In the next part we are told how the same person carried out a diplomatic mission to the governors of Moesia, Sabinus and Aelianus, that was

successful in procuring further supplies for the city. While in Moesia, the Sarmatian conflict had erupted back home and the Romans sent a detachment of auxiliaries in support of the Olbians⁵⁸. This was related to the conflict mentioned in the Tiburtine eulogy and dated around AD 62⁵⁹. In the next part of the inscription, we are told how the same person went on a diplomatic mission, this time to Umabios and the great kings of *Aorsia*⁶⁰. The fact that after Umabios’ name the inscription is damaged led to some speculation that here followed the names of Pharzoios and Inismeos that are attested on the Olbian coins⁶¹. Nevertheless, it is quite important that we see how the Olbians requested help from both the Romans and the *Aorsi*, in the context of a larger conflict, probably with other Sarmatian groups. This has led to some interpretations, like that of Ju. G. Vinogradov, that considered that the *Aorsi* were settled somewhere near the Lower Danube and *Moesia*, being protectors of Olbia and Roman vassals at the same time⁶². This is a logical conclusion, which could be put in a larger context – the *Aorsi*, allied with Rome since the Bosporan conflict, moved west of the Dnieper and kept their allegiance, receiving benefits from the Romans and Olbia (through the minting of the coins) in exchange for some service or aid they provided. This implies that the opposing Sarmatians mentioned in the Tiburtine inscription must be another group, perhaps the *Alani*, who threatened Olbia and the Lower Danube frontier. This would be perfectly sound, but if the *Aorsi* were Roman allies, why are they not mentioned in the Tiburtine inscription? Here we find out that the *Roxolani* were Rome’s Sarmatian allies⁶³. Nevertheless, the inscription is another proof for the tense political situation in the Lower Danube and Pontic areas during this time, synchronous with the infiltration of new Sarmatian groups in the region, attested by literary sources as well⁶⁴. Recent archaeological research suggests that Sarmatian groups were present in the vicinity of Olbia as allies of the Romans, as different objects with incised *tamga* signs were found in the Kamyanka V Roman *castellum* situated in Olbia’s *chora*, while Sarmatian military equipment (iron knife and elements of a wooden bow, together with a bone arrow with a *tamga* sign) were found in a structure from Olbia’s upper city dated to the second half of the 1st c. AD⁶⁵.

The *tamga* scheme of Pharzoios and Inismeos is present, in different variants, on many items from the north-Pontic area. V. S. Dračuk had assigned 98 *tamgas* to Pharzoios’ scheme (Fig. 5/10), coming from different places, being incised on different types of objects (“encyclopedic” stones, like the one from *Panticapaeum* – Fig. 5/10.302, or on other slabs, on funerary *stelae*, on the marble lions from Olbia, on bronze mirrors, like the one from Kerch, on different vessels, on the walls of Ak-Kaya I and II caves etc.)⁶⁶.

⁵⁰ YATSENKO 2001, 55.

⁵¹ BUTYAGIN 2007, 15.

⁵² CIL XIV, 3608; PIPPIDI 1955.

⁵³ BÂRCĂ 2006, 13.

⁵⁴ BÂRCĂ 2014, 173.

⁵⁵ BÂRCĂ 2014, 174.

⁵⁶ BÂRCĂ 2013, 111.

⁵⁷ BÂRCĂ 2013, 111.

⁵⁸ BÂRCĂ 2014, 176; BÂRCĂ/SYMONENKO 2009, 360.

⁵⁹ BÂRCĂ/SYMONENKO 2009, 360.

⁶⁰ BÂRCĂ/SYMONENKO 2009, 360.

⁶¹ BÂRCĂ 2013, 113.

⁶² BÂRCĂ 2014, 176.

⁶³ BÂRCĂ 2014, 175.

⁶⁴ BÂRCĂ 2014, 176.

⁶⁵ KOZLENKO 2018; KOZLENKO 2020.

⁶⁶ DRAČUK 1975, Tab. V, 260-358.

It has been observed that most *tamgas* of this scheme were found in the regions east of the Don and Volga rivers, as well as in the territory of Olbia⁶⁷. Yatsenko tried to demonstrate that this *tamga* scheme is representative for the *Siraces* or *Aorsi* that moved towards the western areas and that it could have been brought, initially, by the western *Sacae* before this⁶⁸.

I think it is quite impossible to trace a specific origin for this sign, as it is hard to determine if a sign imitates another based on a direct connection or not, without further contextual evidence. The fact that similar signs were recorded from the far reaches of Mongolia (Fig. 4/5) to the Przeworsk culture area in Poland, where they appear on parade lances inlaid with silver, most of them dated to the second half of the 2nd c. AD – first three decades of the 3rd c. AD⁶⁹, speaks about the wide distribution of such signs in different cultural areas at the beginning of the first millennium. Although I agree that the *tamga* signs were most probably used in the steppes by Sarmatian/Iranian groups, I don't consider that similar *tamgas* always reflect the same person/clan. Images can spread without their original meaning and links to them can be artificially forged at the same time. This is especially true for the peripheral areas, like in the Przeworsk or Dacian cultures, where at least some of the *tamga* signs had a possible different meaning than those in the steppes (see the case at Sânsimion further down – *infra* notes 112-115). However, even in the steppes one might expect the use of a similar sign by another clan or person, with or without any relation to its previous "owners". Such a case could be, perhaps, suggested by the close patterns between the *tamgas* of Pharzoios and Inismeos of Olbia and that of Ininthimaos of Bosphorus, as the chronological and contextual evidence clearly differentiates them, while their *tamga* is similar. What is particular to Pharzoios' *tamga* is its simplicity (Fig. 5/1-3). The same can be said about Ininthimaos' sign (Fig. 1/5, 2/5).

This begs the question regarding the birth of *tamga* schemes, or at least of the royal ones. Pharzoios' scheme (through Inismeos – Fig. 5/1-7 and other "royal" variants of the *tamga* scheme we shall see below – Fig. 7-8) and those of the Bosporan kings (Fig. 1/1-5) reflect an evolution based on a common root pattern. The important question is when such a root pattern was chosen and following what criteria? If we consider that *tamga* schemes represent actual clans, even tribes, as their many variants suggest, then each of them should have had a pretty complicated pattern. However, the patterns of the *tamga* signs do not become overly complicated, probably because of their specific grammar, as suggested by ethnographic studies⁷⁰. This still does not explain how a root pattern can (re)appear, as everyone should already possess their own symbol, related to the rest of the clan. On the one hand, I think this situation may be explained, in part, by some sort of internal hierarchy in the clan/tribe, in the sense that the closer you are to the nucleus of the clan, the greater are the chances to inherit a

symbol closer to the root. On the other hand, in the case of "royal" *tamgas*, I think that the use of a new or of a different root from the predecessors' signs reflects, most probably, the founding (Pharzoios) or re-founding (Ininthimeos) of a dynasty. The proposed patterns in such cases could have originated in the root pattern of the king's clan or it could have represented an artificial appropriation of a predecessor's root, if more valuable. It could have been based on two or more different roots (Fig. 1/1-4)⁷¹, if the candidate had the support of more factions. If it was not related to any of these, it could have been individualised, but in this case it must have been already known to the rest of the people. In any case, the handling of such "royal" *tamgas* must have been related to political and ideological reasons, this is why their evolution is not always progressive.

Given the wide variety of schemes and types of *tamgas*, when trying to identify possible connections between them and their owners, it is necessary to look at direct evidence if possible (like the coins) or at chronologically, geographically or contextually relevant objects with incised *tamga* signs. In the case of Pharzoios and Inismeos, that means objects that were found relatively close to Olbia and are dated in the same period. When studying such an artefact, the first things to take into consideration are its physical characteristics (like material or morphology) and only later – the sign(s) that decorates it. The comparison between collected specimens from different sources can be deceiving, as not all *tamga* signs were found on „encyclopedic” stones and can be, thus, compared on similar grounds. Much attention should be given, of course, to the *tamgas*' closeness to a specific pattern.

Identical signs of Pharzoios' *tamga* were found on the marble lion no. 1 from Olbia (Fig. 6/1-2, boxes 69-70), although signs from the general scheme are present on both lions (e.g. Fig. 5.10/261, 263, 304, 319, 321, 327). Even if these lions are of older date (the 6th c. BC), their surface was transformed into a veritable „encyclopedia” of *tamgas* in the first centuries AD⁷². The presence of „encyclopedic” stones with *tamgas* is well attested in the north-Pontic area, such an example being the impressive slab from Kerch⁷³.

Another relevant discovery is the grave from Kozyrka, near Olbia, where two persons were interred in wooden coffins together with a funerary inventory. Among the funerary inventory, a wooden vessel with a *tamga* sign was identified, as well as a wooden harp that has its ends sculpted in the form of a bear and a bird (Fig. 6/3). On the latter item a number of 32 different *tamga* signs were identified, out of which two signs, one of them identical to that of Pharzoios (Fig. 6/4.29), were represented on the shoulder of the bear (Fig. 6/3). The grave has been dated to the end of the 1st c. AD and has been related to the Sarmatian nobility present near or in Olbia at the time⁷⁴.

⁶⁷ BĂRCĂ 2006a, 250.

⁶⁸ YATSENKO 2001, 48-49, 196-197.

⁶⁹ VORONJATOV/MAČINSKIJ 2010, 60; YATSENKO/DOBENZAŃSKA 2012.

⁷⁰ MANASSERO 2013, 64.

⁷¹ The Bosporan "royal" *tamgas* are believed to be composed by a schematic trident symbol in the lower half, the traditional sign of the Bosporan dynasty, and a different representation in the upper half – DRAČUK 1975, 168.

⁷² BUTYAGIN 2007, 15.

⁷³ DRAČUK 1975, Tab. XXXI-XXXVI.

⁷⁴ SYMONENKO 2004, 227; SYMONENKO 2012; BĂRCĂ/SYMONENKO 2009, 356.

Yatsenko suggested that the bronze mirror from *Panticapaeum* is closer to Pharzoios' *tamga* pattern than that of Ininthimaios', because of the different proportions⁷⁵.

The basic *tamga* sign of Pharzoios' scheme is actually found quite rarely and mostly around Olbia⁷⁶. The only instance it was found in an aristocratic grave inventory is the above-mentioned case of Kozyrka, where it is accompanied by many other signs. On the other hand, M. Babeş had observed that the *tamga* of Inismeos, his probable successor, is present in higher numbers in the north-western area of the Black Sea and in the Dacian environment as well⁷⁷, and can also be attested in funerary inventories, as we shall see below. Yatsenko observed that two other closely related signs to Pharzoios' *tamga* concentrate in the lower Dniester area and in the lower Don area, coming from aristocratic graves and probably representing other branches of Pharzoios' clan⁷⁸. This is the case of the Hruşca grave from the lower Dniester, dated to the second part of the 1st c. AD/the beginning of the 2nd c. AD⁷⁹, although some researchers linked this grave directly to Pharzoios⁸⁰. In the inventory of the grave, besides other objects, a silver *phiale*⁸¹ or rather a *phalera*⁸² with a *tamga* sign engraved on its interior bottom was found (Fig. 7/1). This sign is different from that of Pharzoios in the sense that it has an additional element added to the root pattern, namely an evert twist at one end of the upper volute. A similar sign was found in the tumular necropolis at Carskij north of *Tanais*. The *tumulus* 64/grave 1 is dated in the second half of the 1st c. AD – beginning of the 2nd c. AD⁸³ and from it was recovered a complete horse-bit, made out of iron, with the cheek-pieces represented in the form of the above-mentioned *tamga*, having horizontal incisions on their exterior that were inlaid with gold (Fig. 7/2). A similar piece, inlaid with gold as well, although poorly preserved, was discovered near Kuban, at Stanica Vozdviženskaja (Fig. 7/3). It was dated by I. I. Gushchina and I. P. Zasetzkaya in the second half of the 1st c. BC – first half of the 1st c. AD⁸⁴. Another horse-bit of this kind was found in grave 86 from the Levadka necropolis in Crimea (in functional position on the skeleton of a horse – Fig. 7/3) and was dated by its researcher in the same period as the grave from Carskij⁸⁵. The difference in this case is that the bit is not decorated and inlaid with gold, while the *tamga* pattern has additional elements at both volutes, with one of the ends inversed, the other evert. In this horse-grave other pieces of harness were found, that have analogies in the lower Don area⁸⁶.

Coming back to Olbia, there are other items that wear *tamga* signs close to the ones discussed above. A golden vessel, with a lion in relief on its lid and lion-shaped handles,

probably discovered in Olbia in the 19th century⁸⁷, was engraved, on the exterior of its bottom, with a *tamga* sign close to the ones described before. The difference this time is that the ends of the volutes are oriented inwards on one end and outwards on the other end (Fig. 7/5). An identical sign is represented on the bottom of a silver vessel, coming from a grave with other golden items from Davydovka in Voronezh region discovered in 1913 (Fig. 7/7)⁸⁸. A golden vessel similar to the first piece from Olbia, was discovered in a grave in Olbia in 1913, but it is lost today (only the drawing is kept – Fig. 7/6). On its exterior, two volutes, both with ends oriented inwards, were represented. Solomonik believed they were probably linked by an element⁸⁹, forming a similar pattern to that of Pharzoios' scheme. Given the fact that these items were discovered in the 19th-early 20th centuries, some of them being lost, their context of discovery is not well recorded. Still, Solomonik argued that all these examples are dated in the first centuries AD⁹⁰.

Such examples of precious objects with *tamga* signs identical or very close to the pattern of Pharzoios' scheme seems to indicate the inner-relations of the Sarmatian nobility from Olbia, that revolves around the image and person of Pharzoios (Yatsenko considered them *tamga* signs of clans related to Pharzoios)⁹¹. In this series of "royal" or "nobility" *tamgas* from Pharzoios' scheme, the *tamga* of his probable successor, Inismeos, is even better represented on similar objects from aristocratic graves. What is interesting is that his *tamga*, present on coins at Olbia, was not found on "encyclopedic" stones or other items, but on artefacts from rich graves discovered in western Ukraine⁹² and in the neighbouring areas (in Romania and Bulgaria). The most important context in which his *tamga* was discovered is the Porogi grave, on the left bank of the Dniester. This grave contained many items, including golden and silver belt fittings inlaid with Inismeos' *tamga*, as well as a silver vessel with a horse-shaped zoomorphic handle, that had the same *tamga* sign engraved on its bottom (Fig. 8/6), while a close sign to the typical one of Inismeos (one of the volutes is forked at the base – Fig. 8/7) was represented on the shoulder of the horse-shaped handle. The grave was dated at the end of the 1st c. AD⁹³.

Another interesting find attesting Inismeos' *tamga* was found in southern Bulgaria, at Čatalka, in grave no. 2 from the Roşova-Dragana mound. The inventory of this grave attests the presence of a warrior panoply of Sarmatian tradition, perhaps a *cataphractarius*⁹⁴, probably in the service of the Romans, as the context suggests. Some *tamga* signs appear on the golden pommel of a sword, that are close to Inismeos' pattern (Fig. 8/8). One of them is almost identical to the typical pattern, with the difference being represented by an additional, outward inverted element added to one of the volutes. On the scabbard of the sword a bronze applique

⁷⁵ YATSENKO 2001, 49-50.

⁷⁶ YATSENKO 2001, 48-49.

⁷⁷ BABEŞ 1999, 225; BÂRCĂ 2018, note 37.

⁷⁸ YATSENKO 2001, 49-50.

⁷⁹ BÂRCĂ/SYMONENKO 2009, 203.

⁸⁰ GROSU 1996.

⁸¹ GROSU 1996, 247.

⁸² BÂRCĂ/SYMONENKO 2009, 203.

⁸³ BABEŞ 1999, 226; YATSENKO 2001, 50; YATSENKO 2016.

⁸⁴ GUŠČINA/ZASETSKAYA 1992, Fig. 3, no. 25.

⁸⁵ MULD/KROPOTOV 2015, 127.

⁸⁶ MULD/KROPOTOV 2015, 127.

⁸⁷ SOLOMONIK 1959, 125-126, no. 63.

⁸⁸ SOLOMONIK 1959, 126, no. 65.

⁸⁹ SOLOMONIK 1959, 126-127, no. 64.

⁹⁰ SOLOMONIK 1959, 125-128.

⁹¹ YATSENKO 2001, 49-50.

⁹² YATSENKO 2001, 49-50.

⁹³ BÂRCĂ 2018, 44.

⁹⁴ BABEŞ 1999, 229; BÂRCĂ/SYMONENKO 2009, notes 70, 83.

is decorated with two parallel *tamga* signs identical to Inismeos' sign (Fig. 8/10). Another bronze applique, this time circular, is decorated with a triskelion-like pattern, composed of three volutes with everted ends (Fig. 8/9). The grave has been dated during the same period (the 1st c. AD – the beginning of the 2nd c. AD)⁹⁵.

Another sign typical for Inismeos was identified in Romania, at Ocnița. Although the piece was initially largely dated in the 1st c. BC – 1st c. AD, Babeș demonstrated that it appeared later in Dacia, together with other Sarmatian objects during the 1st c. AD, based on its characteristics and on the chronology of the Dacian *davae*⁹⁶. The piece itself is some sort of applique, made out of iron that had metal clamps on its back, probably used for attachment to a wooden or leather support, and was covered on the exterior with a golden foil of 2-3 mm⁹⁷. Its purpose was definitely decorative, given the golden foil used on the exterior and its *tamga*-shaped form, Babeș considering it to belong to a parade equipment (Fig. 8/11). Babeș was not categorical regarding its specific use, although he mentioned that it could have been used on harness⁹⁸. Kozlovskaya and Ilyashenko consider that specific categories of objects with *tamgas* can imply a decorative function, like the mirrors, belt-buckles or even more so, ceremonial/parade horse harnesses⁹⁹. Such items were collected and discussed by Voronjatov, who focused on the idea, proposed by Yatsenko, that such pieces on horse harnesses would have doubled or imitated the actual brand that the horse was wearing. In this sense he invoked the different representations of horses or other animals with marks on their shoulder or jaw (like in the already discussed cases of Kozyrka – Fig. 6/3 or Porogi – Fig. 8/7)¹⁰⁰. He related this to the presence of only one *tamga* representation on some sets of *phalerae*, like those from mound no. 25/burial no. 1 in the Valovyy I burial ground near *Tanais* (Fig. 9/2)¹⁰¹, dated in the 2nd to the 3rd c. AD¹⁰². Still, in other cases, it is evident that parade harness objects with *tamgas* were used in pairs, such being the case of a catacomb burial dated to the second part of the 2nd c. AD – the beginning of the 3rd c. AD from *Tanais*, where two sets of silver *phalerae* and buckles, with identical carved representation, were recovered (Fig. 9/3)¹⁰³. A somewhat closer analogy for the piece from Ocnița is represented by the two pieces of gold foil that were imprinted with identical *tamgas* discovered in mound no. 10 at the necropolis of Kobryakovskoe, that are dated at the end of the 1st – beginning of the 2nd c. AD (Fig. 9/1)¹⁰⁴. Three similar iron pieces plated with gold were found in the same necropolis, in mound no. 5, together with four iron *phalerae* and eight distributors (Fig. 9/4), being dated to the 2nd – early 3rd c. AD¹⁰⁵. Both Babeș and Voronjatov¹⁰⁶ observed

that the technique used in decorating these parade harness equipment (the plating and inlays of precious metals) are specific to the Sarmatian *milieu* of the 1st c. AD and such pieces could be related to the similarly decorated *tamga* shaped horse-bits that have been mentioned before from Carskij and Vozdviženskaja (*supra* n. 83,84, Fig. 7/2-3).

The *tamga* shape of the piece at Ocnița is identical to that of Inismeos found on the coins or in the grave at Porogi or on the appliques from Čatalka. This further demonstrates the westwards-oriented distribution of Inismeos' typical *tamga* on precious objects.

The distribution of *tamgas* of Pharzoios' scheme on precious objects demonstrates how his *tamga* is evidently related to Olbia, while other close *tamgas* were used by the nobility in the lower Dnieper, Don and Kuban regions and how Inismeos' variant of the scheme travelled west. Now we will head in the same direction, to see how *tamga* signs were used in the Dacian environment in the 1st c. AD – early beginning of the 2nd c. AD.

TAMGA SIGNS IN PRE-ROMAN DACIA

The objects with *tamga* signs discovered in pre-Roman Dacia were first collected by C. Beldiman in 1990. He registered a number of 35 different *tamga* signs represented on 16 objects coming from 6 Dacian settlements (Fig. 10/1)¹⁰⁷. They were found mostly in settlements from eastern Dacia, where other objects or contexts linked to a Sarmatian presence were attested¹⁰⁸. Beldiman noted that such signs were represented on ceramic vessels and bone objects. From these finds, 50% were represented on vessels of Dacian tradition (with the signs incised before or after burning), while 18,75% were represented on vessels of Sarmatian tradition or north-Pontic origin (with the signs incised before/after burning). A similar proportion was observed for the bone objects: 25% were of probable local origin, while 6,25% of the bone objects had a certain Sarmatian origin (like in the case of *pyxides*)¹⁰⁹. Unfortunately, most of the pieces with *tamgas* (75%) were coming from unknown contexts, while 18,75% were found in pits and 6,25% in houses. The signs were represented by themselves or in groups (from one to a maximum of eight) and were not identical (with the exception of the *tamga* from *Porolissum*, which was repeated four times under the mouth of the vessel – Fig. 10/1.4, 10/5 or the Poiana bone pieces I will discuss below – Fig. 10/1.5-18). These statistical observations, together with other relevant aspects, made Beldiman consider that *tamga* signs were used on a limited scale in Dacia in the 1st c. AD – beginning of the 2nd c. AD and that they appear mostly in the eastern areas (81,25%), where the Sarmatian influence or presence was already felt. The fact that most *tamga* signs were represented on local ceramic vessels, some of them in evident ritual contexts (in pits), made the author consider that such signs were assimilated by the local population and

⁹⁵ YATSENKO 2001, 50.

⁹⁶ BABEȘ 1999, 223, 225.

⁹⁷ BABEȘ 1999, 223.

⁹⁸ BABEȘ 1999, 225.

⁹⁹ KOZLOVSKAYA/ILYASHENKO 2018, 175-176.

¹⁰⁰ VORONJATOV 2013, 297.

¹⁰¹ VORONJATOV 2013, 297.

¹⁰² YATSENKO 2016.

¹⁰³ KOZLOVSKAYA/ILYASHENKO 2018, 175.

¹⁰⁴ KOZLOVSKAYA/ILYASHENKO 2018, 175.

¹⁰⁵ GUGUEV/BEZUGLOV 1990, 167-169.

¹⁰⁶ BABEȘ 1999, 226; VORONJATOV 2013, 299.

¹⁰⁷ BELDIMAN 1990, 140.

¹⁰⁸ BICHIR 1993, 166. The author suggested that the earliest Sarmatian-related material and contexts west of the Prut river can be dated around the middle and in the second half of the 1st c. AD.

¹⁰⁹ BELDIMAN 1990, 142.

used in religious or magical practices. On the other hand, the presence of *tamga* signs on objects of Sarmatian tradition, together with other identified objects and contexts, indicates the real presence of Sarmatians or at least of north-Pontic imports in this area during this time, through which these signs could have appeared in the Dacian environment¹¹⁰. What is interesting regarding the *tamga* signs from Dacia is the fact that none of them appeared in funerary contexts¹¹¹, as opposed to the situation attested in the north-Pontic area.

Beldiman started his research because of the accidental discovery of a pit at Sânsimion, in the Ciuc depression of eastern Transylvania¹¹². In this pit, four vessels were deposited in an organised manner. Two of the vessels were hand-made and represent, typologically, the so-called Dacian “jar-vessel”, while the other two vessels were wheel-thrown and represented local imitations of *kantharoi* (Fig. 10/2). The bigger jar-vessel acted as a recipient for the other three: the smaller jar-vessel was placed on its bottom and one of the two *kantharoi* was placed on top of it. The latter had an evident *tamga* sign incised, after burning, on its external, superior side (Fig. 10/2.5). The other *kantharos* was placed on top of the jar-vessel, acting as a lid, and it had some marks, three curved lines, incised after burning in the same area as the *tamga* on the previous *kantharos*. Still, these marks were not considered *tamga* signs by Beldiman, but were related to a symbolic, magic or religious purpose¹¹³. The whole context was interpreted by Beldiman in the same sense, as a magical or religious practice, similar to other votive pits identified in the Dacian settlements¹¹⁴. This opinion was based on other factors as well, such as the fact that the *kantharos* that acted as a lid was perforated after burning on its shoulder and bottom, while the smaller jar-vessel was perforated on its shoulder as well, remains of charred wood being identified in this perforation. The deposit could not have had a funerary character, as no remains of charred human bones or inventory pieces were found. The context was dated by Beldiman to the 1st c. AD, eventually beginning of the 2nd c. AD, because of the *kantharoi* that are typical for this period (and related to the eastern *davae*) and because of the presence of the *tamga* sign on one of them that couldn't have been earlier than the 1st c. AD (no evident *tamga* signs were recorded for previous periods in Dacia)¹¹⁵.

A similar context to the Sânsimion deposit was probably identified at *Porolissum*, in north-western Transylvania. Here, on the “Măgura Moigradului” plateau, a series of strange assemblages were discovered. These were represented mostly by pits filled with ceramic vessels, iron objects, hearth fragments, adobe and sometimes cremated human or animal bones, that have been interpreted as graves or cultic pits¹¹⁶. Unfortunately, the specific context in which this vessel was found was not described in the initial publication¹¹⁷, although it seems that it was discovered in

such a pit¹¹⁸. The pot itself, a typical hand-made jar-vessel with girdle decoration, had the same sign repeated five times under its lip, on the exterior side, the signs being impressed before burning (Fig. 10/5). The sign is somewhat out of the ordinary in comparison to other evident *tamga* signs, but Beldiman suggests that a sign from Răcățău, in eastern Dacia, could have been related to it (Fig. 10/1.20)¹¹⁹. Nevertheless, given the fact that the sign was incised before burning and it was repeated five times it could be supposed that its purpose was, at least to some extent, decorative, while its symbolic meaning is hard to define. Assigning it to the category of *tamga* signs is somewhat problematic, given the discussion with which I've began this study (*supra* notes 10-14), although given its pattern, it seems to be at least influenced by the presence of *tamgas* in the Dacian world at this time.

These are the most interesting *tamga*-related contexts which were documented in Dacia, and they certainly present a different behavior than that present in the steppes, related, as Beldiman implied, to ritual or magical practices. On the other hand, most of the other *tamga* signs were found on different objects from the eastern *dava*, as stray finds in the layers, indicating a behavior closer to that found in the north Pontic area.

Before discussing *tamgas* close to Pharzoios' scheme from pre-Roman Dacia, that are relevant to our piece from Costești-Cetățuie, I must discuss some new additions to the list of *tamga* signs made by Beldiman in the early '90s.

A. Berzovan and E. D. Pădureanu published in 2010 a fragmentary hand-made vessel, probably found at Șiria, in Arad county (western Romania), that is engraved with five marks under its upper lip, on the exterior side, made before burning (Fig. 10/3)¹²⁰. This type of vessel, with two decorative girdles, is similar to those of Sânsimion and *Porolissum* and has been interpreted by the authors as of Dacian origin. Although the same authors transmit that this type of hand-made vessel is common during the Dacian kingdom period, as well as in later centuries¹²¹, and that the archaeological *milieu* of the western plains during the 2nd to the 4th c. AD is characterised by a dual Sarmatian and Dacian presence¹²², they date the vessel between the 1st and the 3rd centuries AD¹²³. Afterwards they limit this chronology to the 1st c. AD only based on the fact that *tamga* signs are found rarely on Sarmatian objects in the Pannonian plain (in the sense that the signs from Șiria could have gotten there only after contact with the eastern Sarmatian during the Dacian period)¹²⁴. It is true that, for a long time, it was considered that the *Yaziges* of the Pannonian plain did not use such signs¹²⁵. However, new evidence seems to suggest

¹¹⁸ BELDIMAN 1990, 141, note 12.

¹¹⁹ BELDIMAN 1990, 141, note 12.

¹²⁰ BERZOVAN/PĂDUREANU 2010, 59.

¹²¹ BERZOVAN/PĂDUREANU 2010, 59.

¹²² BERZOVAN/PĂDUREANU 2010, 59, 65; other authors suggest that the pottery from the Sarmatian horizon between the 2nd – 5th c. AD in the Pannonian plain is evidently influenced by Celtic, Dacian and Roman technical and stylistic elements – GRUMEZA 2015, 81.

¹²³ BERZOVAN/PĂDUREANU 2010, 65.

¹²⁴ GRUMEZA 2018, 121.

¹²⁵ SULIMIRSKI 1970, 152.

¹¹⁰ BELDIMAN 1990, 143.

¹¹¹ BELDIMAN 1990, 142.

¹¹² BELDIMAN/SZÖCS 1988; BELDIMAN/SZÖCS 1992.

¹¹³ BELDIMAN/SZÖCS 1992, 260.

¹¹⁴ BELDIMAN/SZÖCS 1992, 260.

¹¹⁵ BELDIMAN/SZÖCS 1992, 262-263.

¹¹⁶ PUPEZĂ/POP 2018, 41.

¹¹⁷ MACREA/PROTASE/RUSU 1961, 368.

otherwise – the golden plaque from Dunaharaszti, dated by Bârcă towards the end of the 1st c. AD, indicates the arrival of a new group from the northern Pontic steppes, related to Pharzoios and Inismeos, that certainly used *tamgas*¹²⁶. Another set of evidence attests the use of *tamga*-like signs during the later period of the 3rd – 5th c. AD (especially on incense burners)¹²⁷, although L. Grumeza suggested that such items could have been used even earlier, as some contexts seem to indicate, during the 1st c. and 2nd c. AD¹²⁸. The same researcher mentions the vessel with marks from Şiria in her list of ritual vessels with decoration from the later period in one study¹²⁹, while in another study she mentions that it is a vessel pertaining to the Dacian environment, as Berzovan and Pădureanu suggested¹³⁰, thus adding to the confusion regarding the interpretation of this vessel. I feel that given all the confusion regarding the problematic of Sarmatian/Dacian pottery in the Pannonian plain, together with the fact that the object is fragmentary and without a context of discovery, while the settlement/fortress it has been attributed to (Şiria) was never systematically researched, it is better to be circumspect regarding its chronological and cultural framing, at least until more evidence could be added to the table. Berzovan and Pădureanu tried to find similar signs from the northern Pontic steppes, dated to the 1st – 3rd c. AD and, unsurprisingly, found examples in the vast collections of *tamga* signs like that of Yatsenko. Still, I believe that this approach is not methodologically correct, as it looks for connections on a wide distance, while the vessel itself is definitely a local product. Given the fact that *tamga* signs are very rare in Transylvania (indicating that it was not a common place of diffusion for such signs), while Şiria is located at the edges of the Pannonian plain, I would be more inclined to associate them with the attested Sarmatian presence in that area.

When discussing the possible *tamgas* from Şiria, Berzovan and Pădureanu updated Beldiman's list with new *tamga* or *tamga*-like signs from pre-Roman Dacia identified or published since then. The first on the list is a sign from *Sarmizegetusa Regia*, in the Orăştie Mountains (close to Costeşti-Cetăţuie), that was engraved in a limestone block (Fig. 10/4.1, 6). The attribution of this sign to a *tamga* scheme is not that clear, as the two authors do not speak about its context of discovery: it was engraved on a limestone block that was part of a *favissa*, a deposit of blocks "hidden" from view in the filling of the Xth terrace in the sanctuary at *Sarmizegetusa Regia*, probably after an older religious structure was disaffected¹³¹. These are not ordinary blocks, as all the faces of the blocks were smooth and they were fixed to each other through lead clamps and, more importantly, out of those 296 blocks, 68 of them had markings – 30 blocks had Greek letters, 7 blocks had possible monograms, 30 blocks had letters possibly combined with monograms and one block had the strange sign that I am now questioning¹³².

¹²⁶ BÂRCĂ 2018, 46.

¹²⁷ GRUMEZA 2018, 126.

¹²⁸ GRUMEZA 2018, 128.

¹²⁹ GRUMEZA 2016, 78, Pl. 21/5.

¹³⁰ GRUMEZA 2018, note 6.

¹³¹ GHEORGHIU/MATEESCU 2007, 122.

¹³² GHEORGHIU/MATEESCU 2007, 120.

Given the context that clearly relates the blocks with signs to a former religious structure in the sanctuary that made use of Greek letters, as well as the fact that no other *tamga* sign was discovered until now in the Orăştie Mountains area (except for the piece published in this article) and that, in general, very few evident *tamga* signs were identified in Transylvania, it is hard to accept that this is indeed a *tamga* sign. Besides this, the pattern of the sign is quite different from any *tamga* signs I have seen. The sign from *Sarmizegetusa Regia* was interpreted by G. Gheorghiu as the zodiacal symbol of Pisces¹³³, although I have the impression we will never find out if it represented this or something else, but probably not a *tamga* sign.

In their „additions” to Beldiman's *tamga* list, Berzovan and Pădureanu included some other questionable examples. They mentioned three signs incised on a shard discovered in the settlement at Cetăţeni (Fig. 10/4.7-9), interpreted by D. Măndescu in the original publication as *graffiti*¹³⁴. Three other signs (Fig. 10/4.4-6) were added to the list, found in the *dava* from Brad in eastern Dacia, published by V. Ursachi¹³⁵. From these three signs, only one can be associated, with some certainty, to a *tamga* scheme (Fig. 10/4.5). It was incised on an imported vessel discovered on the plateau of the settlement (Fig. 10/7). Regarding the sign no. 4 (Fig. 10/4.4), that is somewhat similar to a *tamga*, Berzovan and Pădureanu omitted to mention that, on the same object, many other scratches were recorded and that the general appearance of those scratches have little in common with typical *tamga* signs (Fig. 11/1). The last piece from Brad (Fig. 10/4.6) is represented on the exterior of the bottom of an imported vessel and I can't see why this sign should not be interpreted as a *graffito* (Fig. 11/2).

Two other signs were added to the list (Fig. 10/4.2-3), although there were actually three marks incised on the interior of a wheel-thrown dish after burning, discovered at Cernat in eastern Transylvania (Fig. 11/4). One of the signs is identical to the last discussed sign from Brad, while the other two signs are, again, quite different from traditional *tamgas*. In fact, a similar version of the third sign can be, for example, found on another vessel from the fortress at Miercurea Ciuc – Jigodin I, in the same area (Fig. 11/3)¹³⁶. Such signs are hard to interpret at the moment, because there is no general study that focused on either the *graffiti* of pre-Roman Dacia and on the decoration of the Dacian ceramics. Such studies could help differentiate the *tamga* signs of eastern tradition from the local motifs/*graffiti*. Unfortunately, there is no certain way of discerning such categories of figurate marks appearing on the local made objects other than by relying on the characteristics of the pattern itself and its closeness to other well-established types of marks (an X inscribed on a vessel will be most likely considered a *graffito*, while a pattern composed by two or three mirroring schematic elements in a certain balance, would probably be considered a *tamga*). This being said, I am inclined to consider that the symbol no. 31 in Beldiman's list is not necessarily a *tamga* because

¹³³ GHEORGHIU 2005, 219.

¹³⁴ MĂNDESCU 2006, 59.

¹³⁵ URSACHI 1995, Pl. 199/7, 201/7, 213/4.

¹³⁶ CRIŞAN/GHEORGHIU/POPESCU 2004, Pl. XVII/2.

of its shape and because it was not found in the Sânsimion deposit, but in the nearby settlement, incised on a local amphora fragment¹³⁷.

Recently, P. Pupeză and V. Crișan published a number of signs found on different ceramic vessels in the fortress at Covasna – “Cetatea Zânelor”, in eastern Transylvania, which were discovered in a structure dated, probably, around the end of the 1st c. BC – the beginning of the 1st c. AD¹³⁸. They considered most of the identified signs (X-shaped, circles, lines etc.) as *graffiti*, although their certain functionality has not been determined¹³⁹. Among these signs, one was identified as a *tamga*, given its distinct pattern from the other markings (Fig. 11/8). It was incised before burning on the exterior of a small, wheel-thrown bi-conical vessel. The sign is close to no. 2 from Dumbrava in Beldiman’s list (Fig. 10/1.2). Another certain *tamga* sign was identified on a cattle bone (Fig. 11/9)¹⁴⁰, found together with other similar, but unmarked objects.

Given all the examples above and the reasonings of C. Beldiman, it can be safely assumed that *tamga* signs were a rare occurrence in the intra-Carpathian region, as opposed to their presence in a higher number in the eastern, extra-Carpathian area. There are only five somewhat certain cases of signs that can be interpreted as *tamga* in Transylvania – three in the south-east, close to the extra-Carpathian region (Sânsimion and Covasna – “Cetatea Zânelor”), one in the north-west (“Măgura Moigradului” – although this one is somewhat debatable) and a new one in south-western Transylvania, in the Orăștie Mountains (the cheek-piece with Pharzoios’ *tamga* published here). In the eastern regions, *tamgas* were present in higher numbers in the 1st c. AD and this trend continued in the next centuries, with many *tamgas* being discovered in contexts from the 2nd and the 3rd c. AD in the extra-Carpathian area¹⁴¹, while on the territory of the new Roman province *tamga* signs were not present¹⁴².

The concentration of *tamga* signs in Transylvania towards the south-eastern settlements was connected by previous researchers to their intense relations with the eastern regions¹⁴³. Besides *tamgas*, many of the ceramic types that imitated Greek or Roman models were probably produced in the eastern centers of Brad, Răcătău and Poiana¹⁴⁴. Other categories of objects can be related to this apparent relationship, including the presence of type V (variant C-D) horse-bits in the fortress of Covasna¹⁴⁵, that

are usually found in the same eastern environment of Dacia. Such relations between the communities on both sides of the Oriental Carpathians could explain how a cheek-piece with a *tamga* sign engraved on it found its way to south-western Transylvania. The best link between the eastern depressions and the Mureș river basin is the settlement at Sighișoara-Wietenberg on the Târnava Mare river, where a series of eastern tradition objects were found during research (like coral beads or strongly profiled brooches of eastern type)¹⁴⁶. Probably, this was the route that our horse-rider would have taken to reach the capital of the Dacian kingdom in south-western Transylvania. From this perspective, the presence of the *tamga* sign in the area of the Dacian capital should be seen as a reflection of the long-distance relations and influence this center had towards different directions.

Tamga signs close to Pharzoios’ scheme were found in the eastern *davae*, especially at Poiana, where many bone objects have such representations. Poiana is the most important settlement from this region and this is confirmed by the quantity of *tamga* signs that were identified by Beldiman there as well – 14 out of his 31 signs (Fig. 10/1.5-19). Signs nos. 5-6 (Fig. 10/1.5-6) were observed on a local *amphora* fragment, but they were engraved, after burning, together with a “fir-tree” motif. Sign no. 7 (Fig. 10/1.7) was identified on a local, fragmentary “flask” type vessel. Sign no. 8 (Fig. 10/1.8) is the last to be found on pottery, specifically on a fragment from an imported *paterna* (Fig. 12/7). The signs mentioned until now, although they are certainly *tamga* signs, do not resemble Pharzoios’ scheme (with the partial exception of sign no. 5).

The next category of objects is much more relevant in this sense. All signs from no. 9 to 15 (Fig. 10/1.9-15) were found on the same bone object that had a truncated shape and a circular section, with a transversal perforation near the wider end (Fig. 12/3). It was decorated on the outside with 7 different *tamga* signs. On another object of this kind two more signs, of particular importance, were found (Fig. 10/1.16-17). The object itself, although similar to the one before, has its slimmer end forked, while its wider ending was hollowed out and connected to with the transversal perforation (Fig. 12/2). On the outside, towards its ends, the piece was decorated with two registers of oblique lines. Between these registers, on the central part of the piece, a *tamga* sign identical to that of Pharzoios was engraved, while on the other side only two opposing volutes were recorded. Beldiman suggested that the two volutes were forming an identical pattern to that on the other side¹⁴⁷. This could be possible, as their position suggests. Even so, the signs on the two sides would not have been identical, as one of the individual volutes has one of its ends everted. This would still indicate the possible presence of a closely-related sign to Pharzoios’ pattern on the other side of the round object.

The next object, similar in morphology to the first two, does not present any perforation or hollowing (Fig. 12/1). It was decorated on its surface with cross-hatchings disposed along the ends of the piece or cross-hatchings that

¹³⁷ BELDIMAN 1990, 142.

¹³⁸ PUPEZĂ/CRİȘAN 2019, 38.

¹³⁹ PUPEZĂ/CRİȘAN 2019, 38-42.

¹⁴⁰ PUPEZĂ 2020, 10.

¹⁴¹ BELDIMAN/SZÖCS 1988, 123.

¹⁴² With one possible exception – the Locusteni necropolis, dated in the 2nd c. AD, where three Roman vessels had *tamga*-like incisions on their walls – Fig. 11/5-7. The signs are similar to the ones that appear on Dacian vessels at Cernat, Jigodin or Brad, that I have not been able to determine if they represent *graffiti* or *tamgas*. In the necropolis from Locusteni many eastern tradition objects were found, while the funerary rite was different, characteristics that were explained through a population transfer from the eastern areas inside the Roman province – OPREANU 1998, 101-103.

¹⁴³ BELDIMAN/SZÖCS 1992, 263; CRİȘAN 2000, 152; PUPEZĂ/CRİȘAN 2019, 38-43.

¹⁴⁴ CRİȘAN 2000, 152.

¹⁴⁵ Discussed in the previous article - VASILACHE 2022, 166, Fig. 13/6-7.

¹⁴⁶ RUSTOIU 1994.

¹⁴⁷ BELDIMAN 1990, 142.

formed triangular shapes in the central part of the object. Near the wider end of the piece, intertwined with the rest of the decoration, a *tamga* was engraved. The sign itself (Fig. 10/1.18) is composed of three similar volutes, with both their ends everted. The two upper volutes are connected through straight lines to the body of the third volute. The pattern could be associated with Pharzoios' *tamga* scheme, given the use of volutes and straight lines, representing a composed type of a *tamga* sign based on a similar root. The same root pattern seems to be used in the next example, where a more complex triskelion-shaped *tamga* sign was engraved on the upper side of a *pyxis* lid (Fig. 10/1.19, 12/4). The lid is fragmented, but the pattern could be deduced for the most part, while the diameter would be around 4,5 cm. The pattern itself is evidently composed of three similar parts that extend from a central node. Each of these parts end in three circles, two of them delimited by two opposing volute ends, while an external volute end forms the third circle. In the center of each of these circles a point was engraved. The spaces between the three parts of the sign were given a decorative role as well, as indicated by their similar circular shape and by the presence of points in their center. This triple parted composition brings to mind the *tamga* sign represented on the previous object (Fig. 12/1). There, the sign was composed of three identical volutes, that were treated differently – two parallel on top and one that formed the base. A somewhat similar design is observable on the *pyxis* lid as well – two opposite volutes that encompass two circles, while a similar third volute end is delimiting an external circle from the first two. In the center, the gaps between the volutes are identical and symmetrical. Such details could indicate that the two patterns are perhaps related – both of them were composed from three similar root patterns, two of them forming a unit, while the third formed a complementary unit. The *pyxis* lid was considered an import item from the northern Pontic area¹⁴⁸. Such items were found in funerary inventories in the north-western and northern Pontic area, dated to the second half of the 1st c. – first part of the 2nd c. AD, mostly appearing in the area west of Don in graves with eastern features and items, related to the appearance of new Sarmatian groups west of Don¹⁴⁹.

Besides the lid, more body parts of *pyxides* were discovered at Poiana. They are usually decorated with circles. One piece (Fig. 12/5) presents, around its body, different markings (hatchings, X-sign, star with 4 points, letters (?)) and a possible *tamga* sign¹⁵⁰.

Another bone object could be of relevance. A concave-sectioned plaque of ovoidal shape (Fig. 12/6) presents three larger perforations on its length, in the central part. The central perforation is encompassed by four symmetric, smaller perforations. The exterior of the plaque (its convex side), was decorated with horizontal incisions that define several registers, decorated with oblique lines or V-shaped elements, together with straight or curved lines themselves decorated with oblique lines. Although no certain *tamga* sign can be identified in this decoration, the general style

is similar to the other decorated bone objects, especially with the bone object with triskelion-like *tamga* (Fig. 12/1), because the lines that form the *tamga* pattern there are quite similar to the lines used to decorate the plaque. The piece itself is interesting, as the three colinear perforations were probably used for attaching the object to some kind of strap, while the four smaller perforations were probably used for attaching some sort of decoration on top of the plaque. Perhaps it is part of a decorative harness, as it could represent the support for some sort of applique, while its own decoration suggests a similar decorative purpose. Its decorative style is similar to that of other *tamga*-engraved bone objects from Poiana.

The presence at Poiana of *tamga* signs identical or similar to that of Pharzoios, represented mostly on bone objects, some of north-Pontic origin or influence, attests, together with other arguments expressed in some studies¹⁵¹, a Sarmatian influence and/or presence in the area in the later part of the 1st c. AD. This is the settlement with the biggest number of *tamga* signs from pre-Roman Dacia (and the only *tamga* sign identical to Pharzoios', together with other ones from his scheme). Additionally, type VIII horse-bits with *propeller* type cheek-pieces were found in this settlement¹⁵². As such, Poiana could represent a proper place to locate the production of the cheek-piece of type VIII with Pharzoios' *tamga* discovered at Costești. Other categories of objects attest a similar distribution, such as the strongly profiled brooches of eastern type, that were probably produced at Brad and Poiana and reached both the Sarmatian environment and were present in high numbers in the Dacian settlements and fortresses in south-eastern Transylvania and at Ocnița¹⁵³, exactly where most evident *tamga* related objects were found in pre-Roman Dacia, excepting, of course, the eastern *davae*.

HORSE-BITS FROM THE NORTH-PONTIC REGION

Similar *propeller* type cheek-pieces to the one with Pharzoios' *tamga* from Costești-Cetățuie (Fig. 13/1) are not commonly found in the northern Pontic region, where other types of cheek-pieces, like the C-shaped ones, are commonly used during the early and middle Sarmatian periods¹⁵⁴. Another type of cheek-pieces and bits found during the 2nd and 1st c. BC in the northern Pontic area, like the ones in the Velikoploskoe hoard, have X-shaped cheek-pieces, sometimes with spikes towards the mouth of the horse, that seem to originate from the northern Caucasus and the Kuban region, where they appeared earlier and were very common¹⁵⁵. It has been proposed that these cheek-pieces were used by Sarmatian horse-riders serving Mithridates, coming from the Don and Kuban region, based on the fact that they were found in the so-called "strange deposits" with other objects related to horse harness, armour and precious

¹⁴⁸ BELDIMAN 1990, 142.

¹⁴⁹ BĂRCĂ 2019, 148.

¹⁵⁰ TEODOR/NICU/ȚĂU 1997, 84.

¹⁵¹ See BICHIR 1993, 145-146.

¹⁵² See VASILACHE 2022, 160.

¹⁵³ BĂRCĂ 2011, 17-18.

¹⁵⁴ BĂRCĂ/SYMONENKO 2009, 82, 201; see the discussion in VASILACHE 2022, 167.

¹⁵⁵ BĂRCĂ/SYMONENKO 2009, 83-85.

objects in the northern Pontic area, while some of them were present in Don and Kuban region graves during the same period¹⁵⁶. A complete horse-bit similar to this type was found in the same settlement at Ocnița (Fig. 13/2), where the golden foiled Inismeos applique was also discovered. Werner already mentioned this possible connection in regard to this piece, adding it to his VIII type¹⁵⁷.

Another type of horse-bits that appears at the end of the early Sarmatian period are the four-spoked wheel-shaped cheek-pieces that originated in the northern Caucasian region during the 1st c. BC¹⁵⁸. The piece from Zolotaja Balka, mentioned by Werner in relation to the use of wheel-shaped stoppers in the case of some type VIII horse-bits in Dacia¹⁵⁹, was dated around the passing of the millenia (Fig. 13/4)¹⁶⁰. The use of wheel-shaped stoppers with spikes on many of the type VIII bits from Dacia could have been inspired from the use of spikes and wheel-shaped cheek-pieces on new eastern bits that appeared in the north-Pontic region during the last centuries BC. The earliest wheel-shaped stopper of a bit from Dacia is dated to the end of the 2nd c. – 1st c. BC¹⁶¹. This can be also related to the appearance of the Sisak variant of the VIII type in Dacia, that uses bronze, wheel-shaped, openwork cheek-pieces with spikes on the inside¹⁶².

During the middle Sarmatian period (1st c. – middle 2nd c. AD), other new types of cheek-pieces appeared in the north-Pontic area. The first are the so-called “straight” cheek-pieces (Fig. 13/5), that are to be found during the middle and late Sarmatian periods¹⁶³. What is morphologically important regarding these cheek-pieces is the fact that they present two rectangular sockets in their central part, between which the mouth-piece was fastened. This is similar to the VIII type and variants C-D of the V type of cheek-pieces found in Dacia. A similar type of cheek-pieces (with two sockets) are the so-called “eyeglass” type, named after their enlarged, ring endings, have been found in contexts such as those from Valovyy I burial ground (Fig. 13/4)¹⁶⁴. Two bronze cheek-pieces found at Căpâlna, in Transylvania, have similar ring-shaped endings and sockets¹⁶⁵. While Symonenko considered them a specific type dated to the first two centuries AD¹⁶⁶, Gluhov attributed them to the general type of straight cheek-pieces, the difference between variants being represented by the shape of their endings¹⁶⁷.

Antipenko classified the straight cheek-pieces with two sockets as type III.3¹⁶⁸. The first subvariant (III.3.a) has tapered endings (Fig. 3/3) and are dated in the 1st c. – first half of the 2nd c. AD. The second subvariant (III.3.b) presents widened endings (Fig. 3/4) and are dated in the second half of the 1st c. – the first half of the 2nd c. AD. This

type of cheek-pieces is quite similar to the type V, variant D bits in Dacia¹⁶⁹. The third subvariant proposed by Antipenko had cheek-pieces with figurate endings (Fig. 3/5, 6, 8) and were dated to the 1st c. – first half of the 2nd c. AD. In this category should be included the already discussed pieces (*supra* n. 83-85; Fig. 7/2-4) with *tamga*-shaped endings from Carskij, Stanica Vozdviženskaja and Levadka. In the III.4 category he included the already discussed “eyeglass” shaped cheek-pieces, while in type III.5 he mentioned a bronze bit with widening ends from Neyzats dated in the first half of the 3rd c. AD (although classified differently in the series of straight cheek-pieces, they still do present two-sockets in their central part as do the type III.3 variants from above). In the last variant of the third type of straight cheek-pieces he included an iron cheek-piece with widening ends (similar to the *propeller* type from Dacia), covered in silver foil, discovered at Neyzats and dated to the second half of the 2nd c. AD¹⁷⁰. Variants III.3.a-c are most commonly used in the first two centuries AD¹⁷¹.

The cheek-pieces of the type VIII and the C-D variants of type V types from Dacia, used in the 1st c. BC – 1st c. AD and those similar from the northern Pontic area, used in the 1st – 3rd c. AD, are probably related in some manner, although I can't explain the exact process at the moment. The use of *propeller* type cheek-pieces in Dacia starts at least in the 1st c. BC and become one of the most common types used during the 1st c. BC – 1st c. AD, possibly indicating an earlier use in this area. Such an earlier dating in Dacia seems to be suggested by their common association with wheel-shaped stoppers, that could be related to north-Pontic cheek-pieces from the early Sarmatian period, like the cross-shaped and wheel-shaped types, that had a similar function – to press on the horse's mouth (this is further evidenced by the use of barbed-wheels in the western variants of the type VIII bits)¹⁷². Still, we can see through other indicators besides morphology, that they were related in some ways. For example, we can see that the cheek-pieces of variant D of the type V bits in Dacia, that is actually correspondent to the straight type of cheek-pieces from the northern Pontic area, appear mostly in the eastern *davae* and in the same settlements where *tamga* signs were attested as well (the case of south-eastern Transylvania is relevant as well). These cheek-pieces were sometimes decorated with horizontal incisions on their exterior, sometimes inlaid with bronze or precious metal wire¹⁷³, a technique reminding of the decoration found in the northern Pontic areas (*supra* note 106). The use of horizontal incisions as means of decorating cheek-pieces is exemplified on the bronze subvariants of the VIII type in western Dacia (the Căpâlna and Židovar pieces) that present different endings (circular, truncated), but are not found on the iron *propeller* type cheek-pieces. The appearance of these specific elements on western bronze

¹⁵⁶ BĂRCĂ/SYMONENKO 2009, 343.

¹⁵⁷ WERNER 1988, 49.

¹⁵⁸ SYMONENKO 2015, 355.

¹⁵⁹ WERNER 1988, 119; VASILACHE 2022, 165.

¹⁶⁰ ANTIPENKO 2016, 89.

¹⁶¹ VASILACHE 2022, 160.

¹⁶² VASILACHE 2022, 164-165, Fig. 11/2, 5/6.

¹⁶³ SYMONENKO 2015, 355.

¹⁶⁴ SYMONENKO 2015, 355.

¹⁶⁵ VASILACHE 2022, 162, Fig. 7/2-3.

¹⁶⁶ SYMONENKO 2015, 355.

¹⁶⁷ ANTIPENKO 2016, 90.

¹⁶⁸ ANTIPENKO 2016, 92-94.

¹⁶⁹ VASILACHE 2022, 165, Fig. 12/5-8.

¹⁷⁰ ANTIPENKO 2016, 90-94.

¹⁷¹ ANTIPENKO 2016, 95.

¹⁷² VASILACHE 2002, 163.

¹⁷³ Sometimes the Vth type cheek-pieces in Dacia presented sets of horizontal incisions that were inlaid with precious metal, such as at Brad (inlaid with bronze), Dubova, Ocnița (inlaid with silver) and Pietroasele-Gruiu Dării (inlaid with bronze) - PUPEZĂ/POP 2018, 44; VASILACHE 2022, 162.

cheek-pieces or the use of barbed wheels with slender *propeller* iron cheek-pieces on western bits seems to suggest that features pertaining to both types V (variants C-D) and VIII (whose common feature is represented by their protruding sockets) are used interchangeably when new variants were produced in the western areas. This is indicative for the fact that both type V (variants C-D) and VIII are part of the same family of horse-bits. A similar situation is evidenced in the northern Pontic areas, where different types of endings are associated with two socketed cheek-pieces that appear in contexts dating from the first centuries AD.

I think it is important to understand that this general category of cheek-pieces with two sockets were found on a very large area during this period, and that they generated many local variants. Werner' type IX could be added to this morphological family, already included by Glodariu/Iaroslavski in their type III, that are present in the northern Pontic area during the same period and were included by Antipenko in his classification of straight cheek-pieces – type III.2¹⁷⁴. If the V (variants C-D) types of bits from Dacia were found in settlements where a certain Sarmatian influence or presence is documented, the *propeller* type VIII cheek-pieces were found on a wider area in Dacia, being dated relatively early, with subvariants spreading later towards west as well. That is why I tend to consider that the *propeller* type cheek-pieces are the dominant variant of this family in the Dacian heartland, while type V was used especially in the eastern contact zones. This is another reason why I consider that the best choice for the production of the *propeller* cheek-piece from Costești-Cetățuie in a Dacian environment would be at Poiana, where both type V and VIII bits are found, together with the use of identical or close *tamga* signs on other different objects. Still, I cannot exclude the possibility that the piece was produced in the northern Pontic area during the 1st c. AD, as similar cheek-pieces do appear in the area at that time. In both cases, the piece would have been produced in the second part of the 1st c. AD, as the use of the *tamga* sign suggests. The cheek-piece has a *terminus ante quem* as well – 106 AD, when the Dacian fortress at Costești-Cetățuie was conquered by the Romans.

The possibility that the production of this cheek-piece took place in a north-Pontic Sarmatian environment seems to be somewhat limited, because I know of no other cheek-pieces that were stamped with a *tamga* sign, even though similar cheek-pieces were actually shaped in the form of *tamga* signs and *tamga* signs were usually associated with horse harness, especially on parade equipment. This could be, perhaps, indicative for its production in a Dacian environment – a typical *propeller* type cheek-piece was stamped during production, in order to differentiate it from the many other *propeller* cheek-pieces that were used in the local *milieu*. This may have happened at the request of a client that probably originated from/or was in contact with the north-Pontic environment. Such a choice may have been determined by the customer's familiarity to similar cheek-pieces from the northern Pontic steppes. Still, the possibility for the production of this piece in a Sarmatian owned

workshop, either at Poiana or somewhere else, cannot be excluded. However, such a workshop should have left us more specimens of *tamga*-stamped *propeller* type cheek-pieces.

CONCLUSIONS

Regarding the *tamga* sign represented on the cheek-piece from Costești, it must be stressed that, although represented on the exterior of the piece, as most *tamga* signs or decoration represented on cheek-pieces do, its size makes it almost unobservable. Could this aspect be related to the interpretation of this *tamga* sign as a production stamp of the workshop that produced it? Or could we look at other reasons? What comes to mind is the use of *tamga* signs especially on parade equipment. That is, most probably, the case of the Ocnița golden foiled and *tamga*-shaped applique. Such a possibility, related to diplomatic connections between a group of Sarmatians and the Dacians in the Orăștie Mountains, could be indicated by the context in which the cheek-piece was found at Costești, namely the tower no. 4¹⁷⁵, which suggests a high status for our "guest". In this sense, the cheek-piece with *tamga* could have been part of a sumptuous parade harness. The cheek-piece is not decorated with precious metal, which would have confirmed such a function. However, another possible interpretation in this sense is that it may have belonged to a second or third tier harness owned by a Sarmatian noble, that could have been used for specific purposes (this is a highly speculative interpretation, based on the manner in which the modern European nobility had different harnesses for different purposes – night time was not a time to expose a parade equipment).

It is safe to suppose that this cheek-piece could have been part of the usual harness of a Sarmatian horse-rider, perhaps working for the Dacian kings, either in the military or for diplomatic reasons¹⁷⁶. Most researchers agree that this kind of horse-bits was used by horse-riders¹⁷⁷ and that definitely explains how this *tamga* sign reached south-western Transylvania, either from the eastern areas of Dacia or from further distance. Even if the piece belonged to a common horse-bit, its owner was still close to the higher echelons of the society, given the status that horse-riders had in the Sarmatian environment and in other places.

Could this cheek-piece with *tamga* represent evidence for a direct relation between Pharzoios' realm and that of the Dacian kings in south-western Transylvania? For this, we first must accept the interpretation of the sign as the typical pattern of Pharzoios. Visually, this seems to be the case, and the presence of other *tamga* signs, identical or close to this at Poiana could indicate the presence of a certain clan in the area, that used Pharzoios' scheme of *tamgas*. Still, one must ask oneself if the simple character of the *tamga* on the cheek-piece was not determined by technical limitations, as

¹⁷⁵ VASILACHE 2022, 159.

¹⁷⁶ Suggestive in this sense are the already mentioned cases at Olbia (*supra* note 65) or at Čatalka (*supra* notes 94-95); they seem to indicate the use of Sarmatian mercenaries by the Romans, who left their *tamgas* on various objects.

¹⁷⁷ BĂRCĂ/SYMONENKO 2009, 201; GLODARIU/IAROSLAVSCHI 1979, 126.

¹⁷⁴ VASILACHE 2022, 165; ANTIPENKO 2016, 91.

stamping such a small sign on an iron piece could be more difficult than, for example, scratching a more complex sign on a piece of pottery or bone. Still, even if the *tamga* on the cheek-piece would be a simplification of a more complex sign, it would still be part of Pharzoios' scheme of *tamgas*, as exemplified by the Poiana finds. Secondly, we would need to accept that the Sarmatian presence in the eastern *davae*, especially at Poiana, would be directly related to Pharzoios' clan. This could be true, but we have no way of verifying this. Thirdly, we would need to accept that only Pharzoios and his clan had the right to use this sign. However, if Pharzoios' sign had become an emblem of its public authority, we could expect it to be used by other groups who tried to associate themselves with him or his clan.

The discussion in the last paragraph could be related to the general historical situation attested for the second half of the 1st c. AD in the lower Danube area. The good relations between the Dacian and the Sarmatians are attested by literary sources¹⁷⁸, while the archaeological ones seem to suggest a similar situation¹⁷⁹. Nonetheless, the sources are contradictory. We know, from the same sources, that the Dacians were specifically in good relations with the *Roxolani*, with whom they were allied in the first Daco-Roman war (and are represented on Trajan's Column and the Adamclisi triumphal monument)¹⁸⁰.

Another period when the Dacians could have collaborated with the *Roxolani* are the conflicts between AD 67-70. In AD 67/68 the *Roxolani* attacked Moesia, in AD 69 the Dacians did the same and in AD 70 the Sarmatians attacked, again, Moesia¹⁸¹. The closeness of the *Roxolani* to the former Dacian kingdom and the lower Danube area is exemplified through later episodes as well, like the well-known one under Hadrian's rule, which ended with him offering citizenship to P. Aelius Rasparaganus, *Rex Roxolanorum*¹⁸².

It is problematic to ascertain a direct connection between Pharzoios' realm and the Dacian kingdom based on the presence of his *tamga* sign on the cheek-piece from Costești, as all researchers tend to associate Pharzoios with the new eastern Sarmatian groups that appeared after mid-first c. AD in the north-western Pontic area and that brought *tamgas* with them (the *Aorsi*, *Siraces* and *Alani*), while the *Roxolani* were the older Sarmatians in the region, together with the *Yaziges* that migrated at this time towards the Pannonian plains. The situation is complicated by the fact that *tamga* signs spread rapidly in the northern Pontic area, where other Sarmatian groups, such as the *Roxolani*, probably quickly embraced them (and not only Sarmatian groups - as suggested by the distribution of such signs in the Dacian environment or elsewhere). As such, there is no certainty in associating the *tamga* signs from Dacia with the new eastern Sarmatian groups.

¹⁷⁸ For a complete account of these, see BÂRCĂ/SYMONENKO 2009, 348-364; BÂRCĂ 2006.

¹⁷⁹ BICHIR 1993, 166 - speaks about the fact that no settlement and fortress destruction east and south of the Carpathians can't be related to a Sarmatian attack; other indicators are the presence of Sarmatian in the eastern *davae* or even further, like, sporadically, at Costești-Cetățuie.

¹⁸⁰ BÂRCĂ/SYMONENKO 2009, 363.

¹⁸¹ BÂRCĂ/SYMONENKO 2009, 363.

¹⁸² BÂRCĂ/SYMONENKO 2009, 364.

Therefore, there is no way to specifically define whom the *tamga* sign from Costești-Cetățuie represents. All the evidence hints towards a good relation between the Dacians and the *Roxolani*, and their presence in the eastern and southern extra-Carpathian region, before and after the Roman conquest of Dacia, is proof of their closeness. Still, the possibility that other Sarmatian groups were present at the same time in this area can't be excluded. In this sense, Pharzoios' *tamga* signs from Poiana could be interpreted as proof of the presence of members of Pharzoios' clan/establishment in eastern Dacia, with further implications evidenced by the cheek-piece from Costești. On the other hand, it can't be excluded that the *Roxolani* used these signs, perhaps with Pharzoios' blessing, as representatives of its interests.

The relation between the Dacian kingdom and Pharzoios' kingdom can't be evaluated based on the presence of one sign on a cheek-piece, but it opens new lines of enquiry. For the moment, there are more literary, epigraphical and archaeological sources that point towards close relations between the *Roxolani* and the *Daci*. Still, as mentioned above, one cannot exclude the possibility that long-distance relations were established between the Dacians and other groups of Sarmatians. If we consider that the *tamgas* of Pharzoios and Inismeos were reserved to them and their close relatives only, then we can attest direct relations between them and the Dacian kingdom. If the presence of Inismeos' *tamga* on a parade harness piece from Ocnîța could be seen as proof of economic and diplomatic relations between Inismeos and the salt-rich center at Ocnîța, then the presence of Pharzoios' *tamga* on a cheek-piece from Costești-Cetățuie could be seen as an indication for earlier political relations between the Dacians in south-western Transylvania and the Sarmatians near Olbia.

There is another subject that can be of interest regarding the relations of the Dacians with the Sarmatians, namely the well-known story of Callidromus, the slave of the governor of Moesia Inferior¹⁸³. During an attack on the said province, he was taken prisoner by Susagus, who gave him to Decebalus. The Dacian king then sent Callidromus to the Parthian king, Pacorus II, as a gift. The story was recorded by Pliny the Younger in a letter to Trajan. D. Tudor accepts the veracity of the story without much reserve. Other opinions are much more nuanced, like that of J. R. Carbó García, who considers that we can't know for sure if the story is real, since neither did Pliny. At the same time, Pliny considered that it was worth mentioning to the emperor, so the story must have held some value in his eyes. If the story is true, then we can see that Decebalus had support amongst the Sarmatians of the northern Pontic area, that allowed him to send this slave to Parthia. If true, this could speak about the diplomatic capabilities of the Dacian king, reaching even beyond the Sarmatian environment. If false, then it only reflects the Roman paranoia towards scheming carried out by their adversaries, and it seems to me that Dacia went hand in hand with Parthia, from Caesar to Trajan. Therefore,

¹⁸³ TUDOR 1956; CARBÓ GARCÍA 2006; BÂRCĂ 2006a, 261; BÂRCĂ 2013, 116.

this story is not of much use in explaining Daco-Sarmatian relations, that were already well documented. Still, until now, there was no direct link between the seat of the Dacian kings in south-western Transylvania and the Sarmatians living further east. Now, the identification of a *tamga* sign in the fortress at Costești-Cețățuie, on an emblematic piece for horse-riding, leaves no doubt regarding a long-distance relation between this center and the Sarmatians from the lower Danube and north-western Pontic areas, be they *Roxolani* or another Sarmatian group.

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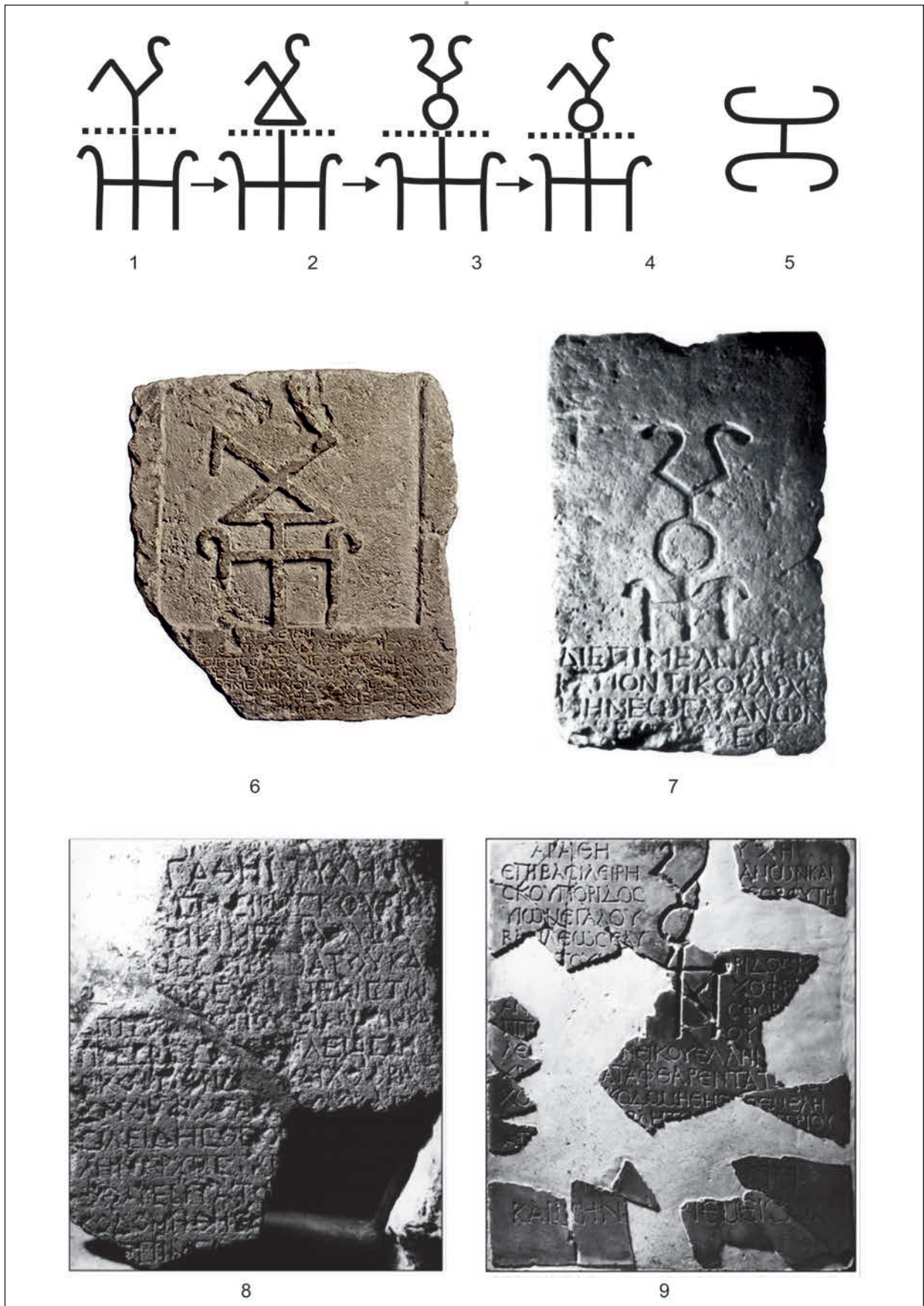


Fig. 1. “Royal” Bosphoran *tamgas*: **1.** Tiberius Iulius Rhometalces (131 – 153 A.D.), **2.** Tiberius Iulius Eupator (154 – 170 A.D.), **3.** Tiberius Iulius Sauromates II (174 – 210 A.D.), **4.** Tiberius Iulius Rheskouporis III (210 – 222 A.D.), **5.** Tiberius Iulius Ininthimaios (234/4 – 239/40 A.D.), modified after YATSENKO 2001, Fig. 14/e and TREISTER 2011, Fig. 11/1; **6.** Photo of CIRB 1241 from *Tanais*, after KOZLOVSKAYA/ILYASHENKO 2018, Fig. 8.1; **7.** Photo of CIRB 1053 from *Hermonassa*, after TREISTER 2011, Fig. 11/3; **8.** Photo of CIRB 1246 from *Tanais*, after VDOVCHENKOV 2023, Fig. 4; **9.** Photo of CIRB 1249 from *Tanais*, after VDOVCHENKOV 2023, Fig. 5.



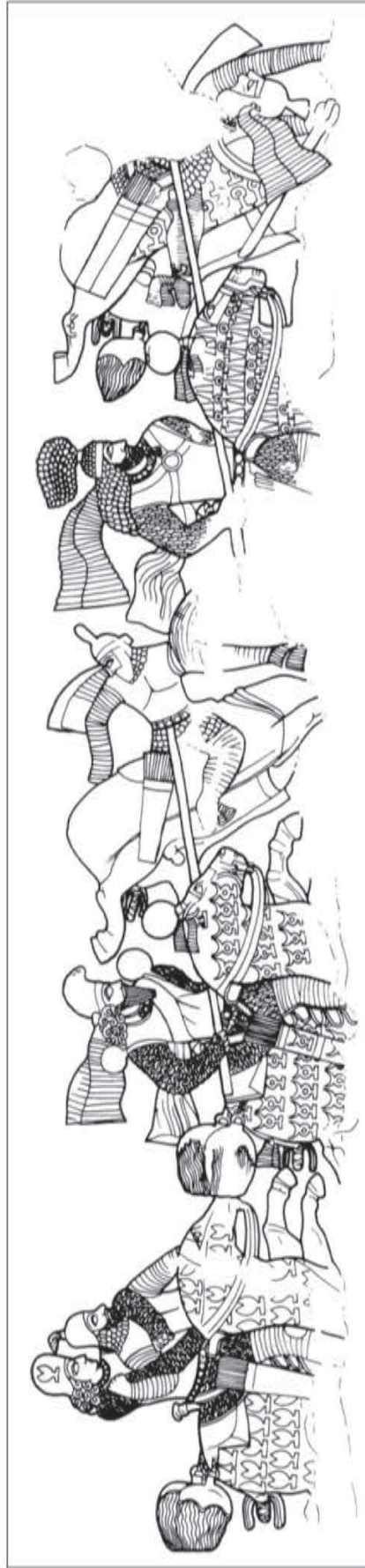
Fig. 2. “Royal” Bosphoran *tamgas*. **1.** Slab from *Tanais*, with *tamga* of, probably, Tiberius Iulius Rhoemetalces, after VDOVCHENKOV 2023, Fig. 4/4; **2.** Slab from *Phanagoreia*, after TREISTER 2011, Fig. 11/5; **3-4.** Slabs from Taman peninsula, after TREISTER 2011, Fig. 12/1-2; **5.** Slab with construction inscription from *Tanais* with *tamga* of Tiberius Iulius Ininthimaios, after SOLOMONIK 1959, no. 15.



1



2



3

Fig. 3. Sassanid reliefs: **1.** Photo of investiture scene with Ardashir II at Tāq-i Būstān, after MANASSERO 2013, Fig. 11; **2.** Drawing of the investiture relief Naqsh-e Rostam III with Ardashir I, after BERGE 1983, Fig. 9; **3.** Drawing of the battle relief at Firuzābād I with Ardashir I, after GRABOWSKI 2011, Fig. 1.

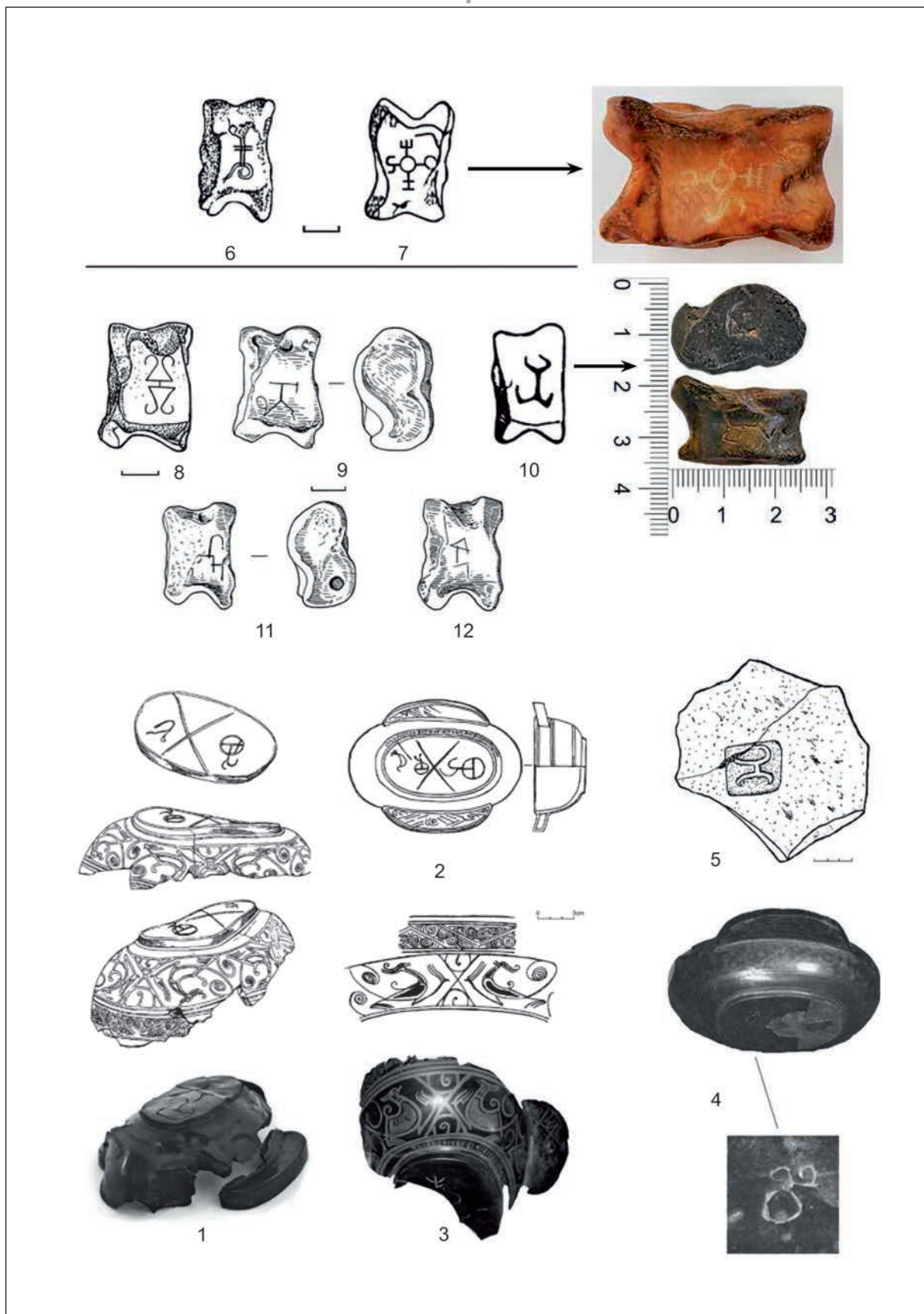


Fig. 4. Ceramic and wooden vessels with *tamga* signs from Mongolia: **1-2.** Wooden lacquered vessels from barrow 20 of the Noyon uul cemetery in Mongolia, produced in 9 B.C., after VORONJATOV 2014, Fig. 1/5-6, Fig. 2/2; **3.** Similar vessel from unnumbered barrow in the same cemetery, produced in 2 B.C., after VORONJATOV 2014, Fig. 2/1; **4.** Similar vessel from barrow no. 23 of the same cemetery, last quarter of 1st c. A.D., after VORONJATOV 2014, Fig. 2/3; **5.** Fragment of ceramic vessel from Nizhnie Durëny settlement in Transbaikalia, after VORONJATOV 2014, Fig. 1/2. **6-7.** Astragali with *tamgas* from Mongolia and north-Pontic littoral (8-12), after VORONJATOV 2014, Fig. 5.

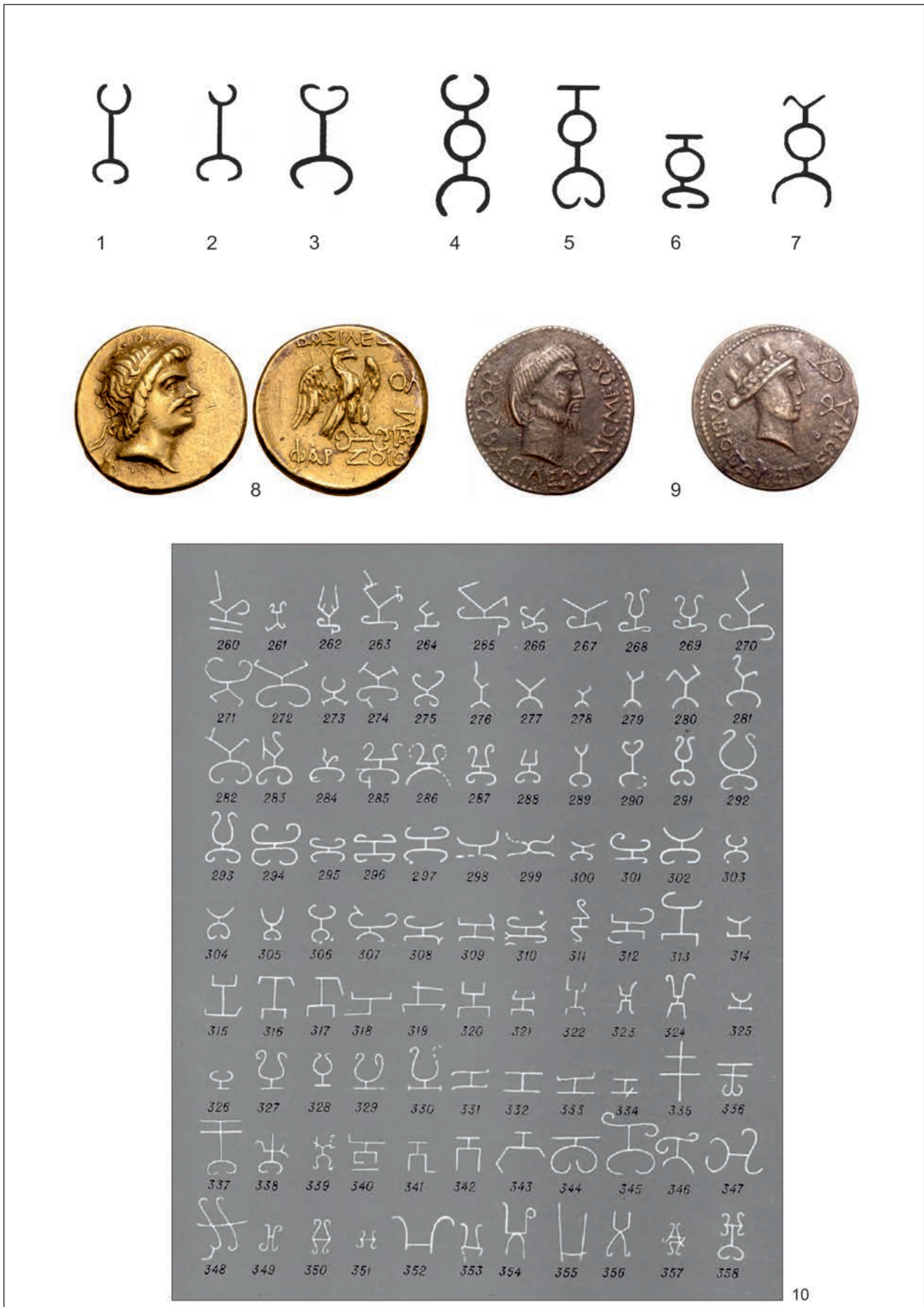


Fig. 5. *Tamgas* of Pharzoios and Inismeos: **1-3.** *Tamgas* attributed to Pharzoios; **4-7.** *Tamgas* attributed to Inismeos, after BÂRCĂ 2018, Fig. 5/1-7; **8.** Golden stater of Pharzoios, after https://www.romanumismatics.com/212-lot-86-kings-of-sarmatia-pharzoios-av-stater?auction_id=66&view=lot_detail; **9.** Silver *denarius* of Inismeos, after BÂRCĂ 2018, Fig. 4/3; **10.** *Tamgas* of Pharzoios' scheme, after DRĂCUK 1975, Tab. V.

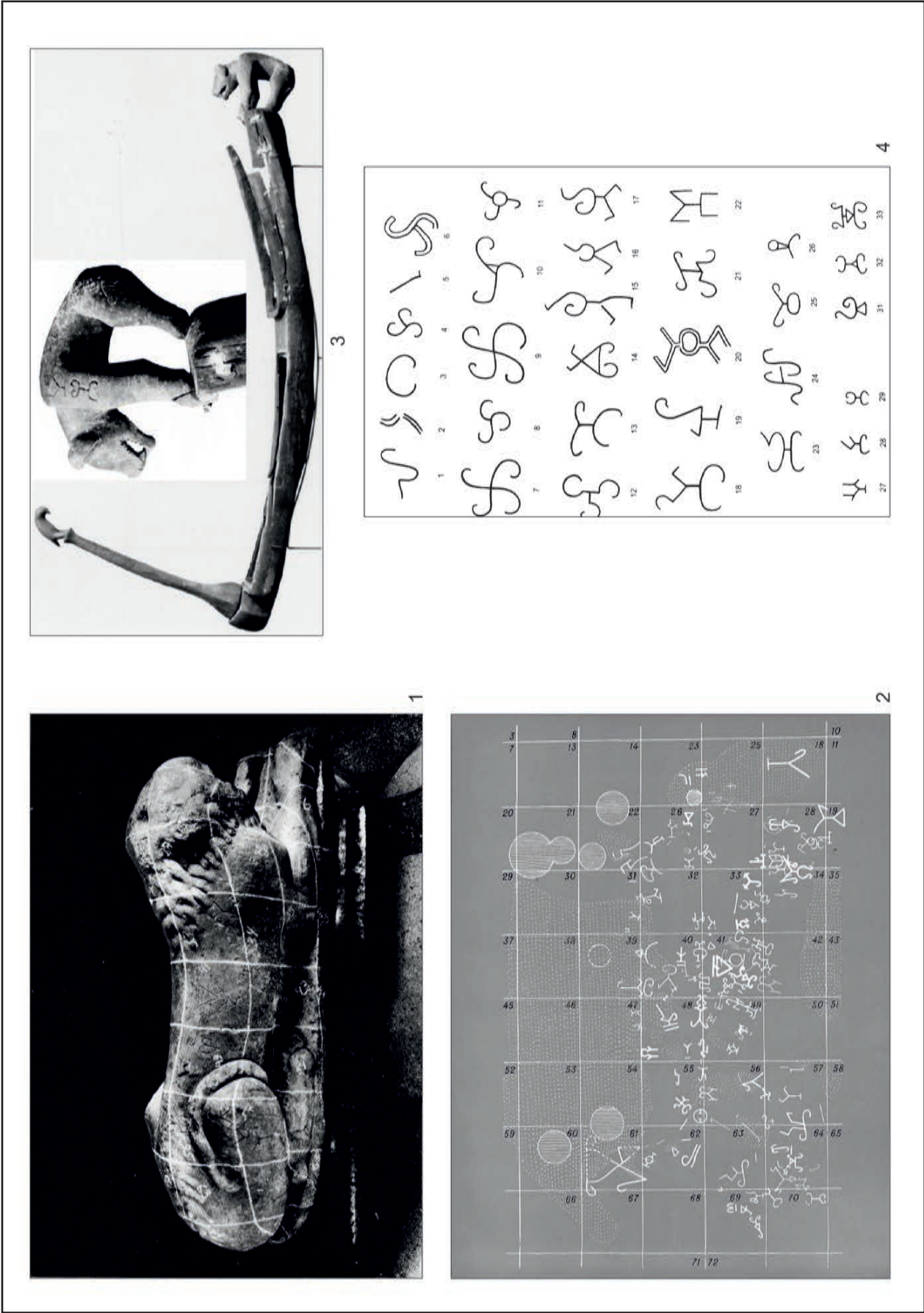


Fig. 6. *Tamga* signs identical to Pharzoios' on objects from Olbia: **1.** Photo of marble lion no. 1 from Olbia, after DRACŪK 1975, Tab. XLIII; **2.** *Tamga* signs on marble lion no. 1 from Olbia, after DRACŪK 1975, Tab. XLIII; **3.** Photo with the harp from Kozyrka and detail with the bear, after SYMONENKO 2004, Abb. 15. **4.** Collection of *tamga* signs from the harp at Kozyrka, after SYMONENKO 2004, Abb. 15.

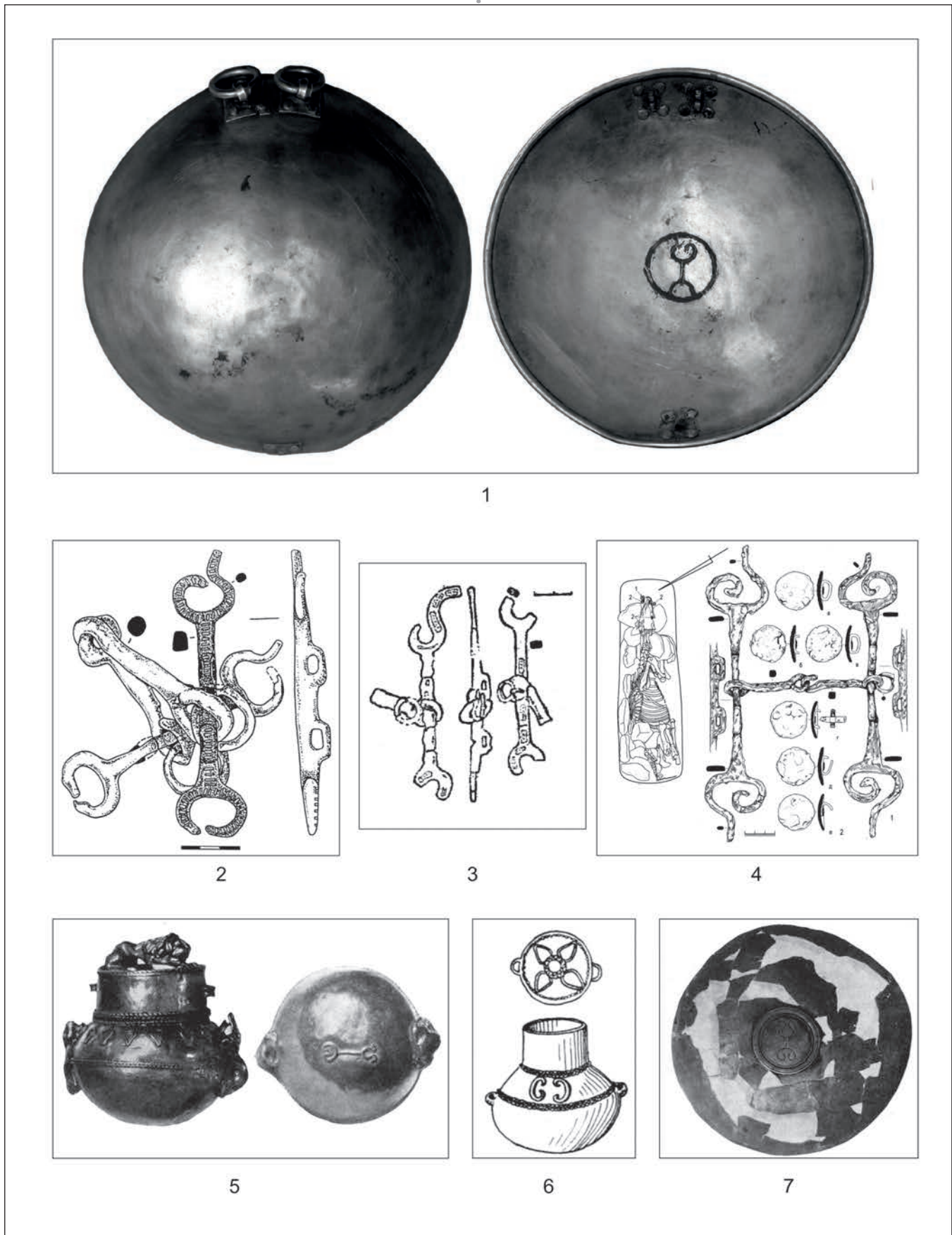


Fig. 7. Tamga signs close to Pharzoiios' pattern: **1.** Phalera from Hruščca grave, after SYMONENKO 2012, Fig. 4/3; **2.** Horse-bit from tumulus 64/grave 1 at Carskij, after BABEŞ 1999, Fig. 3; **3.** Horse-bit from Stanica Vozdviženskaja, after GUŠČINA/ZASETSKAYA 1992, Fig. 3, no. 25; **4.** Horse-bit from grave 86 at Levadka, after MULD/KROPOTOV 2015, Fig. 7; **5.** Gold vessel, probably from Olbia, after SOLOMONIK 1959, no. 63, p. 126; **6.** Gold vessel from Olbia, after SOLOMONIK 1959, no. 64, p. 126; **7.** Silver vessel from Davydovka, after SOLOMONIK 1959, no. 65, p. 127.

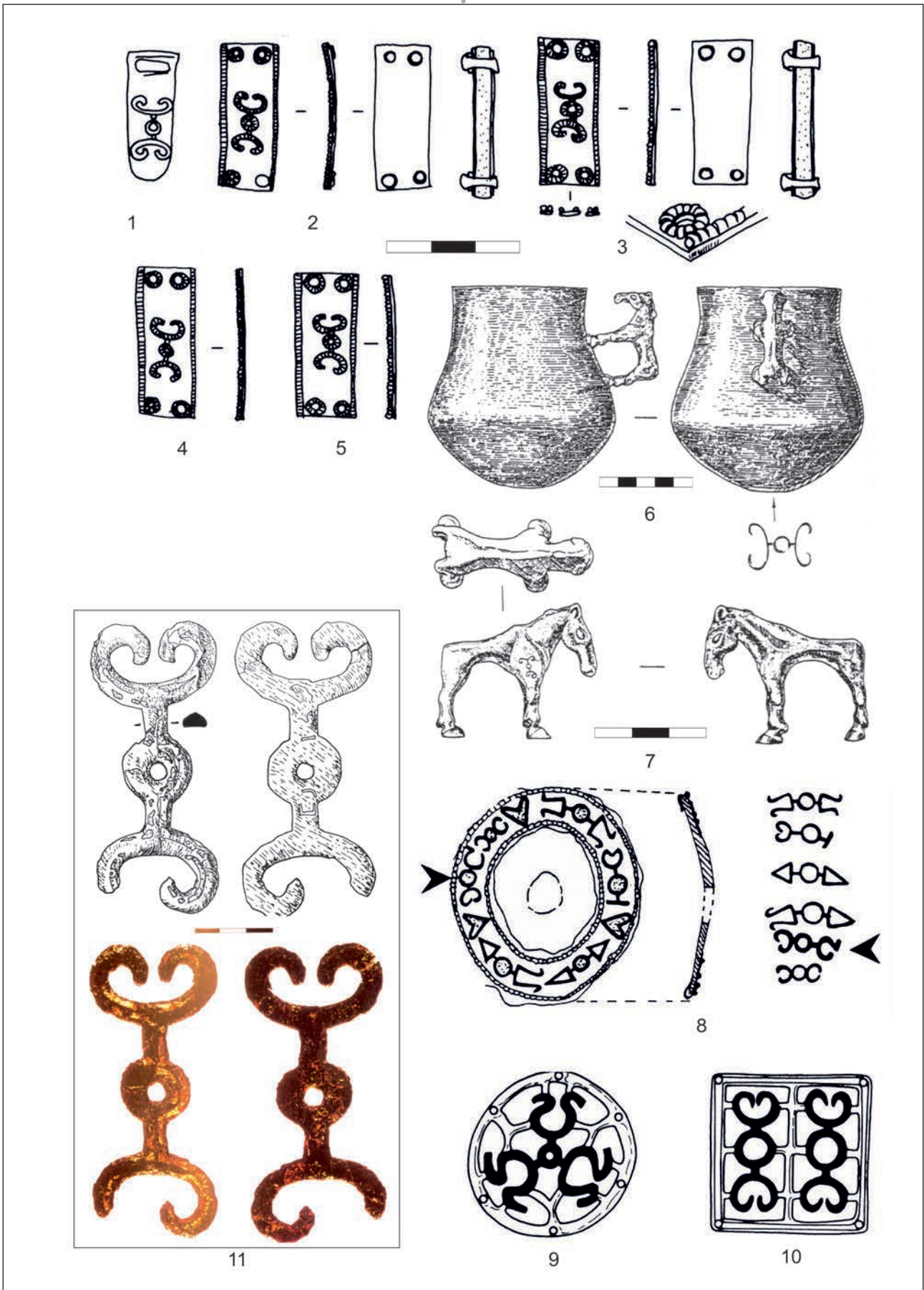


Fig. 8. Tamga signs of Inismeos: **1-5.** Belt fittings with tamga signs from Porogi grave, after BÂRCĂ 2018, Fig. 5/17-22; **6-7.** Silver vessel and detail with the horse-shaped handle from the same Porogi grave, after BABEȘ 1999, Abb. 5/6-9; **8-10.** Pieces from Čatalka in Bulgaria, after BÂRCĂ 2018, Fig. 6/2-4; **11.** Gold covered iron applique in form of tamga from Ocnița, Romania, after BABEȘ 1999, Abb.1.

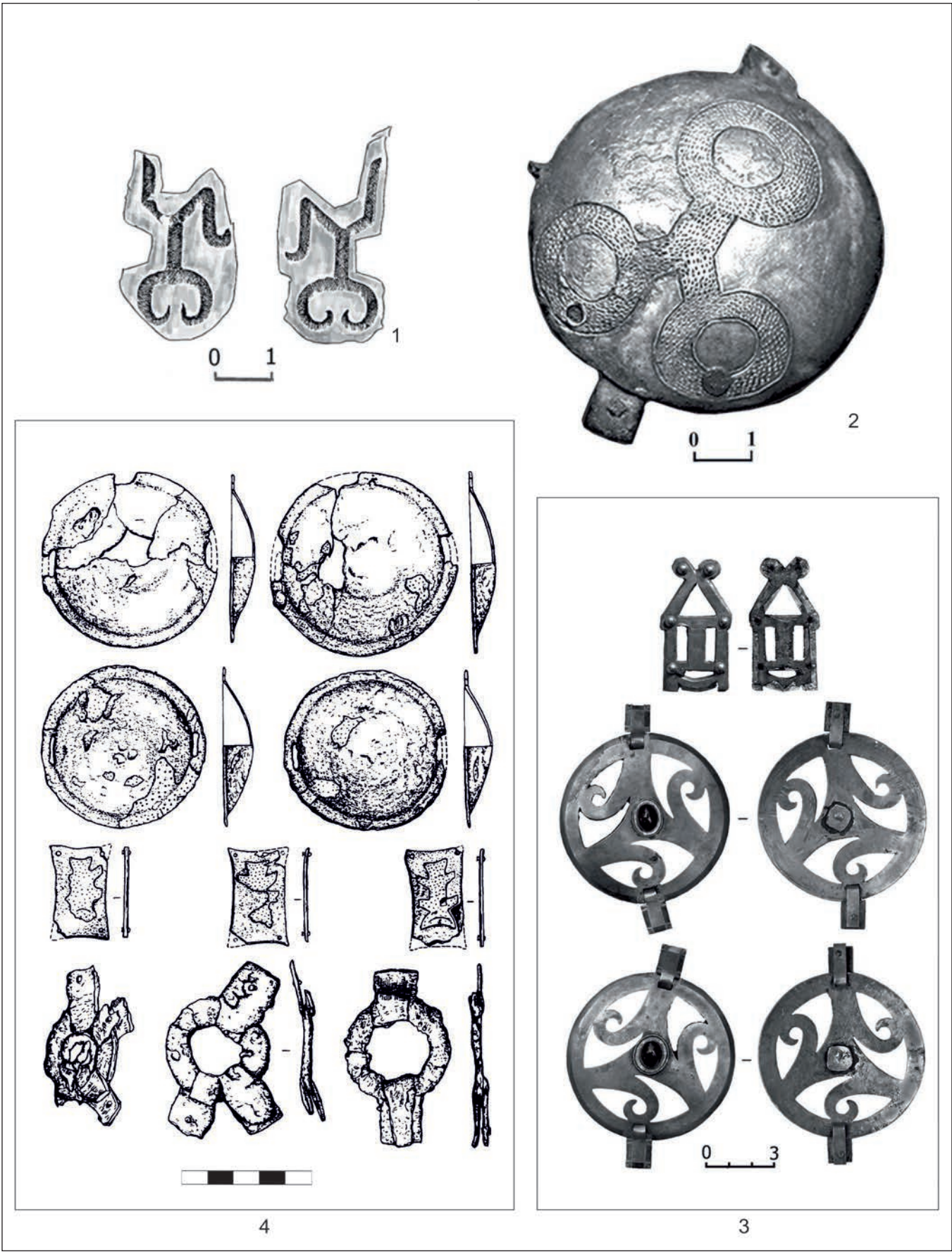


Fig. 9. Parade harness equipment with *tamga* signs: **1.** Set of two golden foils with imprinted *tamgas* from kurgan 10 at Kobayakovskoe, after KOZLOVSKAYA/ILYASHENKO 2018, Fig. 5/1; **2.** Silver *phalera* from kurgan 25/burial 1 at Valovyy I, after KOZLOVSKAYA/ILYASHENKO 2018, Fig. 5/3; **3.** Set of two silver buckles and *phalerae* from *Tanais*, after KOZLOVSKAYA/ILYASHENKO 2018, Fig. 4; **4.** Iron *phalerae*, gold plated appliques and iron distributors from kurgan no. 5 at Kobayakovskoe, after GUGUEV/BEZUGLOV 1990, Fig. 3.

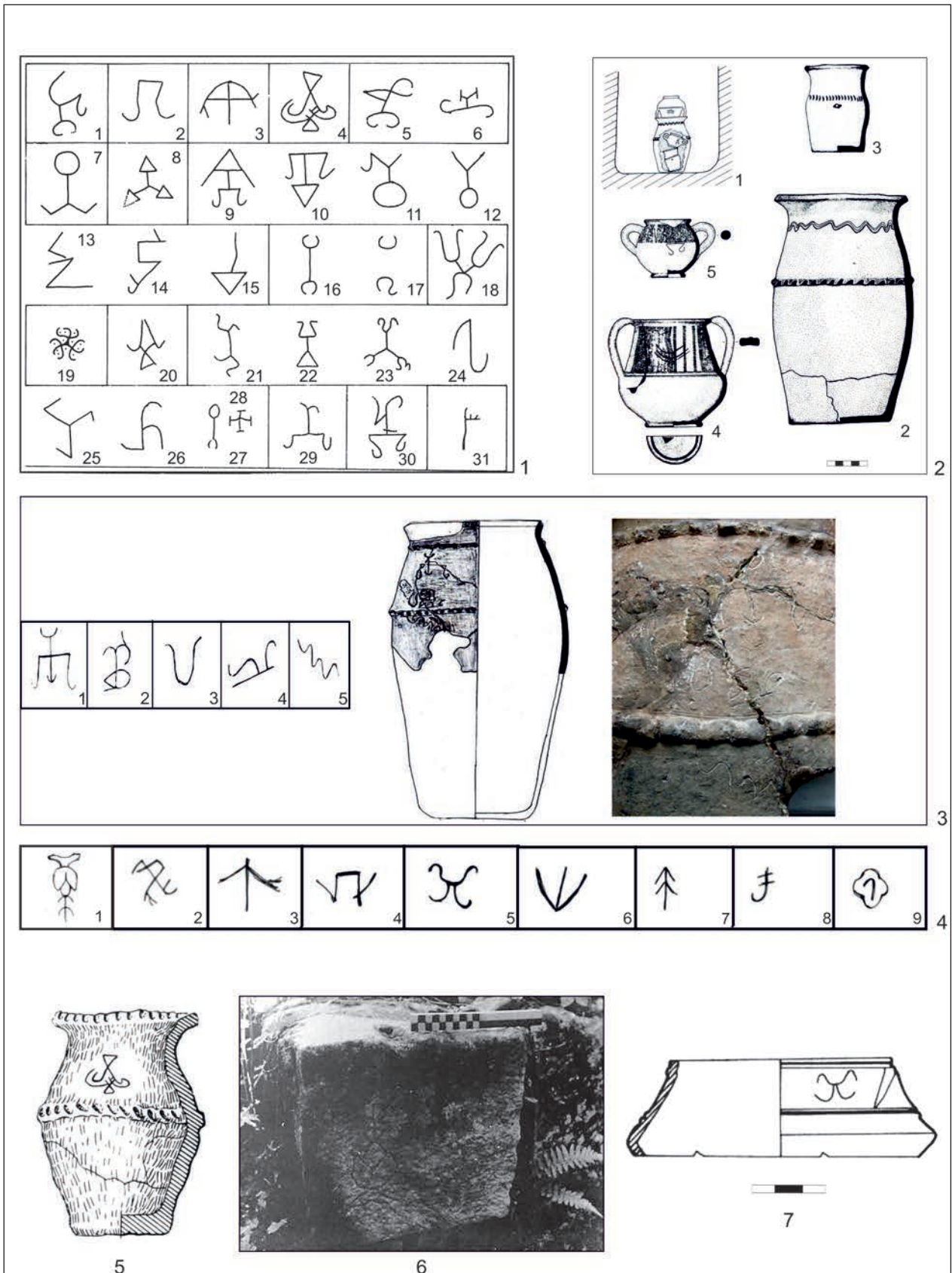


Fig. 10. Tamga and other signs from pre-Roman Dacia: **1.** List of tamga signs collected by Beldiman (1 Brad, 2-3 Dumbrava, 4 Moigrad, 5-19 Poiana, 20-29 Răcătău, 30-31 Sânsimion), after BELDIMAN 1990, Fig. 1; **2.** Inventory of the pit at Sânsimion: 1 context reconstruction, 2 – 5 ceramic vessels, after BELDIMAN/SZÓCS 1992, Pl. III; **3.** Fragmentary ceramic vessel, probably from Șiria – reconstruction, detailed photo and numbered signs (1-5), after BERZOVAN/PĂDUREANU 2010, Fig. 2, 4, Tab. III; **4.** Signs added to Beldiman’s list by Berzovan and Pădureanu: 1 *Sarmizegetusa Regia*, 2 – 3 Cernat, 4 – 6 Brad, 7 – 9 Cetățeni, after BERZOVAN/PĂDUREANU 2010, Tab. III; **5.** Drawing of ceramic vessel from Măgura Moigradului (without scale), after MACREA/PROTASE/RUSU 1961, Fig. 8/4; **6.** Photo of limestone block from the sanctuary at *Sarmizegetusa Regia*, after GHEORGHIU 2005, Fig. 245/a; **7.** Ceramic vessel from Brad, after URSACHI 1995, Pl. 201/7.

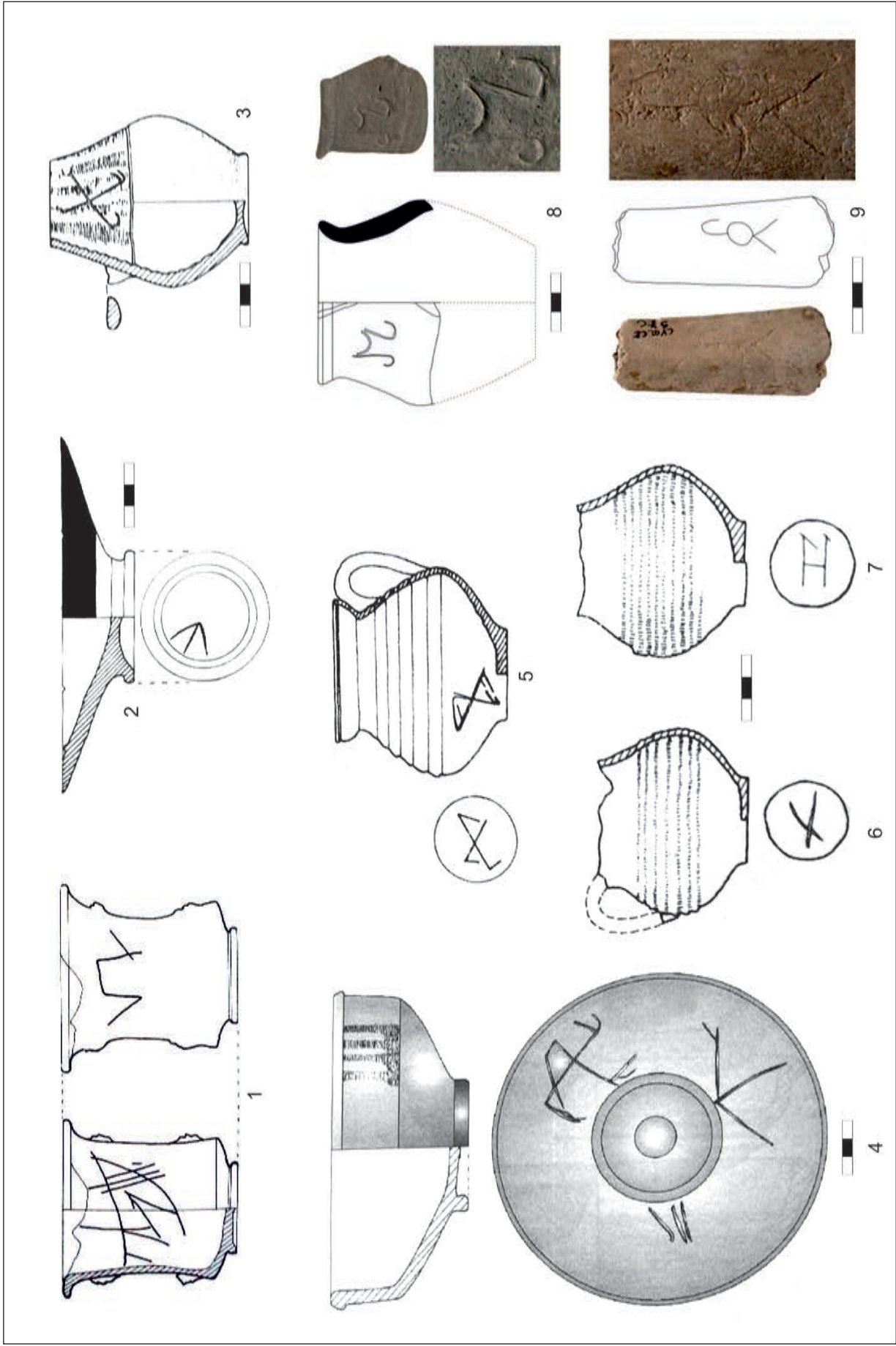


Fig. 11. *Tamga* and other signs from Dacia: **1.** Ceramic vessel from Brad, after URSACHI 1995, Pl. 213/4 (without scale); **2.** Imported ceramic vessel from Brad, after URSACHI 1995, Pl. 199/7; **3.** Ceramic vessel from Miercurea Ciuc – Jigodin I, after CRIȘAN/GHEORGHIU/POPESCU 2004, Pl. 17/2; **4.** Ceramic vessel from Cernat, after CRIȘAN 2000, Pl. 68/2; **5-7.** Roman ceramic vessels from Locusteni, after OPREANU 1998, Fig. 21/1-3; **8.** Ceramic vessel from Covasna – Cetatea Zânelor, after PUPEZA 2020, Pl. III/2; **9.** Cattle bone from Covasna – Cetatea Zânelor, after PUPEZA 2020, Pl. III/2.

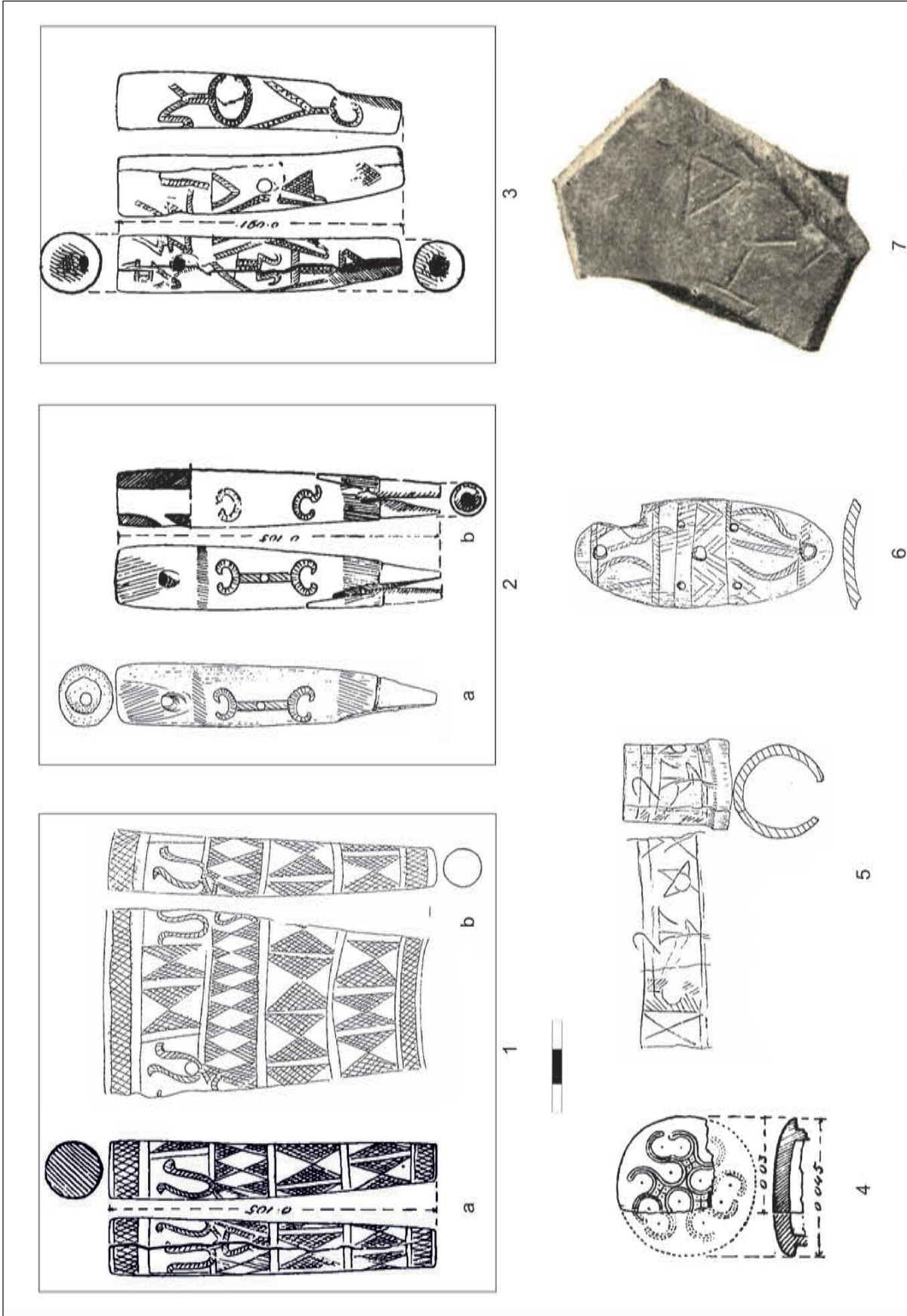


Fig. 12. Drawings and photo of objects with *tamgas* from Poiana: **1.** Bone object with truncated shape, a) after VULPE *et alii* 1951, Fig. 29/2, b) after TEODOR/NICU/ȚAU 1997, Fig. 29/6; **2.** Truncated bone object hollowed at one end, with transversal perforation, forked at the slender end, a) after TEODOR/NICU/ȚAU 1997, Fig. 28/1, b) after VULPE *et alii* 1951, Fig. 29/3; **3.** Truncated bone object with transversal perforation near wider end, after VULPE *et alii* 1951, Fig. 29/1; **4.** Bone pyxis lid, after VULPE *et alii* 1951, Fig. 29/7; **5.** Cylindrical pyxis body, after TEODOR/NICU/ȚAU 1997, Fig. 29/1; **6.** Ovoidal bone plaque with mounting perforations and curved section, after TEODOR/NICU/ȚAU 1997, Fig. 29/2; **7.** Imported ceramic patera fragment (without scale), after VULPE *et alii* 1952, Fig. 20/2.

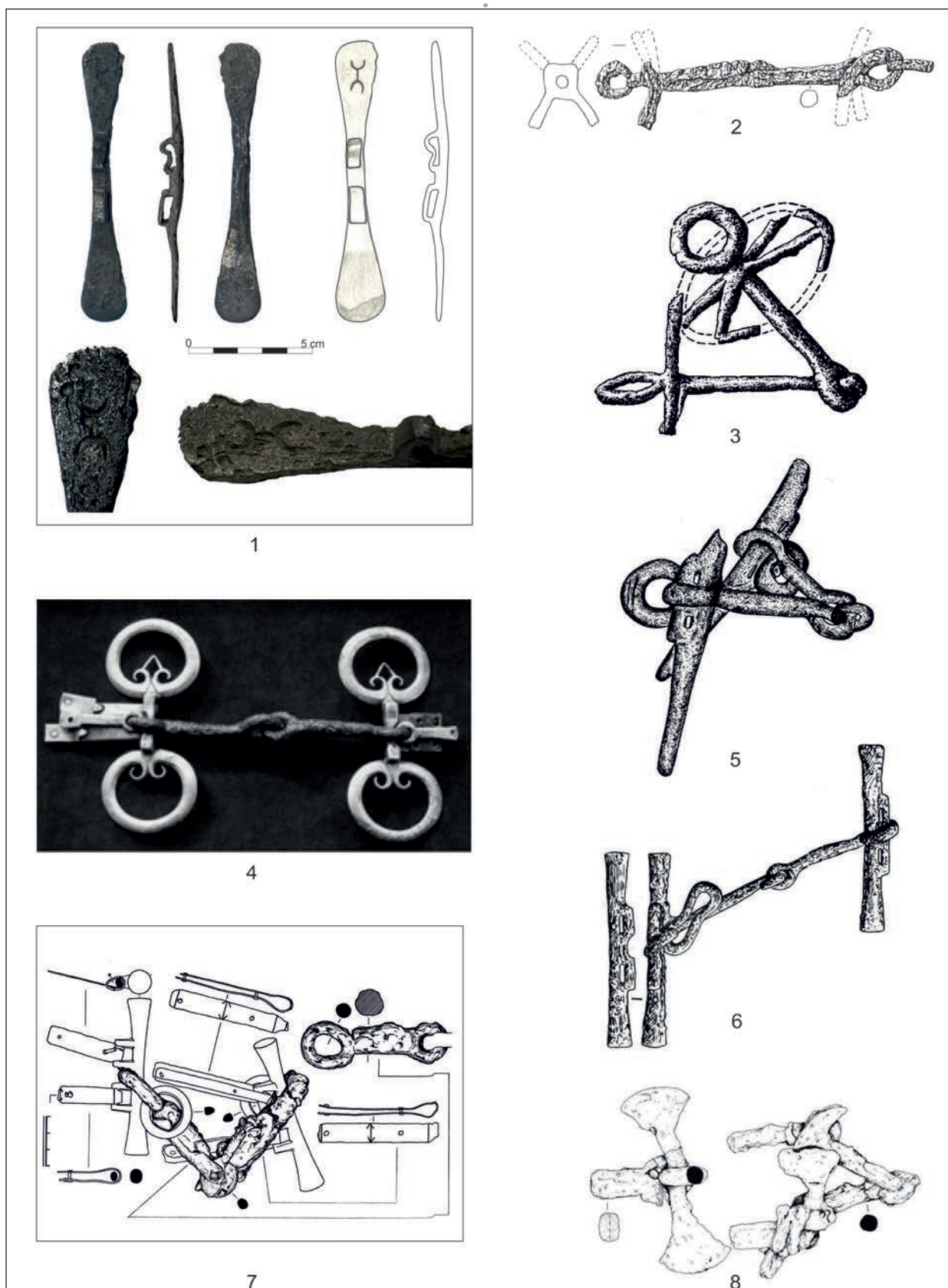


Fig. 13. Horse-bits: **1.** Photo, drawing and details of the iron cheek-piece with *tamga* sign from Costești-Cetățuie, after VASILACHE 2022, Fig. 2/1-2; **2.** Iron horse-bit with X-shaped cheek-pieces from Ocnîța (without scale), after WERNER 1988, Taf. 23/169; **3.** Iron horse-bit with wheel-shaped cheek-pieces from Zolotaja Balka (without scale), after VJAZ'MITINA 1986, Fig. 72; **4.** "Eye-glass" gold and iron horse-bit from Valovyy I (without scale), after SYMONENKO 2015, Fig. 84/1; **5.** Iron horse-bit with straight cheek-pieces with two sockets and tapering ends from kurgan 6 at Shevchenko (without scale), after ANTIPENKO 2016, Fig. 3/3; **6.** Iron horse-bit with straight cheek-pieces with widening ends from St. Tiflisskaja (without scale), after ANTIPENKO 2016, Fig. 3/3; **7.** Bronze horse-bit with straight cheek-pieces with widening ends from Neizats, grave 183, after KHRAPUNOV 2013, Fig. 31; **8.** Iron horse-bit with widened or *propeller* type cheek-pieces from Neizats, grave 374 (without scale), after ANTIPENKO 2016, Fig. 3/14.