# His left foot: A new investigation of the oriental Bronze Age figurine from Šernai (Western Lithuania) and the question of its authenticity

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*Schlagwörter: Bronzezeit, Ostbaltikum, Bronzefigurinen, Bernsteinhandel, Deponierung, Sozialstruktur, Archäometallurgie, Bleiisotopenanalyse, XRF*
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## Introduction

The Eastern Baltic region is far removed from the metalliferous areas. The number of bronze artefacts known from the Bronze Age, most of them imported, is rather limited. This situation is somewhat surprising, as the largest deposit of Baltic amber, the so-called "Blue Earth", is located on the Sambian Peninsula and should have stimulated exchange. However, among the bronze finds several outstanding objects are worth noting. One of them is a statuette of a man, found under a stone at the turn of the 19th and 20th centuries in the Forest of Šernai in the Klaipėda district (formerly Schernen, Kr. Memel) *(figs 1, 3)*. The statuette was described and interpreted in various local and international archaeological publications more than a century ago and was concluded to have come from Syria or Anatolia. The statuette has since attracted controversial interpretations, which have established it as an important object in regional Bronze Age studies. Its exotic appearance and especially the fact that it is the only one of its kind in southeastern and central Europe, have given rise to different interpretations. On the one hand, most scholars do not question the authenticity of the statuette and its having been found near the Baltic Sea, emphasising the amber trade and long-distance communications and thus the significance of the eastern Baltic region in prehistoric times (Bezzenberger / Peiser 1909; Šturms 1936; Gimbutas 1960; Heltzer 1995; Čivilytė 2007). On the other hand, others deny this theory, claiming that the Šernai statuette is a product of a well-organised business in antiquities and their imitations in 19th-century Russia. It is believed that the story of the discovery of the statuette is fictional (Nowakowski 2005, 189–190; Bliujienė 2007, 49). In this article we revisit the question whether the statuette is authentic or fake.

Unfortunately, the statuette disappeared during the havoc of World War II. In 1906, the archaeologist Adalbert Bezzenberger bought the statuette from the goldsmith Schaderait for 500 Reichsmark, after which it was placed in the collection of the Prussia Museum (Königsberg). Only in 2007, during a visit to the History and Art Museum in Kaliningrad, did the German archaeologist Immo Heske notice a strange object in its bronze collection and identified it as the left foot of the statuette from Šernai (Heske 2008, 313–314; *fig. 2*).

Fig. 1. Statuette from Šernai, Klaipėda distr.

Fig. 2. Left foot of the statuette from Šernai.

In 2012, the project "Technology and Social Development in Prehistory: A Study of Bronze Age Metal Objects"[1] conducted in the Lithuanian Institute of History provided the opportunity for an archaeometallurgical analysis of this fragment (old Inv. Nr. V, 252, 8284, current Inv. Nr. 17018.44). The statuette's left foot was examined at the Curt-

[1] VP1-3.1-ŠMM-07-K-01-101.

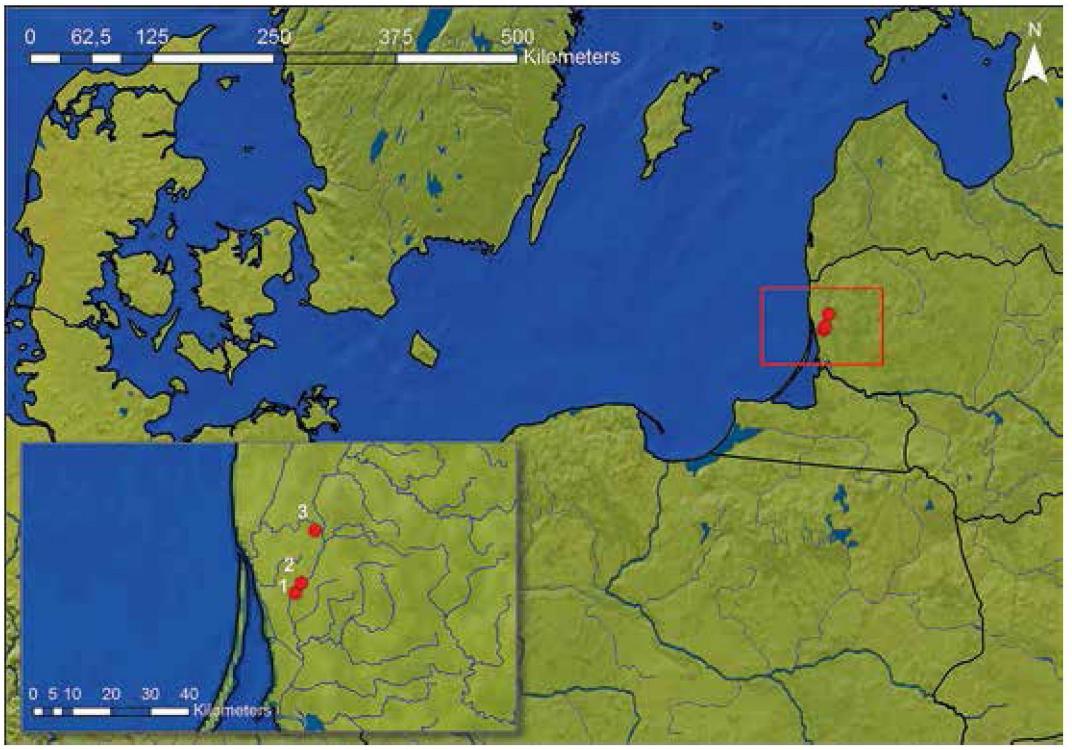


Fig. 3. Find spots of the statuette from Šernai and other extraordinary bronze finds: 1 Šernai; 2 Dovilai; 3 Gribžiniai.

Engelhorn-Centre for Archaeometry in Mannheim to determine its chemical composition and lead isotope ratios in order to test the authenticity of the statuette and verify or disprove the various theories of its origin.

This article presents the results achieved and summarises the history of the circumstances of the finding of the statuette from Šernai in order to assess its importance for archaeology.

A. Č.

## Find history

In the following part we will discuss the fascinating "detective story" of the statuette from Šernai, which is not totally uncommon when dealing with historic collections and especially ancient figurines. In 1909 A. Bezzenberger and F. Peiser published the first record detailing where and how the statuette was found (Bezzenberger / Peiser 1909). In this publication no doubts arose regarding the find circumstances of the statuette, because all information was presented precisely and clearly. On June 29, 1905, Adalbert Bezzenberger heard from the pastor Dr. Gaigalat that the goldsmith Schaderait, a young man living in Svencelė, (former Schwenzeln), possessed a strange statuette, supposedly found in the forest of Šernai. Schaderait wanted to sell the statuette for 500 Reichsmark, and the pastor suggested that he should take the statuette to Bezzenberger. Almost half a year later, on February, 1906, Bezzenberger bought the statuette without hesitation. Schaderait told Bezzenberger that he had found the statuette in the forest under a flat, rough, natural

stone approximately 40 cm in height; no other objects were under the stone, after the latter had been split into four pieces. Several other stones, unworthy of further attention, were noticed next to the main stone. Bezzenberger knew the area well because he had previously excavated the Šernai (Schernen) cemetery (Bezzenberger 1892; Tamulynas 1998), and he immediately believed the goldsmith's story and described the find spot of the statue as follows: "Everyone who knows this region and its people would deny the possibility that the statuette was placed under the rock in modern times" (Bezzenberger / Peiser 1909, 425).

Quite recently, thanks to an archival document in the Prussian archive of the Berlin Museum für Vor- und Frühgeschichte[2], a few interesting details came to the fore about the discovery of the statuette from Šernai. This document was found by archaeologist Rasa Banytė-Rowell who was exploring materials related to the diary of A. Bezzenberger (Banytė-Rowell 2007). This document schematically depicts the find location of the statuette under a rock and also reveals that at the time when the statuette was found, Schaderait was no longer a goldsmith, but running a tavern in Svencelė. After visiting the find spot, it became clear that the statuette was found on land belonging to the tavern and not in the actual forest. The statement by Bezzenberger about the statuette remained unquestioned in archaeological literature for many years, until the scandalous find of Egyptian figurines in Švėkšna, Klaipėda district, gave rise to a discussion of the forgery of archaeological finds (Kolendo 1976; Snitkuvienė 1987). Seven authentic Egyptian statuettes were found in 1852 by the 17-year old Count Adam Broel Plater, just starting his scholarly career, in one of the barrows he was excavating. This discovery, to which the young man referred as "Lithuanian pagan statuettes", brought Plater fame and glory (Snitkuvienė 1987). However, it appears that all seven statues were placed in the barrow by Plater's father, who had brought them back from his travels in Europe, Greece, Turkey, Palestine and Egypt. In fact, the Švėkšna statuettes date back to the middle of the 1st millennium BC, obviously inconsistent with the context of the graves excavated by Plater that date to the 9th to 13th centuries A. D. (Snitkuvienė 1987; Nowakowski 2005). Another six dubious cases are discussed by Wojcech Nowakowski. These are statuettes excavated in Mamonov and Zajcev in the Kaliningrad region and out of the six only two may be regarded as authentic archaeological finds (Nowakowski 2005, 194–196). The circumstances of their discovery and especially the fact that they depict the Egyptian and Greek deities venerated in the Roman Empire enables us to assume that they could have reached the Kaliningrad region through the amber trade that was particularly active in that period (ibid. 196)[3]. According to Nowakowski, all other statuettes, including four kept in the Lithuanian National Museum, are touristic imports or orientalised industrial copies (ibid. 191). The latter statuettes have been already discussed in the context of the Šernai statuette with the intent to establish links with the Caucasus, assuming that they are authentic (Antoniewicz 1930) *(fig. 4)*. However, in 2008 the chemical composition of one of the four statuettes was established [4] and the alloy determined to be brass demonstrating the statuette to be a fake.

[2] SMB-PK / MVF, PM-A 887/1, S. 182.

[3] For more information on the Roman imports and influences see Michelbertas 1965; 1972.

[4] LNM AR 107:20. The authors would like to thank Dr. Marianne Mödlinger (Dipartimento di Chimica e Chimica Industriale, Universitá degli Studi di Genova, Italy) for taking the samples and Dr. Aušra Selskienė (Center for Physical Science and Technology, Lithuania) for carrying out the metal analyses. The methods differ from those of the Curt-Engelhorn-Zentrum Archäometrie Mannheim: Cu 67.9 %; Sn 0.26 %; Sb 0.01 %; Fe 0.47 %; Co 0.01 %; Ni 0.11 %; Zn 29.4 %; Pb 1.40 %; Ag 0.02 %; As 0.46 %; S 0.006 %.

Fig. 4. One of the four "Caucasian" statuettes, deposited in the National Museum of Lithuania (LNM AR 107:20).

Bearing in mind that such archaeological fictions were quite common at the end of the 19th century not only in Lithuania but also throughout the whole eastern Baltic region, the issue of the authenticity of the statuette from Šernai becomes even more relevant. Such imitations of archaeological objects had been very popular in the Russian Empire since the 18th century. Exotic items were also brought from various trips as souvenirs (Nowakowski 2005). In the 19th century, collecting antiquities was a fashionable activity among intellectuals, and private collections were formed (Kulikauskas / Zabiela 1999). Bezzenberger was also a passionate collector and researcher of antiquities. Although he studied archaeological monuments of all periods and all kinds from various districts of Prussia, his principal attention was focused on barrows and cemeteries (Tamulynas 1998). He used to excavate only those parts of a cemetery, which contained the most numerous finds, without regard to their archaeological cultural environment. It is likely that the residents of Šernai village and its surroundings knew of Bezzenberger's fondness for impressive prehistoric objects.

All of these details call the authenticity of the statuette into question and it is certain that a fake statuette was sold to Bezzenberger as a sensational prehistoric find. However, when the circumstances of the find are considered from an archaeological point of view a number of arguments for the authenticity of the statuette may be established.

## Archaeological arguments for the authenticity of the statuette from Šernai

In an attempt to substantiate the origin and dating of the statuette, typological traits will be considered first. The statuette is 14.7 cm tall and depicts a walking man wearing a pleated skirt on his hips and a flat-topped cylindrical helmet on his head. His neck is perhaps

decorated with a torque. His left arm is bent across the chest and the right arm is raised. Both fists are drilled with holes which may have once held a spear or other weapon. The man has a mask-like face and his eyes are hollow and almond-shaped. Semi-circular ear projections are located very high, close to the helmet. Long, pointed tangs extend from the feet to secure the statuette to a stone base that could then be conveniently removed so that the statuette could be carried in processions (Maran 2011, 69). The tangs in particular provide a strong argument for the figurine's authenticity. It is unlikely that traders or buyers in the late 19th century would have known that such figurines were regularly equipped with such tangs or would have wanted these impractical fixtures. A blackish patina covers the entire statuette and it is possible that this patina is the remains of a black adhesive that was used to gild the statuette with gold foil (Bezzenberger / Peiser 1909, 432; Seeden 1980, 129; Heltzer 1995, 52). It is also possible that furrows are visible on the figurine's back, which were used to apply gold foil as was common for such figurines (Maran 2011, 69 fig. 2).

The statuette was found with the middle part of the left leg missing. Based on older notes, the fracture was covered with patina, suggesting ancient damage. Although the archival document mentions the broken leg, the statuette is shown unbroken in many publications (Wiesner 1941, Abb. 1; Gimbutas 1960, fig. 11; Dąbrowski 1968, Tab. XXII). The upper part of the left foot that was rediscovered had been polished after the statuette was found and it was observed that the statuette is composed of a reddish metal (Bezzenerger / Peiser 1909, 424).

The style of the statuette from Šernai, especially its clothing, directed scholars' attention to the regions of present-day Syria, Palestine and Anatolia, where identical statues occur (ibid. 427–428). Bezzenberger and Peiser conclude that the statuette originated in Cappadocia and was brought to the eastern coast of the Baltic Sea as booty or as a purchase from the Black Sea region. Stylistically it can be dated between 1500 and 1000 BC (ibid.). Subsequent studies on metal statuettes from the Near East indicate that the vast majority of these statuettes come from Syria and Palestine. The statuette from Šernai belongs to a type that may be traced to the Canaanite culture dating from 1550 to 1200 BC (Seeden 1980; Heltzer 1995, 52). According to Michael Heltzer, the statuette from Šernai is a male deity, probably a weather-god of the Late Bronze Age (Heltzer 1995, 53). Helga Seeden, who included the statuette in her study (Nr. 1822), assigns it to the so-called group of statues of foreign origin (Group XII – foreign provenance), since they appeared in the second half of the 2nd millennium BC in Egypt and the coast of the Mediterranean Sea, i. e. Cyprus, Crete, the Aegean and mainland Greece (Seeden 1980, 122–132) *(fig. 5)*.

All these statuettes, depicting a walking warrior-god, were exported from their primary production centres or were produced in nearby regions. Interestingly, the statuettes most similar to the one from Šernai were found in Greece and the Aegean Islands (ibid. 125–129, No. 1808–1810; 1813–1823). It is thought that these statuettes are the most orientalised and perhaps may even have been brought from the Levant by their producers. Statuettes of foreign origin are dated to the end of the 2nd millennium and the beginning of the 1st millennium BC. According to H. Seeden, the statuette from Šernai, along with several similar statuettes, would belong to the latest ones. Like the figurines from Cyprus, Crete, Thermon and Delos the statuette from Šernai is described by Seeden as follows "less conventionally naturalistic with a tendency towards exaggeration of certain parts of the body or face and schematisation of attitude and movement." They also "have the same exaggerated mask-like faces and narrow elongated muscle-less bodies, lacking shoulders and hips, as contemporary pieces found in the Levant. The arms spread horizontally from nearly cylindrical necks and bodies and are bent into position without rendering

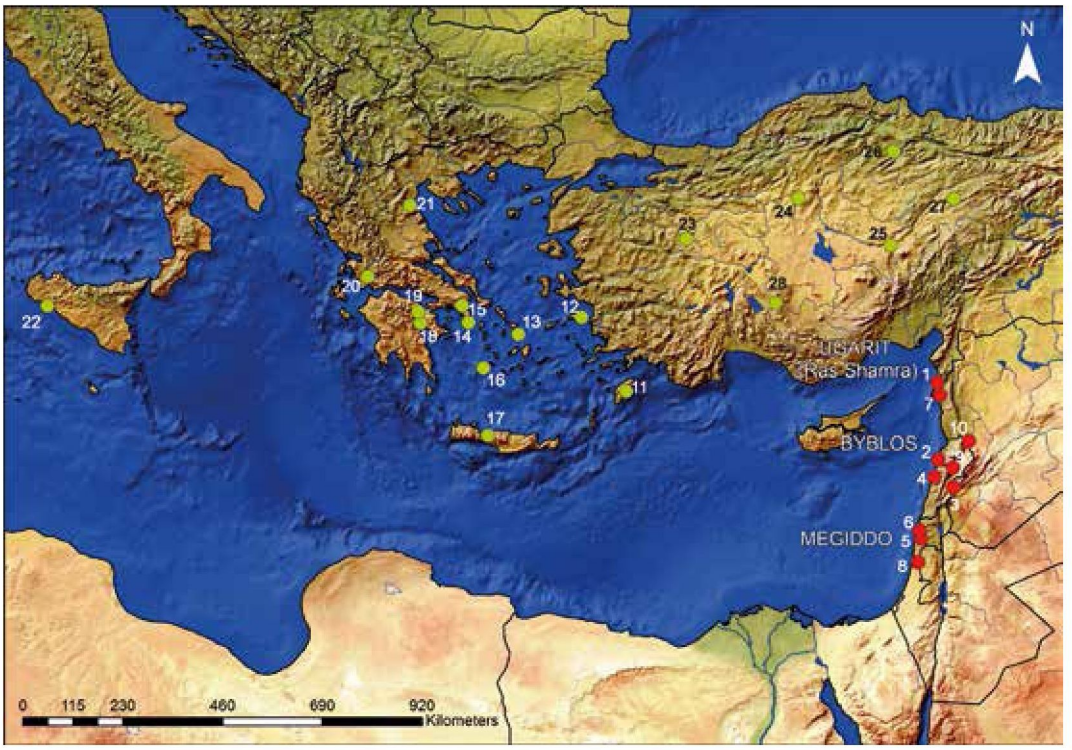


Fig. 5. Distribution of bronze statuettes of group IX, X and XI (red) and group XII (green) (after Seeden 1980, tab. 116. 117), which are stylistically closest to the statuette from Šernai.

elbows and wrists. The advancing movement is expressed by casting one leg exactly in front of the other, so that in some cases it is impossible to recognize which leg is stepping forward. These figurines represent the end of an art form which had originated over a millennium earlier" (ibid. 131). This chronological classification by using stylistic attributes seems to be somewhat imprecise, because the Šernai statuette also is comparable to figurines of attacking warriors from Byblos (ibid. 94, No. 1677), Ras Shamra (ibid. 104, No. 1695) as well as to some figurines from Near Eastern sites (ibid. No. 1757, 1758) *(fig. 6)*.

The statuettes listed above show the same simplified form, which does not seem to be a chronological indication. We assume that the statuette from Šernai may correlate with the above mentioned finds, i. e. it could be one of the earliest figurines of the Late Urban period.

A. Č.

## Interactions between the Eastern Mediterranean and Eastern Baltic

In the following discussion we wish to highlight a few factors, which may confirm that the statuette was brought to the eastern coast of the Baltic Sea and deposited intentionally during the Bronze Age. Baltic amber (*succinit*) is one of the most important reference points for tracing communications and long-distance relations during the Bronze Age. In the period of transition between the Early Bronze Age and the incipient Middle Bronze Age (BA 2 / B1 c.


Fig. 6. Bronze statuettes from different locations that are most similar to the statuette from Šernai: 1 Byblos, Square 15/23; 2 Ras Shamra, "Maison aux albâtres"; 3 "Northern Phoenicia"; 4 Lebanon (?); 5 Tiryns; 6 Mycenae. 1–3: group IX; 4: group X; 5–6: group XII (after Seeden 1980).

1600 BC), the role of Scandinavia became more active in the amber trade and communication between it and Atlantic Europe increased. This region, offering amber, was indirectly involved in the trade relations of Wessex and Mycenae (Harding 1984; 1990; Shennan 1993; Gerloff 1993; 2010). Some echoes of these communications also reached the Eastern

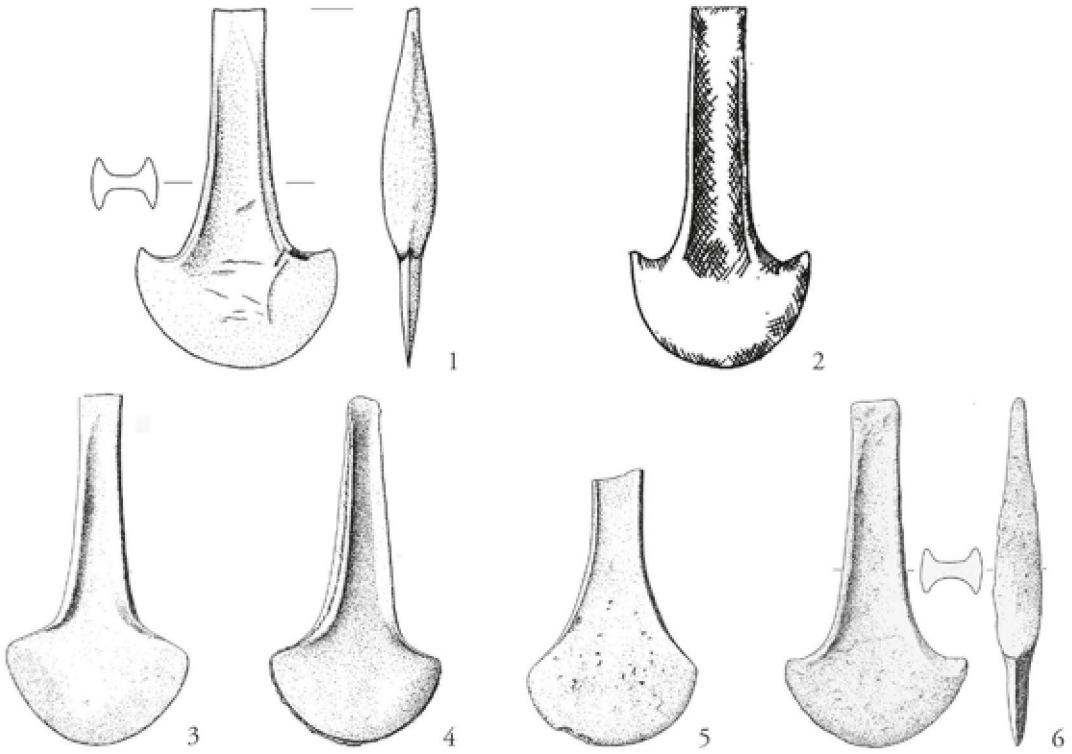


Fig. 7. Flanged axes from different locations of the West and East Baltic region: 1 unknown, Lithuania; 2 Tahula, Estland; 3 Kakeln, Klaipėda distr.; 4 Ringuvėnai, Šiauliai distr.; 5–8 Smørumovre, Denmark (after Čivilytė 2013).

Baltic region. Moreover, Scandinavia might have played a mediating role here. Interactions between Scandinavia and the Eastern Baltic are confirmed, for example, by four axes found in the large Smørumovre hoard (Denmark), dated to Montelius Period II, analogous to the axes of the so-called Eastern Baltic type *(fig. 7)*.

From today's perspective, it seems that the bronze items of the Eastern Baltic region reflect a clear Scandinavian and central northern European influence on local communities. Incidentally, this phenomenon can be observed up to the end of the Bronze Age, especially during the late phase. The Scandinavian influence is indicated by so-called "Devil's Boats" of northern Kurzeme: burials in boat-shaped stone settings, which are typical for the Scandinavian tradition, particularly in Gotland. Similar boat graves were found in the Sõrve Peninsula in Estonia. Moreover, the Staldzene hoard on the Baltic coast near Ventspils (distr. Kurzeme, LV) included typical objects from Scandinavia, especially from Gotland (Vasks / Vijups 2004; Vasks 2010, 156–157), which give clear evidence for close communication by sea. A couple of dozen kilometres north of the ship settings, at the village of Tehumardi (EST), another hoard was discovered, consisting of broken bronze objects, also considered to be of Scandinavian origin (Sperling 2013). Thus, it seems possible that the statuette from Šernai might have been imported to the Eastern Baltic region from Scandinavia. Bearing in mind that most orientalising figurines have been found in Scandinavia, even if they also display typically northern stylistic features, and considering the cultural elements reflecting a certain Scandinavian connection

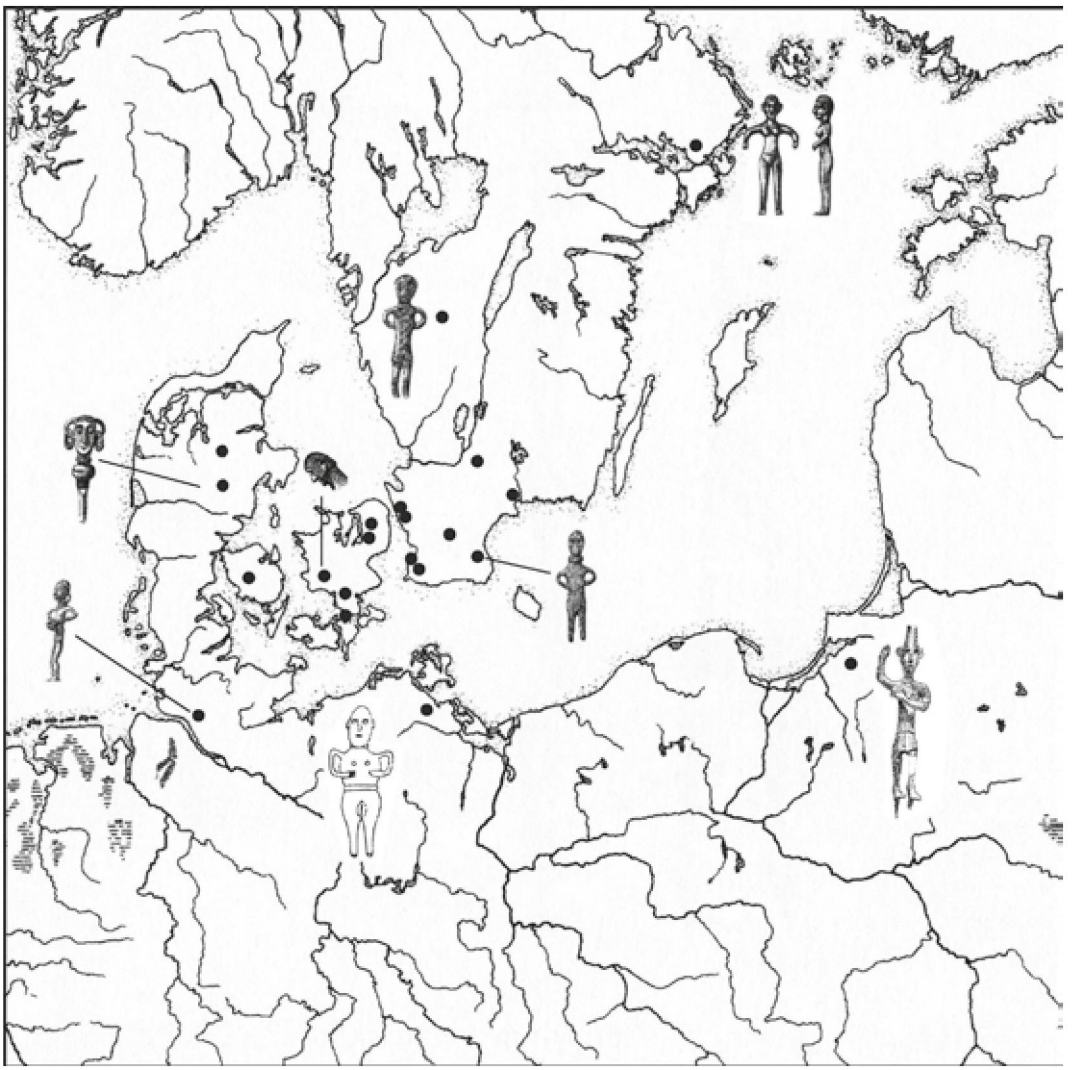

Fig. 8. Distribution of bronze figurines in Scandinavia and northern Central Europe (after Kristansen / Larsson 2005).

with the Near East and Mediterranean world (Kristiansen / Larsson 2005, 308–316; *fig. 8*), this hypothesis gains even more weight.

Although the dating of these statuettes is not unproblematic, Kristiansen and Larsson refer to ten statuettes from Scandinavia. None of the figurines has been found together with other objects or in a datable context (ibid. 310–316). However, both authors tend to relate the tradition of Nordic figurines to the period between 1500–1300 BC and even date the anthropomorphic representations in south Scandinavian rock art to Montelius Period II (ibid. 311–313). It is necessary to bear in mind that according to Kristiansen and Larsson the figurines they examined show a mixture of different orientalising (conical helmets, horns and clothing) and Nordic (ring ornaments) elements. Relations with the Mediterranean are also visible in the way that the calf is depicted. Both authors relate this motif to Mycenaean elements (ibid. 313). To summarise, Kristiansen and Larsson conclude that the female orientalising statuettes found in Scandinavia

could have been produced as early as the Early Bronze Age, tokens of the long-distance influence of Anatolia and the Aegean world during this period (ibid. 313). Interestingly, they also mention the statuette of Šernai. Unfortunately no detailed discussion follows, apart from the well-known theory that the figurine is definitively an imported item from Anatolia / Syria, indicating long-distance interaction during the 16th to 15th centuries BC (ibid. 314). There are no further explanations as to why Kristiansen and Larsson decided on these dates.

As far as the dating of the Šernai statuette is concerned, it is important to note that the statuette reflects a straight iconographical style, in contrast to the Nordic examples. Also of interest is the fact that, as was mentioned above, figurines, iconographically identical to our statuette, have been found in a Mycenaean context, e. g. in Tiryns and Mycenae (Seeden 1980, 127–128, No. 1816, 1817; Sapouna-Sakellarakis 1995, Taf. 44,1–2) *(fig. 6,5–6)*. They are likely to be the earliest statuettes of Seeden's Group XII (foreign statuettes) and are stylistically very close to the fine Late Urban examples from Byblos, Ras Shamra, Megiddo and other Levantine sites (Seeden 1980, 130). Unfortunately, the precise dating of these objects is unknown. One of the statuettes of Group X (Ras Shamra figurines), which is quite similar to the Šernai figurine, was found in Ras Shamra in 1973 in the "Maison aux albâtres" in a room together with three Mycenaean III A or B rhyta and a seated stone statuette (ibid. 104, No. 1695). One of the rhyta by virtue of its vertical whorl shell decoration may be dated to LH III B (1340 / 30–1200 BC). The other two rhyta can be dated to this period, too[5]. This could be a hint towards a chronological classification of this and other statuettes of Group XII (foreign statuettes). It is thought that due to intense cultural and trade contacts they were imported to the Peloponnese directly from their place of production (Seeden 1980, 131). However, it seems very unlikely that such a statuette could have been brought to present-day Lithuania in the period of the late second millennium and early first millennium BC.

Towards the end of the Mycenaean period a completely new type of bead made of Baltic amber appears in circulation – the so-called Tiryns type, reflecting extensive contact (Beck / Shennan 1991, 123; Czebreszuk 2011, 124; Maran 2013, 159). In this period contacts between eastern central Europe and the Adriatic region with the Mycenaean Culture seem to have been more important than trade routes via the *Caput Adriae* (Maran 2004, 54). Previous relations between the Mycenaean world and the Wessex Culture apparently lost their relevance. The number of amber objects in Britain decreases significantly (Beck / Shennan 1991, 101), while the attention of the Mycenaean elite turned to other European regions. Under these circumstances the idea of a transfer of a statuette from Greece to northern Europe between 1200–1000 BC, as Seeden assumes, seems less unlikely. We think that the Šernai statuette can be dated to the same time period as the above-mentioned Late Urban examples from Byblos, Ras Shamra, Megiddo and other Levantine sites, which date to the middle of the 14th to beginning of the 12th centuries BC. This time period is characterised by close contacts between the Mediterranean and the Near East. There was also communication with Central Europe and Scandinavia. In the middle of the 14th century biconical amber beads appeared, demonstrating important changes in trade and cultural communication in Europe. A necklace of sixty beads made from Baltic amber was found in Tutankhamun's tomb in Egypt (18th dynasty, 1361–1352 BC) (Hood 1993). Similar lopsided beads have also been found in the Aegean in large numbers. Furthermore, such beads are known from the Schwarza cemetery (Thuringia,

[5] Pers. comm. Philipp Stockhammer, Heidelberg.

Germany), which dates to the Central European Middle Bronze Age ("Hügelgräberkultur", Tumulus Culture period, c. 1600–1300 BC). Sinclair Hood believes that the Tutankhamun necklace reached Egypt from the area of the Tumulus Culture of Central and Northern Europe (ibid. 231). According to him, it is likely that these beads were brought from Central Europe via the Adriatic to Greece and from there directly by sea or through Syria to Egypt. Interestingly, in Ugarit (or Ras Shamra, Syria), famous for its trade with distant regions, Mycenaean pottery was found in abundance together with amber beads. Thus amber beads, as well as many other prestige goods, could have been sent by the rulers of Ugarit to Egypt as gifts for Tutankhamun or they may have entered Egypt via the cultural and trade relations of Greece (ibid. 232). In any case, the connection between the North-Central and Southern European cultures and the civilisations of the Near East can be clearly established.

However, the question of where the Baltic amber used to manufacture these biconical beads came from remains open. Noting that this type of necklace is quite unknown in Scandinavia, Hood believes that Sambian rather than Jutland amber has essential significance here (ibid. 232). In this case, the theory that the Šernai statuette was imported from the Middle East directly to the East Baltic region would be even more likely (Heltzer 1995; Kristiansen / Larsson 2005, 314), as it was during this period that the Biblis and Ugarit bronze figurines, analogous to our statuette, were produced. However, like Scandinavia, the East Baltic region lacks finds of biconical beads. Many archaeological objects in the Eastern Baltic region reveal incidental rather than regular contacts with remote lands, so it is unlikely that the Šernai statuette was brought to these regions directly from Syria. The role of the mediator fell to Scandinavia. In the 14th century BC, a clearly hierarchical social context with military elite developed in Scandinavia (Kristiansen / Larsson 2005, 212–227). At that time a standardised image of a soldier, whose main attribute was a sword, spread throughout Europe from Greece to Scandinavia. Particularly this armed part of society influenced the internal and external factors of cultural transformations, one of which was exchange and trade. There is no doubt that in this period Nordic societies were involved in the processes affecting trans-European circles.

The latest research of Scandinavian bronze artefacts demonstrated the obvious links between Northern areas and the Mediterranean as well as the Near East in the Middle and Late Bronze Age (Ling et al. 2013; 2014). This idea is confirmed by recent analyses of the chemical composition of a number of blue glass beads from well-dated Danish Bronze Age burials, some of them found together with gold objects proving the provenance of the glass from Egypt and Mesopotamia around 1400–1200 BC. It became clear that glass from those distant lands reached Scandinavia (Varberg et al. 2015). The Nordic society was ready for innovation, for which it was able to repay with amber, a commodity still in great demand. This amber, embodying many magical properties, could travel down Central or Western "maritime" European routes to reach Syria and thence Egypt. It is likely that the Šernai statuette was brought to Scandinavia from Syria as a reward; the societies in Scandinavia were already familiar with many oriental ideas. However, it is not clear whether Mycenaean and Central European participated in the transfer of this statuette. Judging by the spread of biconical beads, this seems to be possible. The role of Mycenae as a "mediating station" is corroborated by the existence of Baltic amber and glass from Mesopotamia.

But why did the figurine appear on the eastern coast of the Baltic Sea? Considering the specifics of the relations of Scandinavia and the Eastern Baltic region in the Bronze Age, it may be thought that the statuette "sailed" here from the western coasts. Why this valuable exotic good was not kept in Scandinavia, one can only speculate. Eastern Baltic amber was easily accessible to neighbouring lands, but perhaps it was considered especially valuable.

This peripheral region, as we have mentioned, attracted attention already during the Early Bronze Age. We believe that the statuette from Šernai can be interpreted as one of the most interesting phenomena of the Bronze Age of the Eastern Baltic region, a prestigious object was brought deliberately to a place located thousands of kilometres away, from which later it entered the peripheral region. Most probably this statuette was shipped by the people from the North themselves. Bearing in mind the aforementioned archaeological evidence from the Late Bronze Age, the idea that seafaring individuals left traces on the eastern coast of the Baltic becomes relevant. All this shows that the people at some distance to the Nordic Bronze Age were part of the same knowledge community. The migration of different groups over a long distance from north to south in the Late Bronze Age could have been part of people's lifeworld (Heske 2012, 57).

A. Č, E. D., E. P.

## Deposition during the Bronze Age or in the 19th century?

Returning to the find circumstances and the archaeological context of the figurine, it should be noted that the fact that it was found under a stone is not a coincidence. The deposition of single finds or even huge hoards under stones is one of the most remarkable prehistoric phenomena in Europe, and it was particularly common in the Bronze Age. In the last decades the rapidly growing interest in the peculiarities of the Bronze Age hoards and a number of new explorations of this cultural phenomenon, covering different regions of Europe, have formed strong opinions about the ritual character of the deposition of bronze artefacts; a recent overview of theoretical and methodical considerations and of the religious and symbolic aspects of depositions is provided by D. Neumann (2015). The ritualised character of these actions and their relevance as social practice are also understood against their spatial background, e. g. in ritualised landscapes (see Fontijn 2002; Hansen 2005; Hansen / Neumann / Vachta 2012; Ballmer 2015).

The covering of valuable objects with rocks thus seems to have been part of the ritual practices; sometimes stones themselves are suggested to have had magical power (Soroceanu 1995, 24). It is most likely that rocks were used to mark a place of sacrifice. They had the potential to remind people both of the action which took place in these locations, the sacrificial ritual, and of the sacrificed items and even their owners.

What should the rock which covered the Šernai statuette remind us of? Already A. Bezzenberger and F. Peiser described this phenomenon of the statue with a broken leg being buried under a large rock, suggesting that evil power was seen in the figurine. The only means of defence against this evil was to break and bury the figurine (Bezzenberger / Peiser 1909, 442). In this case the placement of a rock is interpreted as an act of prevention. Perhaps this figurine truly could raise fear – after all, it depicts a fighting man that the people of this region had not seen at all. This opens ample space for various possibilities of interpretation, but one thing remains clear: The details of how the statuette was discovered and obviously had been deposited in the Bronze Age should not come as a surprise – intentional breaking and depositing and covering of bronze objects is a widespread and well-known phenomenon during that period. Possible reasons for this practice are discussed, e. g., by R. Maraszek (1998, 94 ff.; 2006, 248 ff.) and S. Hansen (2016; see also Neumann 2015, 36 ff.). Besides, one has to keep in mind the detailedness of the archival description of the finding process of the figurine, especially the fact that the covering large stone had to be split into four pieces. It would have required quite a lot of work to put the figure below the big stone in the first place and then arrange its discovery.


Fig. 9. The bronze casting mould from Dovilai, Klaipėda distr. (former Dawillen, Kr. Memel).

Fig. 10. The spearhead of Sejma-Turbino type from Gribžiniai (Klaipėda distr.).

Interestingly, no other figurines of the same type have been found anywhere in central and southeastern Europe. This is not surprising, due to the fact that the anthropomorphic statuettes of Scandinavia have not a single parallel in other parts of Europe. Kristiansen and Larsson describe this situation as follows: "A very peculiar thing is the lack of similar bronze figurines from this period in central and southeastern Europe; according to our knowledge plastic art of this type is totally unknown in this broad geographical area" (Kristiansen / Larsson 2005, 313). This line of thought can be supplemented by one more important aspect: Šernai statuette is a spectacular, but apparently not an isolated find in Western Lithuania. Nearby, in the Dovilai (former Dawillen) riverbed a bronze cast for a flanged axe was found *(fig. 9)*.

It is the only bronze cast in the whole region of the Eastern Baltic and is especially extraordinary because such bronze casts were found neither in Central or South Eastern Europe nor Scandinavia. Another object of foreign provenance is a spearhead of Sejma-Turbino type, which was found in Gribžiniai *(fig. 10)*.

Thus, the Šernai statuette together with the aforementioned special finds constitutes a significant set of archaeological objects from Western Lithuania that testifies to the integration of the regions of the Baltic Sea within important European socio-economic and spiritual processes in the Bronze Age.

A. Č.

| Lab no. | Fe | Ni | Cu | Zn | As | Se | Ag | Sn | Sb | Te | Au | Pb |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MA-112860 | 0,24 | 0,06 | 92 | <0,2 | 0,71 | 0,01 | 0,02 | 7,2 | 0,04 | <0,005 | 0,02 | 0,13 |

Tab. 1. XRF analysis results for sample no. MA-112860; Mn, Al, Co, Bi below detection limit (<0.01 % for Mn, Co, Bi and <0.1 % for Al); all values are given in mass percent.

## Archaeometallurgical analyses

A sample (lab no. MA-112860) was taken with a 2 mm drill and any corrosion material was removed under a binocular. Chemical composition was determined by energy-dispersive X-ray fluorescence analysis (ARL Quant'X). Two measurements were made with different excitation voltages at 28 and 50 keV and 1000 s measuring time each. Quantification was achieved by comparison with certified reference alloys. The procedure is a modified and improved version of the one described by Lutz / Pernicka (1996).

Four elements are most suitable for establishing a material classification on account of their behaviour in the smelting processes, namely silver, nickel, arsenic and antimony (Pernicka 1990). The ratios of silver and nickel to copper remain quite stable during smelting and subsequent metal treatment. Therefore they provide information about the ore used. Arsenic and antimony concentrations can and do change substantially during the smelting of sulphide ores. However, they provide general information on the ore-type used, such as fahlores (Krause 1988, 189–192). To test for the authenticity, manganese and aluminium concentrations were also determined as indicators of modern production. They can be found in bronze alloys from the second half of the 19th century on (Ledebur 1898; Reinglass 1919). As the object was already recovered in the 19th century, the $^{210}$Pb test (Pernicka et al. 2008) was not applied, because this detects only metal that has been produced since the beginning of the 20th century.

The chemical analysis of the sample *(tab. 1)* indicates that it is composed of rather pure tin bronze, whose only major impurity is arsenic. Aluminium and manganese were not detected. Therefore, the composition of the sample is unsuspicious and there is no indication of a modern production.

Furthermore, stable lead isotope analysis was carried out to determine possible regions of origin. The analysis was performed with a multi-collector inductively-coupled plasma mass spectrometer following the procedure described by Niederschlag et al. (2003). The use of lead isotope ratios is well established for provenance studies, because they do not change during the smelting of ores. This geochemical fingerprint is therefore the same in ores from a specific deposit and in the artefacts that were produced from them. Since in nature lead isotope ratios depend on the geological age of a deposit and its geological environment, different deposits may have different lead isotope ratios and can therefore be distinguished (Ottaway 1994). However, lead isotope ratios are not unique and may be similar in different ore deposits. Therefore, a good knowledge of the possible ore sources in the region under investigation is mandatory.

In *tab. 2* the ratios of the stable lead isotope ratios are given. As typological considerations suggest that the statuette could derive from the Hittite region, lead and copper ore deposits in Turkey (Pernicka et al. 1984; Seeliger et al. 1985; Wagner et al. 1986; Yener et al. 1991) were considered for comparison. It turns out that more than 30 copper ore deposits could be excluded as possible sources due to different lead isotope ratios and / or their chemical composition. In *fig. 11* sample MA-112860 is compared with

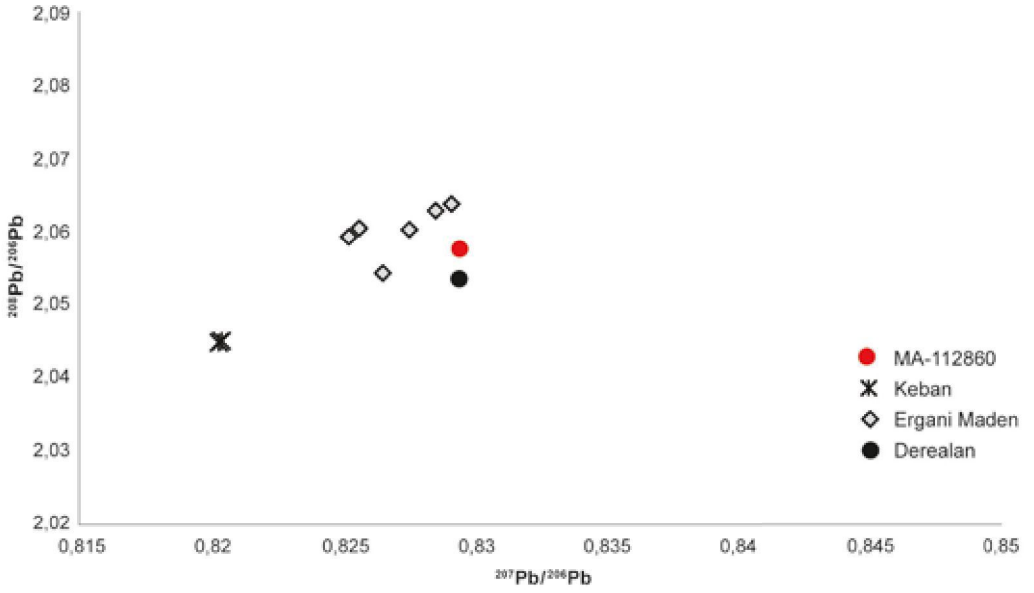


Fig. 11. $^{207/206}Pb$ vs. $^{208/206}Pb$ diagram for sample MA-112860 and isotopically similar copper ore deposits in Anatolia (Pernicka et al. 1984; Seeliger et al. 1985). The analytical uncertainties are smaller than the symbols.

| Lab no. | Original ID | $^{208}Pb/^{206}Pb$ | $^{207}Pb/^{206}Pb$ | $^{206}Pb/^{204}Pb$ |
|---|---|---|---|---|
| MA-112860 | KA1 | 2.0576 | 0.82942 | 18.912 |

Tab. 2. Lead isotope ratio results for sample no. MA-112860.

three deposits that provide the best chemical and lead isotope matches, namely the ore deposits of Keban, Ergani Maden and Derealan (*fig. 12*).

It should be mentioned that similar lead isotope ratios were also found in the Bolkardağ region in the Taurus Mountains by Yener et al. (1991) (their source Taurus 1A). However, all these ores have lead as major component and the compositions of the slag samples belonging to this group indicate that lead and possibly silver was produced from these ores and not copper.

Of the copper deposits in Anatolia, for which lead isotope ratios are known, the best matches with our sample MA-112860 were found for the copper ore deposits of Ergani Maden and Derealan. Therefore, the geochemical pattern was also compared in a second step by using the ratios Co / Ni vs. Sb / As *(fig. 13)*. For this purpose the ore compositions were recalculated to show the possible metal composition that could be produced.

It is obvious that the copper ores of Ergani Maden and Derealan are chemically different and are unlikely sources of the copper of sample MA-112860. A better match for the two element concentration ratios is found in the Keban deposit, but the lead isotope ratios differ clearly from sample MA-112860.

Typologically similar statuettes are found also in Greece and the Aegean Islands (see above). Therefore published lead isotope ratios from copper ore deposits in Greece (Oxa-


Fig. 12. Map of selected investigated ore regions / deposits.

LID) were also compared with the lead isotope ratio of the statuette *(fig. 14)*. Although the lead ore deposits of Laurion, Kythnos and Seriphos plot close to sample MA-112860, there is no clear match. In addition, these are mainly lead-silver ores, although small-scale copper production cannot be excluded. All other ore sources in Greece differ widely and are not plotted in the diagram.

Finally, the lead isotope ratio of the statuette was compared with an internal database, available at the Curt-Engelhorn-Zentrum Archäometrie, containing c. 6000 lead isotope ratios of artefact, slag and ore samples from Europe, the Middle East and Asia. Unfortunately no direct link could be drawn. Furthermore, a comparison with the ore deposits of Timna (Israel) and Feinan (Jordan) revealed clearly different lead isotope ratios (HAUPTMANN 2000).

To sum up, none of the compared ore deposits from Anatolia, Greece and Jordan are possible regions of origin, so that the question of provenance of this metal must remain open at present.

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## Conclusions

Although the discovery and investigation of the Šernai statuette resembles a detective story and the possibility that the statuette represents a forgery cannot be absolutely dismissed, we remain confident that the figurine is an authentic Bronze Age object. In particular, it is necessary to bear in mind that at the beginning of the 20th century such

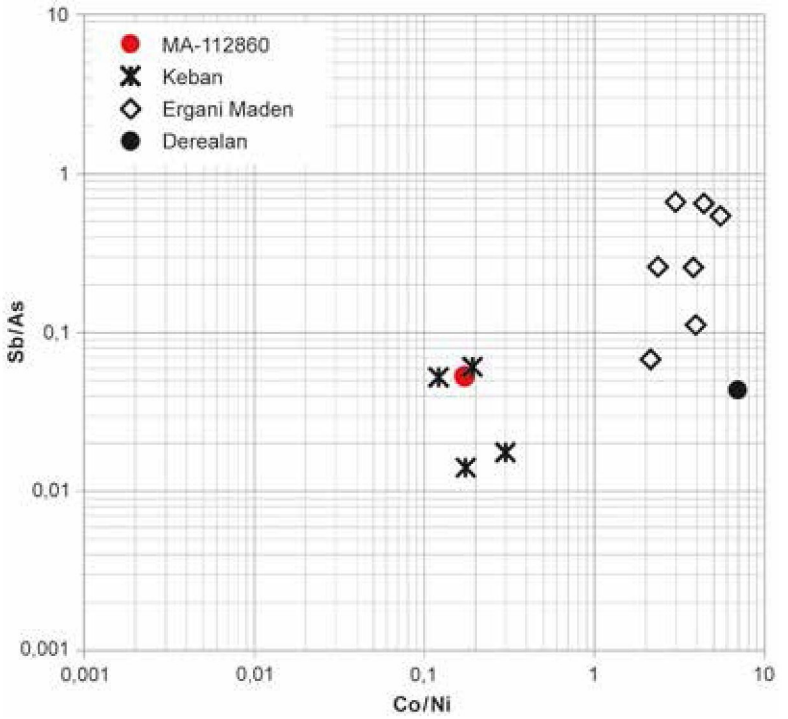


Fig. 13. Co/Ni vs. Sb/As ratios for sample MA-112860 and several Turkish copper ore deposits (Pernicka et al. 1984; Seeliger et al. 1985).

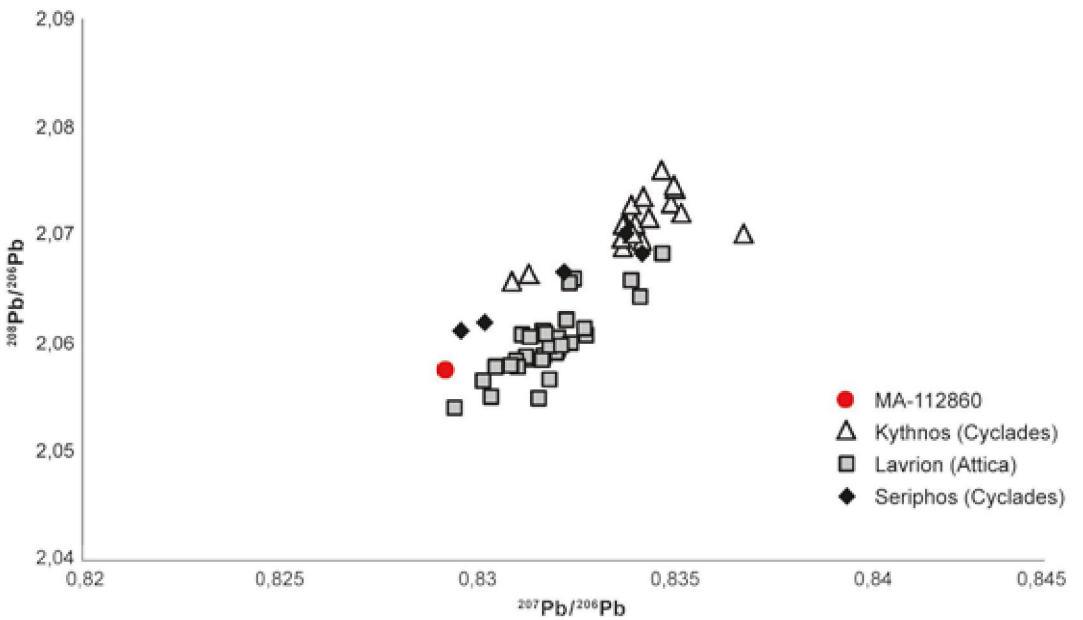


Fig. 14. $^{207/206}Pb$ vs. $^{208/206}Pb$ diagram for sample MA-112860 and Greek copper ore deposits (OXALID).

figurines were very rare in the archaeological material (still today only around one hundred examples from this period are known), making it difficult to believe that original statuettes were sought after and collected. The hypothesis that the figurine is a brass souvenir copy, as is one of the Caucasian figurines in Lithuanian National Museum, is refuted by the chemical composition of the object. As our results show, the statuette is made of rather pure tin bronze, which contains only arsenic as major impurity and there is no indication that the metal was produced in modern times. We believe that the statuette could derive from Syria or Anatolia and found its way to the Baltic in the Bronze Age, however, not directly, as some still believe. It is more likely that the statuette came to Scandinavia via communities which from the Early Bronze Age on were involved in intense relations with Atlantic Europe and the Mediterranean region, due to rich resources of Baltic amber in Jutland. In this case it is possible that the statuette could have reached Scandinavia directly from the Near East, at the time when the so-called biconical amber beads were popular, i. e. in the middle of the 14th century BC. It was during this period that iconographically very similar statuettes from Byblos, Ras Shamra and some other places in the Near East were produced. Regarding the origin of the ore used in the manufacture of the statuette, we state that it is yet not possible to determine the deposit, therefore the question of provenance of this metal must remain open for the time being. We suppose that the Šernai statuette was not solely an item traded for commercial reasons, but an artefact that gained symbolic and religious meaning during this process and was accepted by the locals and honourably sacrificed to the gods. The place of sacrifice was marked with a stone, recalling the ritual which took place here and, most importantly, the unusual deity from distant lands, which lay beneath it and perhaps aroused fear as well as esteem among the local community.

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**Zusammenfassung: Sein linker Fuß: Eine neue Untersuchung der orientalischen Figurine der Bronzezeit von Šernai (West-Litauen) und die Frage ihrer Authentizität**

Die Bronzestatuette aus Šernai ist einer der bemerkenswertesten Funde der Bronzezeit im östlichen Baltikum. Aufgrund des Verlusts der Statuette im 2. Weltkrieg wurden bislang Fragen nach ihrer Authentizität und ihres Ursprungs nur theoretisch erörtert. Nach der Wiederentdeckung eines Fußes der Figurine wurde es nun möglich, sie naturwissenschaftlich zu analysieren. Die Ergebnisse dieser Untersuchung werden in diesem Beitrag vorgelegt, zusammen mit Überlegungen zur Frage des Alters und Ursprungs der Statuette. Trotz Zweifel an den Umständen ihres Auftauchens in Litauen glauben die Autoren, dass dieser Fund auf der einen Seite enge Kontakte des Ostbaltikums mit Skandinavien und die Bedeutung skandinavischer Gesellschaften für Handels- und Austauschsysteme mit Mitteleuropa und dem Mittelmeerraum reflektiert und auf der anderen Seite die Integration des Ostbaltikums in die europäische sozioökonomische und rituelle Koiné in der Bronzezeit aufzeigt.

**Abstract: His left foot: A new investigation of the oriental Bronze Age figurine from Šernai (Western Lithuania) and the question of its authenticity**

The bronze statuette from Šernai is one of the most significant Bronze Age finds in the East Baltic region. Due to the loss of the statuette during World War II, questions regarding its authenticity and origin have been researched theoretically only. After the rediscovery of one of the figurine's feet it has been possible to analyse the statuette scientifically. The results of this investigation are presented in this paper, together with considerations concerning the question of the statuette's date and origin. Despite doubts about the circumstances of its appearance in Lithuania, the authors believe that this find reflects on the one hand close contacts of the East Baltic with Scandinavia and the significance of Scandinavian societies in trade and exchange systems with Central Europe and the Mediterranean, and on the other hand the integration of the East Baltic region within the European socio-economic and ritual koiné in the Bronze Age.

**Résumé: Son pied gauche: Un nouvel examen de la figurine orientale de Šernai (Lituanie occidentale) datée de l'âge du Bronze et la question de son authenticité**

La statuette de Šernai représente une des trouvailles les plus remarquables de l'âge du Bronze des régions baltes orientales. La question de l'authenticité et de l'origine de la statuette ne fut traitée jusqu'ici que théoriquement à cause de sa disparition durant la Seconde Guerre mondiale. La réapparition d'un pied de la figurine a permis de la soumettre à une analyse scientifique. Les résultats sont présentés dans cet article avec quelques réflexions sur l'âge et l'origine de la statuette. Malgré les doutes concernant les circonstances de sa découverte en Lituanie, les auteurs pensent que, d'une part, cet objet affiche des contacts étroits entre les régions baltes orientales et la Scandinavie, et reflète l'importance des sociétés scandinaves dans les systèmes commerciaux et d'échanges avec l'Europe centrale et la Méditerranée, et, d'autre part, qu'il révèle l'intégration des régions baltes orientales dans la koinè socio-économique et rituelle de l'âge du Bronze.

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References of figures:
*Fig. 1:* Čivilytė 2007, 1 (after Bezzenberger / Peiser 1909). – *Fig. 2:* Photo E. Duberow. – *Figs 3, 5:* Vytenis Podėnas. – *Fig. 4:* Photo M. Mödlinger. – *Fig. 6:* after Seeden 1980. – *Fig. 7:* Čivilytė 2013. – *Fig. 8:* after Kristiansen / Larsson 2005. – *Fig. 9:* Photo C. Plamp. – *Fig. 10:* Photo A. Čivilytė. – *Figs 11–14:* E. Duberow. – *Tab. 1–2:* E. Duberow.