MASTERS OF METALS IN THE CARPATHIAN BASIN (WORKSHOPS, PRODUCTION CENTRES AND FUNERARY MANIFESTATIONS IN THE EARLY AND MIDDLE LA TÈNE)

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Metallurgy and manufacturing activities from the Carpathian Basin in general are better documented mainly as concerning the late La Tène period, due to the archaeological excavations in a series of *oppida* (like those from Budapest-Gellérthegy, Velem-Szentvid, Bratislava and Devin) or the investigations from certain production centres situated in the areas surrounding the large fortified settlements. On the other hand, similar studies concerning the same aspects from the previous periods, more precisely about the metallurgy of the early and middle La Tène, have been rather neglected and the specialists tended to concentrate mainly on the investigation of the funerary manifestations. However, some archaeological data, older or more recent, allow the reconstruction of these activities in the Carpathian Basin during the mentioned period.

The concrete activity of the metallurgists from the Carpathian Basin can be identified mainly through the large quantities of finished objects recovered from various archaeological sites (cemeteries and settlements): weapons, tools, jewellery etc. A concentration of some types of artifacts in certain territories indicates the production and distribution areas belonging to different workshops. For example, the zoomorphic brooches of the early La Tène, specific to the Carpathian Basin, are concentrated in the middle Danube region (mainly in Transdanubia – fig. 1/1), therefore defining the area in which a group of artisans, specialised in this type of objects, was active. Similar artefacts have been also found in the nearby regions[1]. The same situation can be also observed a few generations later, in the same region, in the case of the brooches with pseudo-filigree decoration (brooches of Bölcske type – fig. 1/2)[2], which may suggest that the activity of this group of artisans continued during several decades in this area, the workshop being specialised in jewellery manufacturing.

The material traces (constructions, installations, remains of manufacturing, wasters etc) of the metallurgical workshops have been rarely found. This fact merely reflects the stage of research, since the archaeological excavations in the rural settlements are reduced in comparison with those in the cemeteries. Recent investigations from the northern Great Hungarian Plain, in the Tisa River region, led to the identification of some metallurgical activities in the rural

[1] BINDING 1993, 39, pl. 39; RUSTOIU 2005a, 60, fig. 7. Other examples at Viminacium (POPOVIĆ 1996, 109, fig. 12/3), Timişoara, in Banat (unpublished) and in the Veliko Târnovo region, in Bulgaria (MIRCHEVA 2007, 71, fig. 7).

[2] CRIŞAN/RUSTOIU/PALKÓ 1995, 38–39, list 2, fig. 5. Another example at Aszód: HELLEBRANDT 1999, 103, pl. I/2–4.

environment during the 3rd century BC (La Tène B2-C1). For example, a rural settlement consisting of seven half-sunken dwellings has been found at Polgár, on the bank of a former branch of the Tisa River. The inventory recovered from the dwellings consists mainly of ceramic fragments specific to the La Tène B2-C1 sub-phases[3]. Aside from them, a glass bead decorated with a double human mask has to be mentioned[4]. Similar pieces arrived in the Carpathian Basin from the Greek workshops in the Pontus region as early as the beginning of the La Tène B2 period, around 300 BC (as suggested by the piece recovered from a grave belonging to the first phase of the cemetery from Pişcolt[5]), being later copied locally, during the La Tène C1 sub-phase (the second half of the 3rd century BC)[6]. In a dwelling from Polgár it was also found a ceramic piece used for metallurgical activities (fig. 2/6). Initially the piece was identified as a crucible used by craftsmen working bronze objects[7]. Still, its details suggest that it is a blowing tube (tuyere) fixed on the mouth of the bellows, used for increasing the temperature in the furnaces or in the metallurgical hearths. The object has a cylindrical shape, with a diameter of 2.9 cm and a length of 5.8 cm. Its lower end is covered with vitrified slag due to the intense contact with the fire[8]. Similar tuyeres are attested from the prehistory onwards and were used during a long period, until the medieval time[9]. This piece from Polgár illustrates the activity of a metallurgist, who fulfilled, through its production, the demand of a small rural community and perhaps also of other nearby ones.

Two sites are relevant for understanding the detailed organization of the manufacturing activities during the early and middle La Tène, one from Hungary, in the northern Great Hungarian Plain, and another from Transcarpathian Ukraine. The first mentioned site is Sajópetri – Hosszú-dűlő and the second one is Mukačevo – Galliš-Lovačka.

At Sajópetri – Hosszú-dűlő it was investigated an archaeological site which concentrates various manufacturing activities. The entire area was organized in three sectors, each corresponding to a specific production. One of these sectors was designated for producing iron ingots out of blooms brought from another location (fig. 2/1). The second sector revealed some ceramic workshops (several kilns have been excavated), while the third sector was used by the craftsmen working with metals. They produced mainly weaponry and military equipment, as well as a series of accessories used by the warlike elites (according to the half-manufactured products and the wasters). The metallographic analyses of some samples of iron slag indicate that the ore came from the northern regions, rich in such resources. The iron ore was probably transported onto rafts, navigating downstream on Sajó and Bódva rivers. At the same time, some local resources might have been exploited even if these have a lower concentration of iron, which it would have been sufficient for the necessities of these workshops. The settlement from Sajópetri – Hosszú-dűlő illustrates a form of manufacturing activity which was diversified and specialised, in a well structured and organized area[10].

A similar situation was identified in the region around Mukačevo, on Galliš and Lovačka hills, a contact area between the La Tène cultural space and the local "Thracian" one. Older investigations revealed the traces of an intense metallurgical activity (workshops, tools, remains of iron and non-ferrous production etc. – fig. 3), the products being distributed over a

[3] SZABÓ ET AL. 2008.
[4] SZABÓ 2000, 65, fig. 4; SZABÓ ET AL. 2008, 218, fig. 15.
[5] NÉMETI 1988, 58–61, fig. 10.
[6] See on this subject RUSTOIU 2008, excursus 3 (with the bibliography).
[7] SZABÓ 2000, 60; RUSTOIU 2008, according to the older bibliography.
[8] SZABÓ ET AL. 2008, 196–201, fig. 11, 22/6.
[9] PLEINER 2000, 205–208, fig. 55.
[10] SZABÓ 2000; CZAJLIK 2000, 72–75; GUILLAUMET 2006, 89–90. See the recent monograph of this site: SZABÓ 2007.

wider area from the basin of upper Tisa River[11]. From the chronological point of view, these two production centres were contemporaneous. Both functioned during the 3rd century BC (La Tène B2-C1) and illustrate the concentration of the manufacturing activities in centres which supplied the rural settlements from a wider surrounding area. Their development was very probably conditioned by the access to resources, but also to a coherent network of rural settlements which used their output. This process of concentration of the manufacturing activities in a single economic centre anticipates the structural transformations which will appear a few generations later, together with the "industrial production" of the large fortified settlements (*oppida*)[12]. Although the evolution of the communities from the eastern Carpathian Basin witnessed a different historical destiny, since they have not managed to form *oppida*, like in Transdanubia, the production centres from Sajópetri – Hosszú-dűlő and Mukačevo – Galliš-Lovačka are contributing to the understanding of the processes which led to the genesis of this type of structure. Despite of the "traditional" view, according to which the settlements of the middle La Tène period were rather small and unspecialised, having limited connections with the Mediterranean area[13], a series of sites from Gallia (but also from other European zones), having a rural aspect, illustrate the concentration of certain manufacturing and commercial activities before the appearance of *oppida*[14]. At the same time, J. Collis pointed to the fact that various factors contributed to the genesis of large *oppida* and as a consequence, a generally valid and unitary model cannot be drawn. For example, the *oppidum* from Manching is the result of a long evolution of a rural settlement which was established over a century before. In other situations, there is no connection with previous settlements. Gerritsen and Roymans observed that although the notion of *oppidum* plays an important role in the studies concerning the societies of the late Iron Age (as defining the political or economic centres etc), sometimes the archaeology revealed the existence of certain economic centres which more likely have the characteristics of a large rural settlement. As a consequence, the Dutch researchers suggested the use of the term "central places" to describe all kind of locations with a central function, used by territorial supra-communities. A crucial role of these "centres" consisted in the promotion of social cohesion, of the individual and collective identity. At the same time, this type of centres may have included not only rural or proto-urban habitations, but also communal cult places (sanctuaries, sacred groves, etc.)[15]. This general and comprehensive concept offers a better understanding of the situations similar to those identified in the Great Hungarian Plain.

The funerary manifestation of the metallurgists and generally of the artisans of the Second Iron Age is rather discreet. The number of graves containing tools is small, but those already identified are relevant for understanding the role of the metallurgists in their communities. For example, at Sankt Georgen am Steinfeld, in Lower Austria, it was found an inhumation grave with an inventory consisting of a set of blacksmith tools: a pair of tongs, a hammer and a file. Together with them were an iron scissors and a brooch of middle La Tène type[16]. According to the anthropological analysis of the skeleton, the deceased was a mature man, having the age of 50–55 years and a height of 1.75 m[17].

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[11] KOBAL 1995–1996, 144–159.

[12] See, amongst others, MEYLAN/PERRIN/SCHÖNFELDER 2002, who underline the "qualitative" differences between the artisans of the 6th – 3rd centuries BC (artisans of the "court" or independent artists-artisans) and those from the "urban" environment of the late La Tène period (specialised craftsmen grouped into manufacturing quarters).

[13] COLLIS 1995, 75.

[14] BUCHSENSCHUTZ 1995, 60; 2006, 62; KAENEL 2006, 31.

[15] GERRITSEN/ROYMANS 2006, 254–255.

[16] TAUS 1963.

[17] JUNGWIRTH 1963.

In the cemetery from Au am Leithagebirge – "Kleine Hutweide", near the Austrian – Hungarian frontier, it was found a cremation grave belonging to an artisan (fig. 3). Its inventory is very rich and consists, aside from the blacksmith tools (a hammer, an anvil and two chisels, all made of iron), of a surprisingly large number of weapons: three swords (one ritually bent), four spear heads (two also ritually bent) and a fighting knife. Some other iron artefacts (a scissors, two loops, a "handcuff" and a brooch) and a set of ceramic vessels have been found together with them [18].

Both above-mentioned graves have been dated to the middle La Tène period[19]. Their inventories suggest, through the offering of tools specific to a certain craft, the intention of ritually underlining the different status of the deceased within their communities. The presence of weapons in the grave from Au am Leithagebirge – "Kleine Hutweide" indicates the superior status of the artisan, comparable to that of the warlike elites[20].

The use of different ritual elements in the burial in comparison with those usually involved in the funerary assemblage of other individuals from the same community is also illustrated by a grave from the cemetery at Belgrade-Karaburma. More precisely, a pair of blacksmith tongs (fig. 2/3) and another iron object with an unknown utilisation, but which may have been also used in metallurgical activities (fig. 2/2) have been found in the grave no. 104, of cremation in the pit[21]. Given that other artefacts were not placed in the pit, the burial has not been precisely ascribed to one of the chronological phases of the cemetery[22]. Generally, the funerary inventories from Belgrade-Karaburma were constituted according to some well defined ritual rules. The fact that this grave does not fit in the general pattern which characterise the burials from this cemetery may confirm the existence of a differentiated symbolic attitude towards this deceased, nevertheless because of his trade.

An unpublished burial from Fântânele – Dealul Popii also demonstrates the mobility of the metallurgical craftsmen[23]. This is a cremation grave with the cinerary remains placed into an oval pit (grave no. 34/1970). The funerary inventory consists of four ceramic vessels (one of them having a ceramic lamp inside), an iron brooch damaged by fire, a blacksmith hammer and a nail or spike made of iron. Its composition is relevant for interpreting the character and the signification of this burial. Three of the ceramic vessels are hand-made, while the fourth one, a bi-truncated bowl, is wheel-made.

The iron brooch of early La Tène scheme belongs to a type specific to the inner Carpathian area during the end of the La Tène B2 sub-phase and the transition period towards

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[18] NEBEHAY 1973, 14–16, pl. 9–13.

[19] NEBEHAY 1993, 65–66, 83, 93, pl. 4–6.

[20] The ritual bending of some pieces certifies the fact that these weapons belonged to the deceased. The large number of swords may suggest that perhaps some of them were finished products made by this craftsman and were placed in his grave due to an unknown reason.

[21] TODOROVIĆ 1972, 33, 81–82, pl. 32.

[22] BOŽIČ 1981 and then GUŠTIN 1984 clearly defined the chronological phases of the cemetery from Belgrade-Karaburma, which further helped identifying the La Tène horizons in the Scordiscian area. Thus the first horizon (Belgrade 1) belongs to the La Tène B2, the Belgrade 2 horizon characterise the La Tène C1, and Belgrade 3 horizon is contemporaneous with the late La Tène (D). BOŽIČ 1981, 329, 335, note 103, observed that in the graves belonging to the Belgrade 3 chronological horizon the elements specific to the early imperial period are missing, although these are present in later contexts. Amongst the burials containing Roman artefacts in their inventories D. BOŽIČ enumerates the graves no. 50 and 56 from the cemetery at Belgrade-Karaburma. In my opinion (see RUSTOIU 2005b, 81, note 222), other graves can be added: no. 8, 9, 113, 145, 146 etc. (TODOROVIĆ 1972, pl. 2, 36–37). These burials define the Belgrade 4 chronological horizon, generally corresponding to the Augustan – Tiberian period and perhaps also to the following decades. This horizon is characterised by the presence of Roman artefacts (bronze and ceramic vessels or jewelleries) together with the local pottery and metal objects.

[23] See, amongst others, RUSTOIU 1996, 62; 2002, 66–68.

the La Tène C1 sub-phase (around 275–225 BC)[24], a chronological interval in which this grave can be also placed.

The iron hammer (fig. 2/4), of small dimensions (its length is of 7.8 cm), was used in metallurgical activities, either for finer blacksmith techniques (punching, chiselling etc), or for jewellery manufacturing. The morphological repertoire of the hammers used by metallurgical workshops is rather large, illustrating a wide variety of operations involved in the technological processes[25]. The piece from the grave at Fântânele, of simpler shape, has both morphological and dimensional analogies on a wider geographic area and between extended chronological limits. Similar items, contemporaneous with the hammer from Fântânele, have been discovered in the grave from Sankt Georgen am Steinfeld[26] and at Mukačevo – Galliš-Lovačka[27], but also in later contexts and archaeological sites at Manching[28], Caceres el Viejo[29] or Piatra Craivii in pre-Roman Dacia[30].

The lamp (fig. 2/5) was hand-made, using a coarse brown ceramic fabric. The piece imitates a Greek wheel-made prototype, the so-called open lamp. Various types of Greek lamps, as well as local hand-made imitations have been found outside the Carpathians and in northern Balkans, in the area influenced by the Hellenistic centres from eastern Mediterranean or Pontus[31]. In these regions, the daily customs and practices of the Greeks have been often emulated by the local population, especially when these two ethnical groups cohabited (for example at Seuthopolis). The presence of this type of lamp in the Celtic La Tène environment from Transylvania, and indeed in the entire Carpathian Basin, in which up to my knowledge it is the sole example, is outstanding. The use of this ceramic device requires a certain familiarization with this modality of artificial lighting, which could not have been acquired within the community from Fântânele, but in a place in which these lamps were common objects. Given these details and taking into consideration the entire inventory of this grave, it should not be excluded that the artisan buried within the community from Fântânele might have come from the regions outside the Carpathians, perhaps from the eastern ones, or at least he might have lived and worked there for a while. A series of finds from Moldavia attest the connections across the Carpathians, amongst others also in what the metallurgy is concerned.

For example, a small deposit of flattened iron bars was found in the 19th century at Oniceni (Neamț County) (fig. 5/1–4). Only 19 pieces have been preserved, having an almost triangular shape, with the upper extremities bent to form a sort of socket. Some of these sockets still preserve wooden remains inside. The length of these bars varies between 35 and 45 cm, but some pieces have between 26 and 35 cm. Due to their shape, these artefacts have been considered to be ploughshares of Celtic type[32].

Another deposit has been found at Negri (Bacău County) (fig. 5/5–9). On this occasion, the details concerning the context of discovery have been recorded. An impressive number of 315 iron bars was carefully placed into a circular pit, on two layers. Some of the bars

[24] CRIŞAN/RUSTOIU/PALKÓ 1995, 32–33, 38 (list of discoveries – 1), fig. 4 (distribution map).

[25] PLEINER 2006, 76–81.

[26] TAUS 1963, 14, fig. 2.

[27] KOBAL 1995–1996, 146, fig. 3/3.

[28] JACOBI 1974, 5–7, no. 1–2, 4 (the last piece has a length of 6.5 cm), pl. 1/4.

[29] PLEINER 2006, 77–78, fig. 30/3.

[30] RUSTOIU 1996, fig. 23/2; 2000, 234–235, fig. 2/VI; 2002, 85, fig. 48/VI.

[31] ČIČIKOVA 1984, 78–79, fig. 3, 40, pl. 20–22 (Seuthopolis); BOUZEK 2005, 97, fig. 7–9 (Plovdiv: the cremation grave of an Hellenized "Celtic" warrior (?) includes two lamps and many Greek vessels, together with the local ones, in the inventory); VANČUGOV ET AL. 1999, 143–149, fig. 42/9 (Greek lamp found in an indigenous settlement at Orlovka-Cartal (Ukraine) near the mouths of the Danube; KULL 1997, fig. 27a/14–15 (Vrača – Mogilanska mogila, grave no. 2) etc.

[32] TEODOR 1983; BABEŞ 1993, 53, correctly identifies the use of the iron bars from the Moldavian deposits.

were assembled one to another, forming pairs, and the total weight is of 273 kg. Aside from these bars, similar to those found at Oniceni, 22 bars resembling the blade of a sword and 16 elements of sword belts of La Tène type have been also recovered[33] (fig. 5/8–9). The later artefacts belong to a type specific to the La Tène C1 sub-phase (Ger. – Panzergürtel, Fr. – gourmettes)[34], which was widespread in the Carpathian Basin during the second half of the 3rd century BC and the beginning of the 2nd century BC[35]. These belt elements are dating the entire deposit, as well as that one from Oniceni (due to the morphological similarity of the iron bars recovered from both sites), during the mentioned period. Most of the bars having the shape of a "ploughshare" have the length of 49–50 cm, but some smaller pieces have been also found, with a length of about 30 cm. The bars having the shape of a sword blade have the length between 47 and 58 cm and a width of about 2cm.

The functionality, significance and provenience of the artefacts from the mentioned deposits discovered in Moldavia are still a matter of debate. Pliny (*Nat. Hist*. XXXIV, 41) remarked the purity of the iron ores from Noricum. In the 1st century BC, at Magdalensberg functioned one of the most important metallurgical centres, which distributed this iron in Italy and even in northern Africa, as ingots or as pieces shaped as loops (*anuli*), hooks (*unci*), axes (*secures*) or anvils (*incudes*)[36]. Caesar (*B. G.* V, 12) also observed, during his campaign in Britannia, that the local population "use copper, gold coins or iron bars (*taleae ferreae*) of a certain weight as currency". It is well-known that iron ingots or bars having various shapes have been found in many European regions, mainly in deposits, but also in settlements. These are known from the end of the First Iron Age and during the entire La Tène period. Some pieces have the shape of a double pyramid, while others are close to the morphology of a finished object, like a sword blade or a ploughshare. Although such objects might have been used as means of exchange ("currency bars"), these were mainly raw materials for forges. From this point of view, it is significant that in the *oppidum* from Manching have been found iron bars of different shapes, illustrating the variety of sources for metal supplying. Many iron bars discovered in the European Celtic environment are morphologically close to the finds from Moldavia. For example, this type of pieces has been found in England, resembling the ploughshare, with the ends bent around a wooden stake, similar to those from Oniceni. R. Pleiner considers that, by bending the flattened end of these bars in a socket-like shape, the malleability of the metal was tested and the eventual appearance of some fissures could have been observed if the material was of low quality[37].

Therefore, the deposits from Oniceni and Negri contained iron bars which might have been destined to some forges. The presence of the sword chains within the deposit from Negri indicates that at least some of the ingots might have been used for making similar objects. From the typological point of view, the pieces from Moldavia have analogies in the areas inhabited by Celtic and Germanic communities from Central and Western Europe. In this case, the iron bars might have been brought in Moldavia from the Carpathian Basin as raw material for the local workshops. It is also important to mention that both deposits are dated before the

[33] ANTONESCU 1968. The deposit from Negri was never completely published therefore other researchers give different figures concerning the inventory. Thus BABEŞ 1993, p. 53 lists 314 bars having the shape of "ploughshare" or "spear head", as well as 27 long segments and 19 short segments belonging to some sword chains. At the same time, although M. Babeş correctly observes the presence of the sword chains which dates the deposit in the La Tène C1 sub-phase, in another chapter the finds from Oniceni and Negri are dated in the La Tène C2-D sub-phases! (BABEŞ 1993, 126, fig. 31).

[34] RAPIN 1987, 537–538, fig. 9/8; SCHÖNFELDER 1998, 86–87, fig. 6.

[35] ZIRRA 1974, 147–148, fig. 6/5–7; GUŠTIN 1984, 339, Beilage 1/34; POPOVIĆ 1994, 54, map 1; HELLEBRANDT 1999, pl. XI/11, XX/6, LVIII/1, 9, LXVI/1, XC/2.

[36] PLEINER 2006, 154.

[37] PLEINER 2006, 23–37 (with bibliography).

beginning of the Poieneşti-Lukaševka horizon. The production of some La Tène weaponry to the east of the Carpathians may suggests that, before the *Bastarni* colonization of the Central Moldavia, some Celtic groups from the west or from southern Poland may have come to this region. Some years ago, M. Babeş remarked the presence in Moldavia of certain discoveries which precede the appearance of the Poieneşti-Lukaševka culture (included in the Glăvăneşti – Bovšiv cultural horizon) and have patterns specific to the La Tène cultural environment (although mixed with local elements)[38]. As concerning the deposits containing a large number of ingots, R. Pleiner suggested that the deliberate discarding of massive quantities of iron (some deposits weighting thousands of kilograms) may have connections with certain ritual practices belonging to a world strongly dominated by beliefs and superstitions, an interpretation which is also supported by similar artefacts placed into the rivers[39].

Returning to the burial of the artisan from Fântânele, it has to be underlined that the discoveries from Moldavia illustrate a series of connections between the territories inside and outside the Carpathians (fig. 6). Craftsmen (or merchants?) from the La Tène cultural environment transported raw materials for some workshops from the east of the Carpathians. It should not be excluded the possibility that some metallurgists might have travelled in the opposite direction, finding better conditions for their activities within some communities from Transylvania. The grave from Fântânele may have belonged to one of these artisans, given its specific funerary inventory, which differs from those of the local people. This discovery is a rare example which archaeologically demonstrates the mobility of the craftsmen.

In conclusion, it has to be noted that, despite of the rural character of the early and middle La Tène civilization in the Carpathian Basin, sometimes the manufacturing activities were concentrated in certain economic centres, which supplied the communities from a wider area with various goods. Amongst these artisans were also metallurgists and the quantity and quality of their production are illustrated by the large number of metallic objects recovered from settlements, but mainly from cemeteries.

The metallurgists also constituted a well defined group within the Celtic communities, having a distinct identity in comparison with that of other social groups. This fact is demonstrated by the differentiated funerary rituals which characterise their burials from several cemeteries. On the other hand, the metallurgists developed a certain form of internal hierarchy, as the presence or indeed the absence of weapons from their graves suggest. Some of them had a higher status and rank within their communities, while others were bound to an inferior one.

Aside from that, the nature of their trade determined a certain level of mobility of these artisans, who had to find customers for their products. In some cases, this mobility brought them in distant regions, far from their communities of origin. The discoveries from Moldavia and the grave of the artisan from the cemetery at Fântânele support with archaeological evidence this idea.

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[38] BABEŞ 1985, 193, note 10; 1993, 125–127.
[39] PLEINER 2006, 30.

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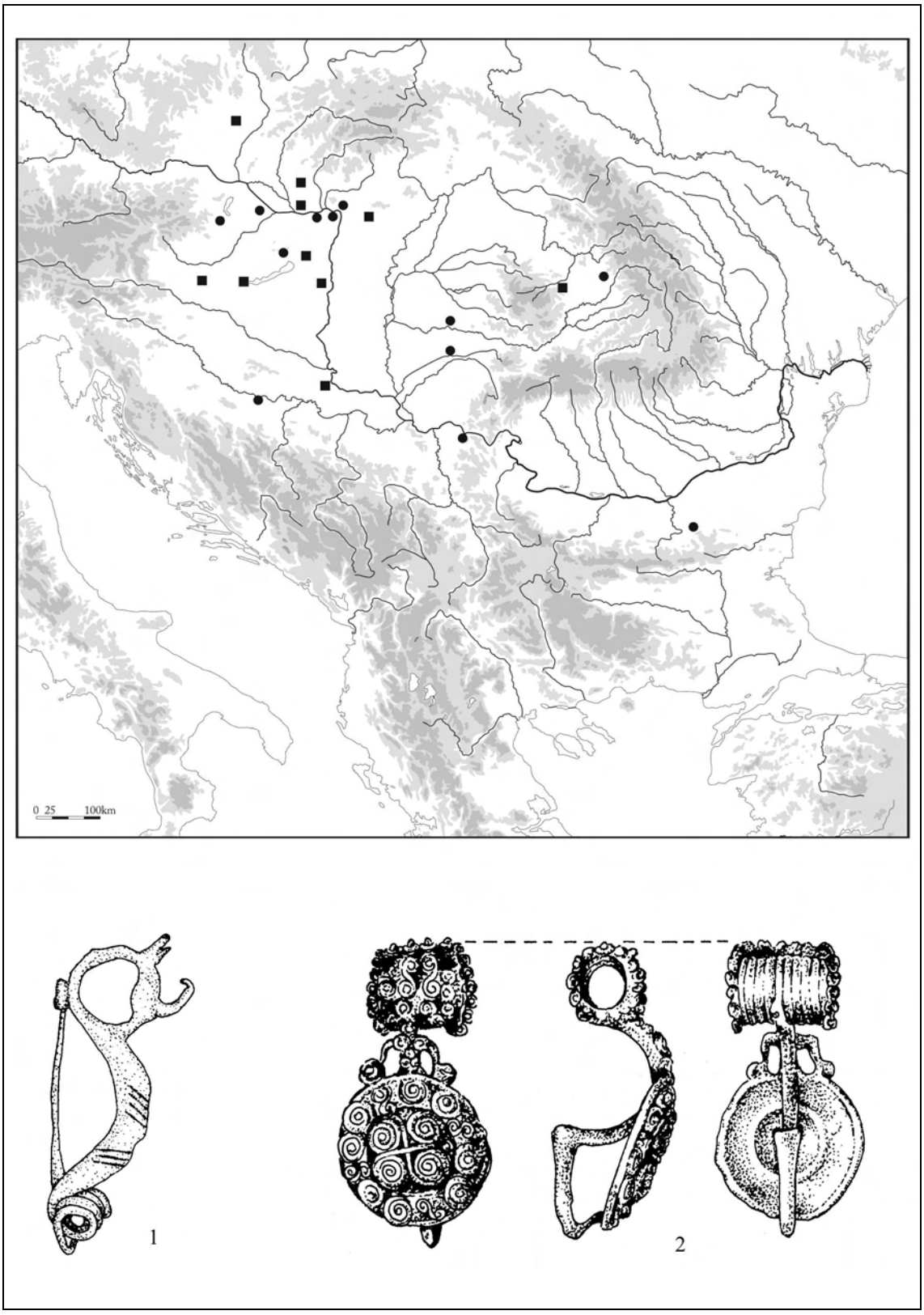

Fig. 1 Distribution map of the zoomorphic brooches (black dots) and of the brooches of Bölcske type (black squares). 1 zoomorphic brooch from Pecica; 2 brooch of Bölcske type from Pruniş (see the notes 1–2).

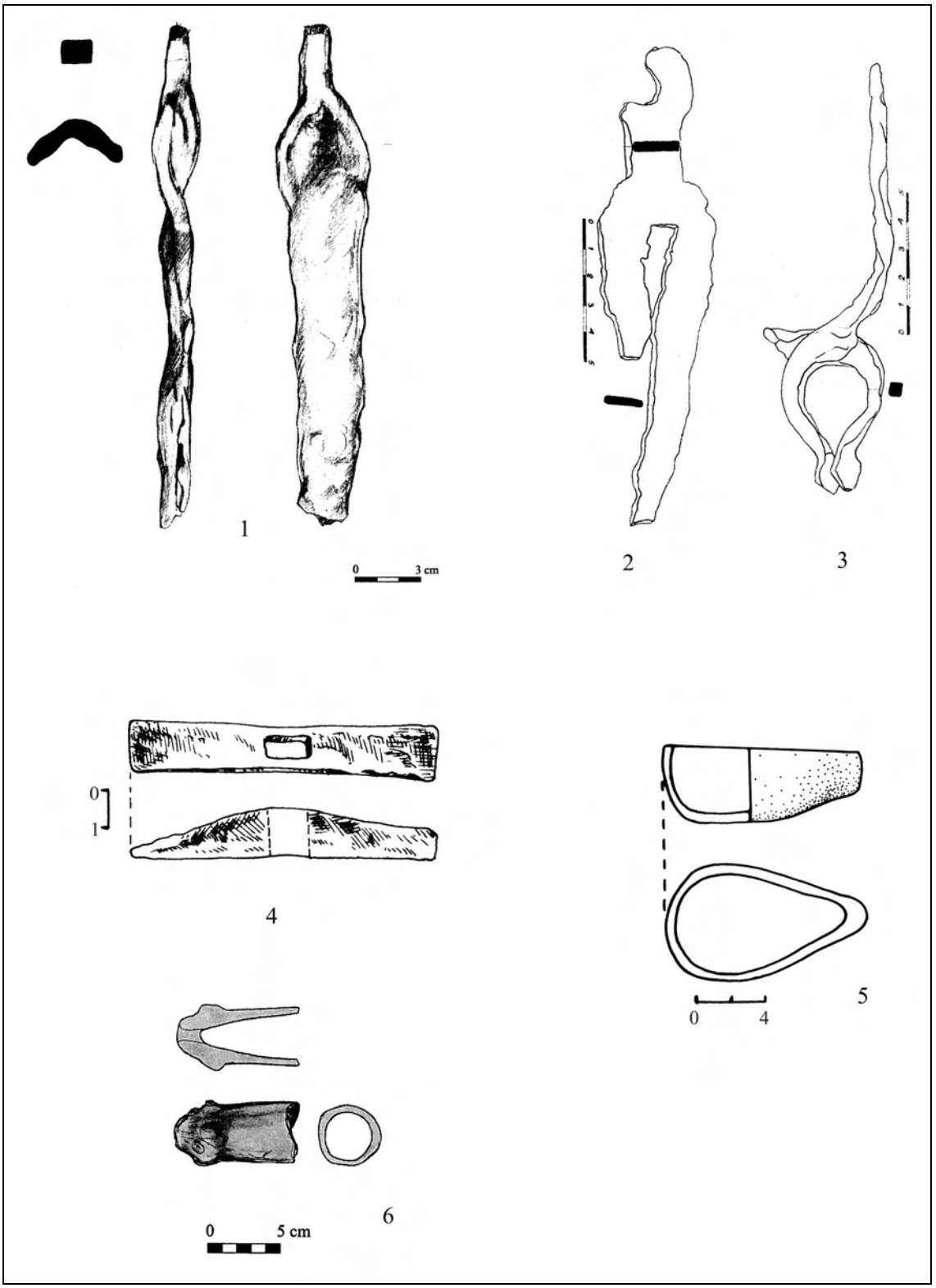

Fig. 2 1 Iron bar from the metallurgical workshop at Sajópetri Hosszú-dűlő (after SZABÓ 2007); 2–3 iron tools from the grave of a metallurgist from Belgrade Karaburma (after TODOROVIĆ 1972); 4–5 iron hammer and ceramic lamp from the grave of a metallurgist from Fântânele Dealul Popii; 6 tuyere from Polgár (after SZABÓ et al. 2008).

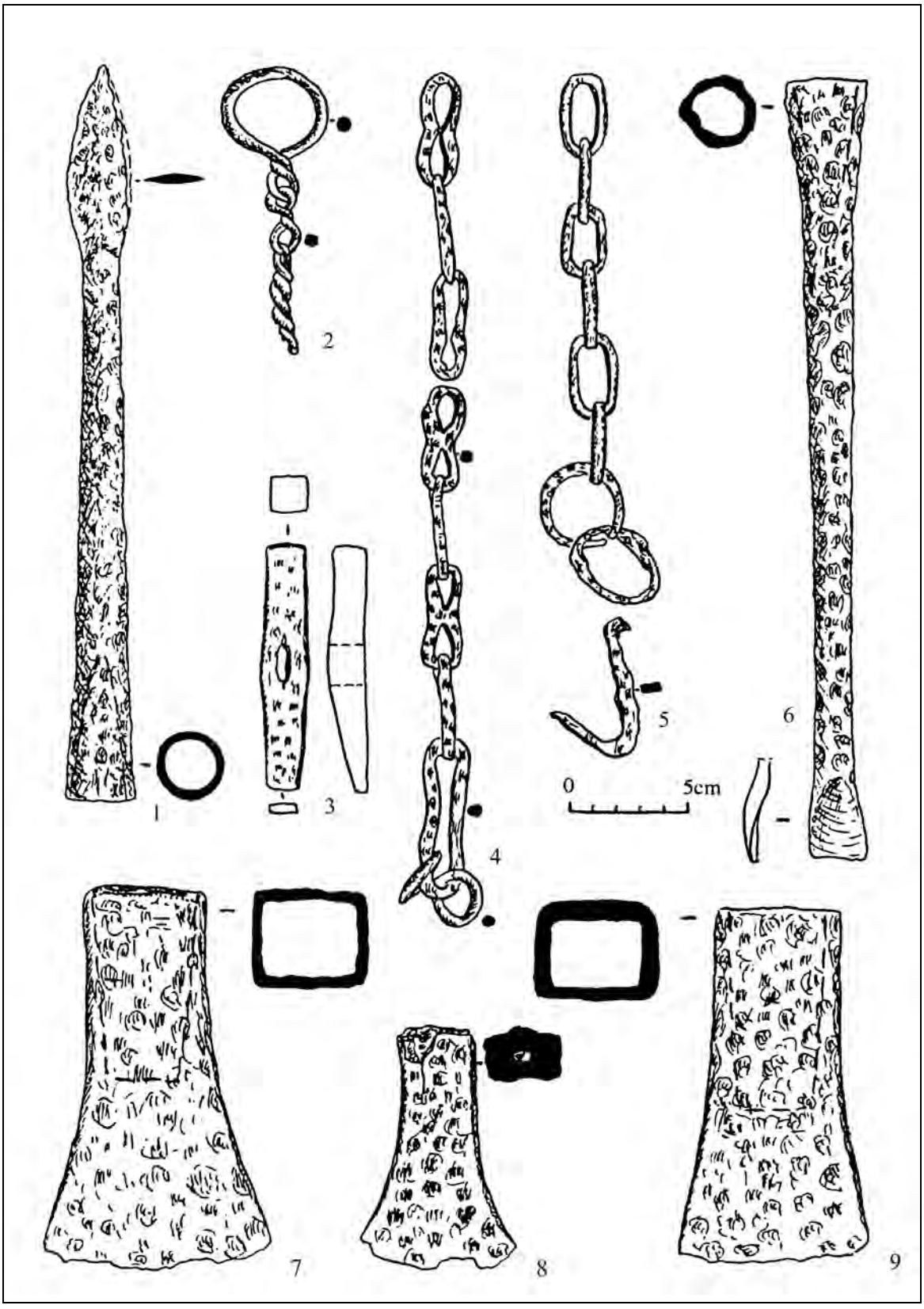

Fig. 3 The inventory of the G 66 structure from Mukačevo Galliš, containing a hammer used in metallurgy (3) and finished objects (after KOBAL 1995–1996).

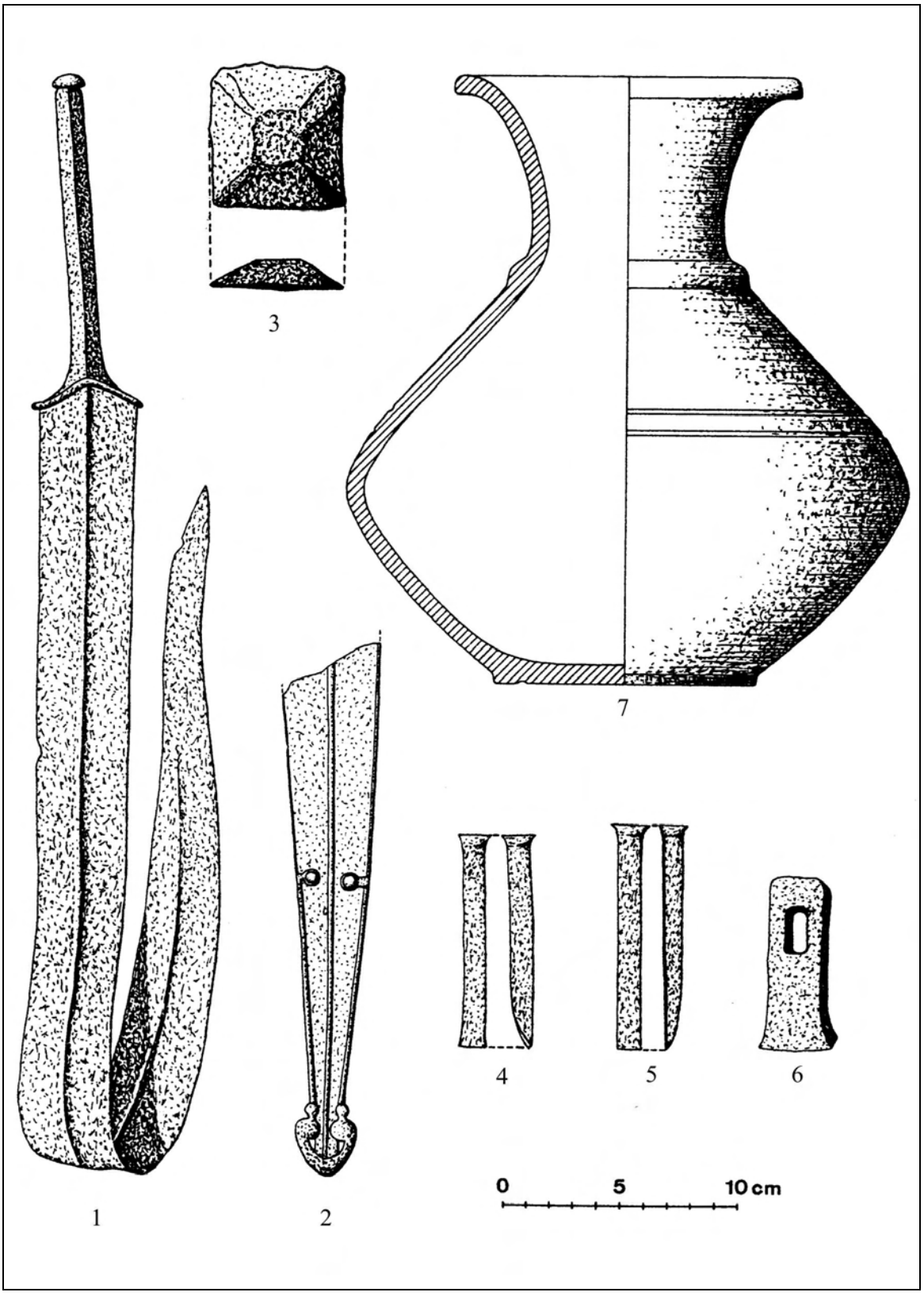

Fig. 4 Selected inventory from the grave containing metallurgical tools (3–6) from Au am Leithagebirge "Kleine Hutweide" (after NEBEHAY 1973).

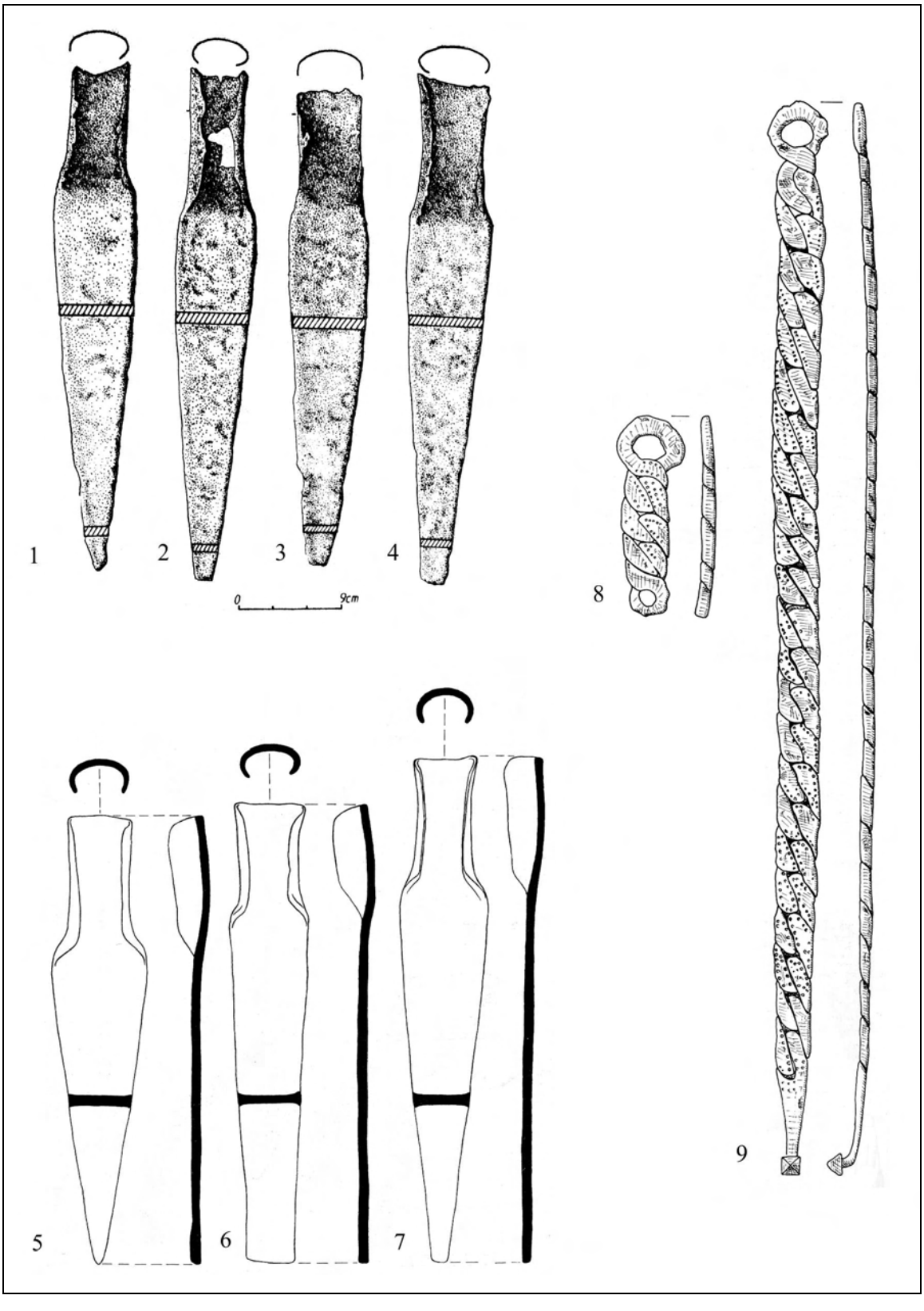

Fig. 5 Iron bars (1–7) and a sword chain (8–9) from Oniceni (1–4) and Negri (5–9) (after TEODOR 1983 (1–4) and BABEŞ 1993 (5–9).