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ARCHAEOLOGICAL AND ANTHROPOLOGICAL REASSESSMENTS OF THE GRAVE WITH A CERAMIC RATTLE FROM FÂNTÂNELE-DÂMBU POPII*

Aurel Rustoiu[1], Szilárd Sándor Gál[2]

Abstract: *Grave no. 1 from Fântânele-Dâmbu Popii, containing a ceramic rattle in its inventory, is one of the few unearthed in this cemetery in which a series of particular magical practices are attested alongside more common elements of the funerary rite and ritual. The anthropological analysis of the cremated human remains has shown that the burial belonged to a woman aged over 20 years. The analysis of the contexts of discovery of other ceramic rattles from Late Iron Age Europe, as well as several historical and ethnographic analogies, suggest that the rattles were frequently included among the instruments used by the "masters" of magic and witchcraft. In the case of the ceramic rattle from Fântânele-Dâmbu Popii, on the basis of its context of discovery and the existing analogies, it can be presumed that it was used in an apotropaic practice to repel with its sound the menacing supernatural beings which supposedly tormented the deceased while alive and also on her way to the otherworld.*

Keywords: *La Tène, cemeteries, Transylvania, rattles, magic and witchcraft, Fântânele-Dâmbu Popii.*

1. Introduction

Grave no. 1 from Fântânele-Dâmbu Popii in Transylvania whose inventory includes a ceramic rattle among other artefacts has recently been discussed from the functional viewpoint[3]. On that occasion it has been noted that, in general, ceramic rattles discovered in the European LT environment performed various functions and were used in different ways. In funerary contexts, they were usually found in graves without weapons, many belonging to children, so they were commonly interpreted as toys. However, some of these objects come from burials belonging to adult women. For example, in the Iberian Peninsula such rattles were mainly discovered in funerary contexts. Consequently, it was supposed that they were part of the funerary rituals and probably facilitated the safe passage of the deceased into the otherworld[4]. At the same time, in some areas inhabited by Thracian populations, such rattles were included in specific toolkits which were used in magical practices or witchcraft.

The anthropological analysis of the cremated bones recovered from this grave provides

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[3] RUSTOIU/BERECKI 2015.

[4] SANZ MINGUEZ ET AL. 2013, 275.

new details regarding the identity of the deceased and also allows a more detailed discussion about the function of the ceramic rattle from Fântânele-Dâmbu Popii [A. R.].

2. The grave, its inventory and dating

Cremation grave no. 1 was found in 1969; the burial pit had a depth of 0.5 m and the cremated human remains were laid on the bottom (Fig. 1/1). The funerary inventory consisted of five offering vessels (of which only three were recovered – Fig. 1/4–6), four of the LT type being wheel-made (a large bitronconical pot, a medium-sized one and two bowls), whereas the fifth (a bowl with inverted rim) belongs to the local ceramic repertoire, being hand-made (Fig. 1/6). The pile of cremated bones also contained three iron brooches of the Dux type. Two of them formed a pair due to their similar size and shape (Fig. 1/7–8); both are 8.7 cm long. The third brooch, which was larger, is now lost. Two kitchen knives made of iron (Fig. 1/2–3) and a ceramic rattle were also found in the grave.

The brooches have analogies in cemeteries from the Carpathian Basin. J. Bujna included similar artefacts into a type dated in south-western Slovakia to the LT B1[5]. In the cemetery at Mannersdorf, in Lower Austria, these brooches were found in some graves dated to the LT B1 and also in others dated to the LT B2a[6]. The finds from Fântânele-Dâmbu Popii can be dated, according to the analogies and the general chronology of the cemetery, to the LT B2a.

The iron knives belong to a type that is frequently encountered in cemeteries from the eastern Carpathian Basin, accompanying the meat offerings in graves. Among the numerous analogies, those from the cemetery at Ludas, in north-eastern Hungary, can be mentioned[7].

The egg-shaped rattle was hand-made of fine clay. It was fired at relatively low temperature in an oxidised atmosphere, so the fabric is reddish on the outside and brown on the inside. The top of the rattle was perforated to allow the insertion of 24 small balls made of fired clay and resembling cereal grains. The perforation was closed with a small conical stopper made of fired clay. On the outside the rattle was decorated with registers of small incised dots longitudinally interrupted by undecorated registers, which were delimited by incised lines. The object has a height of 5.5 cm and the maximum diameter of 4.6 cm. (Fig. 2–3).

Regarding the ceramic inventory, as already mentioned elsewhere[8], the association of wheel-made forms of the LT type with hand-made vessels of the local type points to the cohabitation of the Celtic colonists with the indigenous populations. At the same time, their presence indicates a possible hybridization of the culinary practices, which is an important cultural marker of the new identity constructs of the communities from Transylvania at the beginning of the Late Iron Age. At Fântânele-Dâmbu Popii, the hand-made vessels appear in funerary inventories from the earlier phases of the cemetery, but are absent from those belonging to the LT C1 phase.

Taking into consideration the general dating of the artefacts from the inventory of grave no. 1, and in particular the brooches' chronology, the burial can be dated to the LT B2a sub-phase, corresponding to the last third of the 4th century and the beginning of the 3rd century BC.

[5] BUJNA 2003, 65, type B1-c, fig. 36.
[6] RAMSL 2011, 142–143, fig. 113/218–1, 114/209–5c.
[7] SZABÓ ET AL. 2012, fig. 175, 177.
[8] RUSTOIU 2008; RUSTOIU 2014; RUSTOIU/BERECKI 2016.

3. Bio-archaeological analysis of the human remains

3.1. Material and methods

The cremated human osteological remains are poorly preserved, though several cranial fragments, diaphysis parts and epiphysis ends of the long bones were found useful for a morphological analysis. The morpho-taxonomical investigation could allow the gender determination[9], age estimation (through the analysis of diaphysis parts and epiphysis ends, and cranial vault sutures),[10] and a paleo-pathological examination[11].

For the morphological analysis of the cremated bones, the examination of the burnt surface was first carried out[12], followed by the weighting of the recovered fragments (Tab. 1)[13], the examination of the colour of the cremated bones (Tab. 2)[14] and finally, the identification of skeletal parts. At this stage, the most challenging part of the analysis was the determination of the gender and the estimation of the age of the deceased.

3.2. Morpho-taxonomical analysis of the cremated human remains

The recovered bone fragments weighted 113 g. The identified heating phase of the human remains is Phase 3 (525–645 C°). The bones' length varies between 2 and 38mm. In total were identified 102 bone fragments (leaving aside the powder and bones under 2 mm). The bones show a variety of colours ranging from white-blue to blue and grey. A significant part of the skeleton is missing, so only fragments of the mandible (the right branch of the mandible), small fragments from the vault (the cortical layer is 2–3 mm thick), distal epiphysis end of a humerus, proximal/superior epiphysis end of a radius, and fragments from the diaphysis part of a fibula could be identified.

3.3. Gender determination: the dimensions and characteristics of the recovered bones indicate the presence of a female deceased.

3.4. Age estimation: the dimensions of the bones and the ossification (synostosis) of the ectocranial and endocranial sutures show the characteristics of a young adult person (Adultus, over 20 years old).

3.5. Summary

It can be therefore concluded that the individual was a female who died at an early age (at over 20 years old, according to the cranial sutures fusion). Because significant parts of the skeleton are missing, notably the teeth, nothing can be said about the health and lifestyle of the deceased. There are also questions regarding the degree of recovery of the cremated bones either at the time of the funerals or later, during the archaeological excavation. The presence of bones coming from different parts of the skeleton seems to suggest that only some of the cremated human remains were collected from the cremation place before being laid into the burial pit and this could be a specific funerary practice of the local community.

The analysis of the combustion temperature indicates that the corpse was burned on open fire and the skeleton parts burned down very fast (only fragments from the epiphysis ends could be observed). The fragmentation and distortion of the cremated bones were probably

[9] DOKLADAL 1970.
[10] DOKLADAL 1970; MEINDL/LOVEJOY 1985.
[11] MAYS 1998.
[12] SHIPMAN ET AL. 1984.
[13] TROTTER/HIXON 1974.
[14] BONUCCI/GRAZIANI 1975; SHIPMAN ET AL. 1984.

caused by the rapid vaporisation during the incineration process, while trauma signs are missing [Sz. S. G.].

4. Comments regarding the function of the ceramic rattle

Taking into consideration the results of the anthropological analysis presented above, it is quite clear that the burial belonged to a woman who was well past childhood age when she died. Accordingly, the ceramic rattle from the funerary inventory cannot be identified as a toy. The presence of rattles in funerary contexts was previously documented in other European areas during the Late Iron Age, as already mentioned in the initial publication of the find. Among them, the examples from the cemeteries at Bucsu (Hungary)[15] and Évreux (France)[16] were found in graves belonging to adults, probably women (Fig. 4/1). In a double burial from Dietzenbach (Germany), one ceramic rattle was associated with the cremated remains of a women aged 22–30 years and a child (Infans I), while in another grave a similar object was found together with the cremated remains of another Infans I[17]. Other ceramic rattles were found in child burials at Schirrheinerweg (France)[18] and Münsingen (Switzerland)[19] (Fig. 4/2). However, in many other cemeteries investigated in Europe the gender and age of the deceased buried with this kind of artefacts were not determined[20].

A series of discoveries from the vicinity of Transylvania, to the south and east of the Carpathians, are relevant for the identification of the function of these artefacts. For example, the finds from Moldavia were usually included in some toolkits used in magical practices or witchcraft[21]. Such toolkits come from the settlements at Hanska-Toloacă, in the Republic of Moldova (Fig. 5/1), and Buneşti-Avereşti, in eastern Romania (Fig. 5/2), both being dated to the 4th–3rd centuries BC. Another magical toolkit was found in the settlement at Poiana (Galaţi County, Romania), being dated to the 2nd–1st centuries BC (Fig. 5/4). One rattle was included into a magical toolkit which was recently discovered in the Getic cemetery at Zimnicea, in southern Romania (Fig. 5/3). It is less certain whether this toolkit was part of the funerary inventory of a cremation burial (as in the case of other previous discoveries from the same cemetery – see below) or it was only an offering laid within the funerary ground[22]. Aside from rattles, these toolkits also contained anthropomorphic figurines, some bearing prodding marks that illustrate the practice of black magic[23], miniature vessels, other ceramic objects, boar tusks etc. With the exception of the assemblage from Zimnicea, in all of the other mentioned cases these items were placed in ceramic vessels. The toolkits used in magical practices are quite frequently found among the populations from the Balkans and the north-western and western Black Sea coast during the Iron Age[24], and even in the cemeteries of some Greek colonies, like the one at Apollonia Pontica[25]. Some of them were found in adult burials, for example at Kabyle

[15] ILON 2008; ILON/NAGY 2010, 77–78; NAGY 2011, 180, fig. 118–119.

[16] PLUTON ET AL. 2008, 216, fig. 8.

[17] HEUN 1999, 67, 76, 86, 191–192.

[18] PAULI 1975, 57.

[19] HODSON 1968, 48, pl. 12/646; PAULI 1975, 30, fig. 10/5.

[20] RUSTOIU/BERECKI 2015, 271–272.

[21] For the use of these "toolkits" in magical practices or witchcraft, see SÎRBU 1993a, p. 68–69; SÎRBU 1993b; SÎRBU 2006, 68–70. See also a recent synthesis of various opinions in GANCIU/MĂNDESCU 2014, 95–101.

[22] GANCIU/MĂNDESCU 2014.

[23] For the use of the so-called "voodoo dolls" in magical practices from the Mediterranean area, see FARAONE 1991; OGDEN 1999, 71–79; COLLINS 2008, 64, 92–97; KONOVA 2010, 271–272. For the same use of human figurines in the western provinces of the Roman Empire, see BAILLIOT 2015.

[24] SÎRBU 1993b, fig. 6 (distribution map).

[25] KONOVA 2010.

in Bulgaria[26] or at Zimnicea in Romania[27]. In general, the majority of these magical toolkits were found in graves from the south of the Danube. They were apparently included into the funerary inventories of some female graves, though only in some cases their gender identification was confirmed by the anthropological analysis. In other cases, these artefacts which were usually associated with magical practices come from child burials[28]. However, they cannot be identified as toys since their presence can be more likely related to some magical ceremonies or practices performed after the child's death and/or during the funerary ceremony. This is the case, for example, of the human figurines discovered in child burials at Tiszavasvári[29], in Hungary, and Bugeac[30], in Dobrogea, which will be systematically analysed in a forthcoming study.

Returning to the function of the rattles, it has to be noted that sound-making instruments might be associated with other objects having quite similar characteristics, for example bells. Due to the manner in which they were actually used (hand-held, sewn or tied to clothes or as garment accessories etc), the nature of the produced sounds, as well as the scope of their use in particular ways, could have been different.

Ethnographic sources attest the use of rattles in ritual dances in the case of numerous populations, from northern America to Africa and Oceania. Such objects were made of different materials, some were decorated and others were plain; some were hand-held, while others were sewn or tied to ceremonial costumes, but in general the rattles were meant to dictate the rhythm of the ritual dances and at the same time to call or, on the contrary, to repel supernatural beings or forces[31].

Different categories of practitioners of magic and witchcraft used songs, sounds or incantations to either attract or repel the supernatural spirits, and this is widely attested through time, from Mesopotamia[32] to Greece during the Archaic, Classical or Hellenistic period[33]. For this reason, the presence of rattles in magical toolkits from the areas inhabited by Thracian population could be interpreted in this way.

The act of producing sounds and other noises with the help of rattles had an apotropaic role. Metal rattles and bells were considered magical in ancient Egypt, and continued to be used against the evil eye until the Roman times. They are encountered, for example, in horse harness assemblages together with red tassels or ribbons, all of them having an apotropaic role. The metal bells attached to the Bedouins' camel harnesses nowadays have a similar functionality[34].

Within the ancient communities, and even in the case of some modern populations, it was believed that mostly the women and the children were exposed to a wider variety of dangers. As a consequence, numerous magical strategies and means were conceived to protect them against disease, wild animals, evil eye etc. It can be considered that in the LT times the main function of the rattles was apotropaic. The sound produced by these instruments was meant to drive out the evil spirits, either in magical dances or in shamanic practices, also serving as an active protection against all sorts of perils mainly for the most vulnerable members of the communities, the women and the children. Thus, the presence of rattles in children's burials and in those of adults (mainly women) must have been related to some ritual and magical practices

[26] SÎRBU 1993b, 140, no. 10.

[27] ALEXANDRESCU 1980; SÎRBU 1993b, 143, no. 23.

[28] GANCIU/MĂNDESCU 2014, 95–101.

[29] ALMÁSSY 1987–1988, 59–60, Pl. 9.

[30] IRIMIA 1992; KULL 1997, fig. 74/2.

[31] See, for example, RAY/HADDON 1912, p. 271–272; DREWAL 1979, p. 200–201, 208, 215; ROSMAN/RUBEL 2006, 347; RUSTOIU/BERECKI 2015, 268–269.

[32] SCHWEMER 2011.

[33] BREMMER 1999, 7; VERSNEL 2002 etc.

[34] PAINE 2004, 38–39, 158–159 etc.

performed during the funerary ceremonies. Accordingly, these objects cannot be identified as regular toys, as it was sometimes suggested without providing convincing arguments[35].

Unlike the ceramic rattles, the metal ones were commonly associated with the male identity. In the LT cemeteries from the Carpathian Basin, metal rattles were found in graves with weaponry (Fig. 6/1–2). This is the case of two burials from the cemetery at Zvonimirovo, in Croatia[36]. Similar rattles were also found in pits containing horses from the "Scythian" cemetery at Sâncrai and a nearby isolated context at Rădești (both in Alba County, Romania). In both cases the rattles were found close to the horse-bits, thus indicating their precise position on the harness. These contexts of discovery were radiocarbon dated to a pre-Celtic horizon of the 4th century BC[37]. In all of the mentioned cases, the metal rattles also had an apotropaic role similar to the one of the ceramic rattles. It is worth mentioning that elements resembling the aforementioned artefacts are used even today by traditional "călușarii" dancers (Fig. 6/3). This is an old male dance, possibly related to some pre-Christian solar cults, which was once practiced during the Pentecost. In this case, the rattles were strapped to the lower legs of the dancers and dictated the dance rhythm[38]. At the same time, metal rattles having an apotropaic role are also used nowadays on horse harnesses (Fig. 6/4).

5. Conclusions

Grave no. 1 from Fântânele-Dâmbu Popii is one of the few unearthed in this cemetery in which a series of particular magical practices are attested alongside more common elements of the funerary rite and ritual.

The presence of a ceramic rattle in the funerary inventory could deceptively suggest that the burial belonged to a child who was interred with a beloved toy. However, the anthropological analysis of the cremated human remains has shown that the burial belonged to a woman aged over 20 years. Thus, the functional role of the rattle has to be interpreted from a different perspective.

The analysis of the contexts of discovery of other similar artefacts from Late Iron Age Europe, as well as several historical and ethnographic analogies, suggest that the rattles were frequently included among the instruments used by the "masters" of magic and witchcraft, like the "exorcists" mentioned in Assyrian texts[39] or the *magoi*, *goetes*, *epodoi* and *pharmakeis* of the Greeks[40]. In the case of the ceramic rattle from Fântânele-Dâmbu Popii, on the basis of its context of discovery and the existing analogies, it can be presumed that it was used in an apotropaic practice to repel with its sound the menacing supernatural beings which supposedly tormented the deceased while alive and also on her way to the otherworld.

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[35] ADAMESCU ET AL. 2016.

[36] DIZDAR 2013, 207–208, fig. 11, pl. 9/6, 23/4.

[37] These two contexts of discovery will be included in a forthcoming study authored by A. Rustoiu, G. Balteș, O. Oargă and G. El Susi.

[38] See, for example, FIRICĂ 2010.

[39] SCHWEMER 2011, 419.

[40] BREMMER 1999; DICKIE 2001, 12–16.

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Age groups	Average weight of bones (gram)
0–6 mounths	54
6 mounth–3 years	185
3–13 years	661
13–25 years	2191
Adult	

Table 1. Weight of the human skeleton (after TROTTER/HIXON 1974).

	Results of S. Mays (1998)		Results of p. Shipman (1984)	
	°C	Colour	°C	Colour
Phase 1	185°C	red, orange	under 285°C	white or yellow
Phase 2	285°C	dark brown, black	285–525°C	red-brown, red-yellow, dark grey-brown, or dark grey
Phase 3	360°C	black	525–645°C	black, blue or red-yellow
Phase 4	440°C	grey-brown	-	-
Phase 5	525°C	grey, brown (lighter than that observed at 440°C)	645–940°C	white, light grey or light blue grey
Phase 6	645–1200	white some pale yellow	940°C	white, some grey or rede-yellow

Table 2. Colours observed after heating fresh goat bone (after SHIPMAN ET AL. 1984).

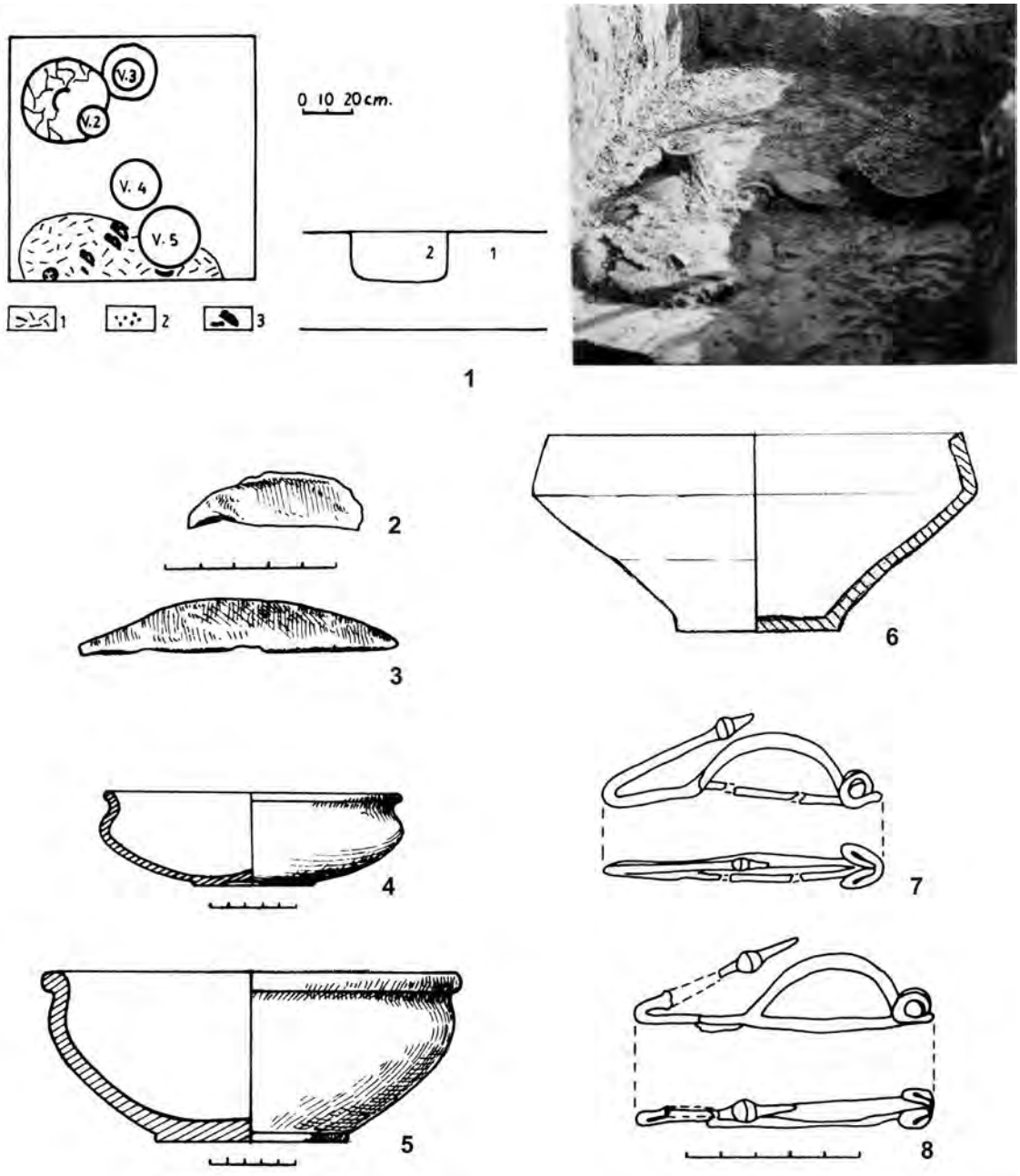

Fig. 1. Grave no. 1 at Fântânele-Dâmbu Popii: 1 – plan; 2–8 – inventory (2–3, 7–8 iron; 4–6 ceramic).

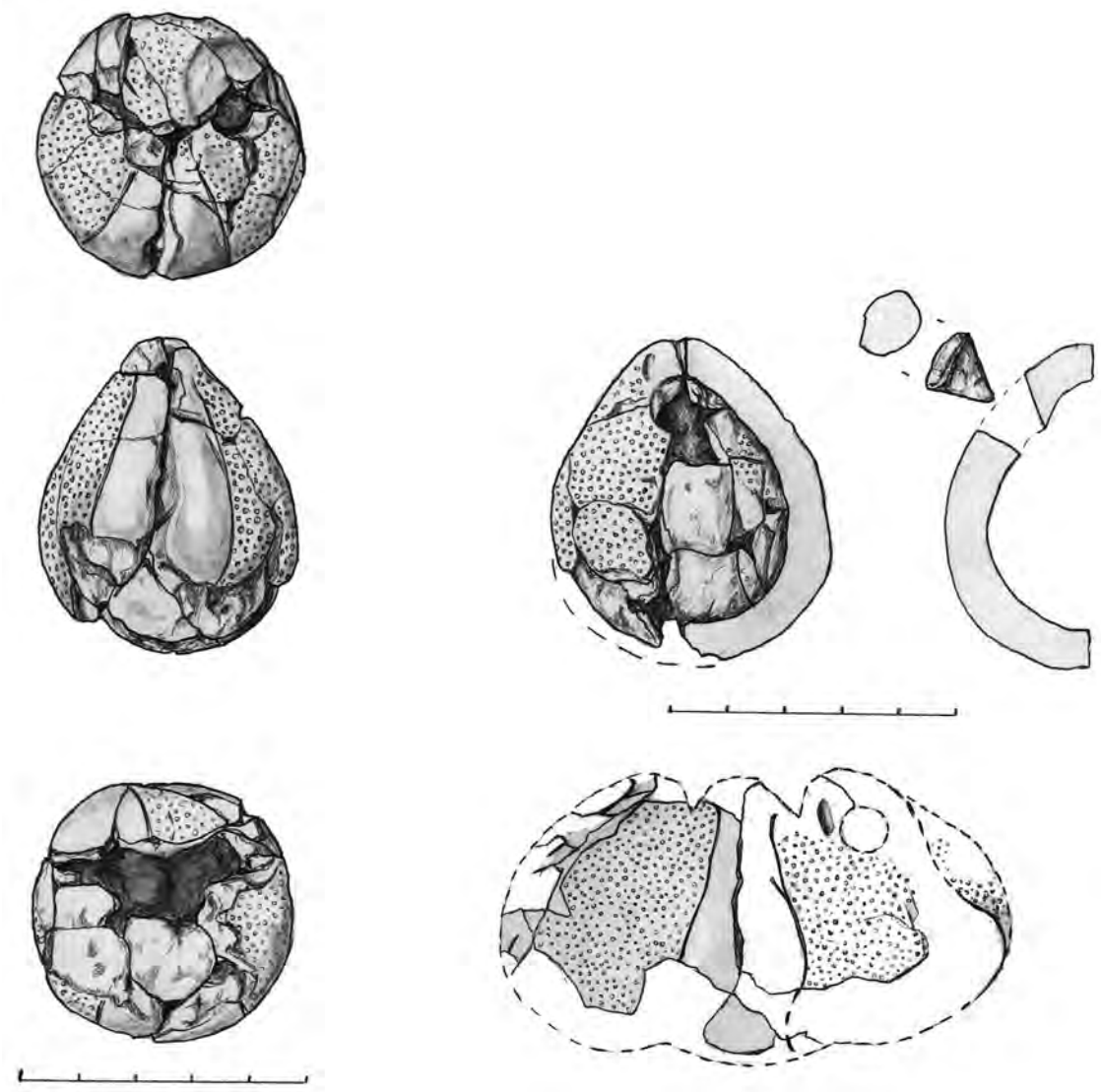

Fig. 2. Ceramic rattle from the inventory of grave no. 1 at Fântânele-Dâmbu Popii.

Fig. 3. Ceramic rattle from the inventory of grave no. 1 at Fântânele-Dâmbu Popii and the small ceramic balls from the inside.

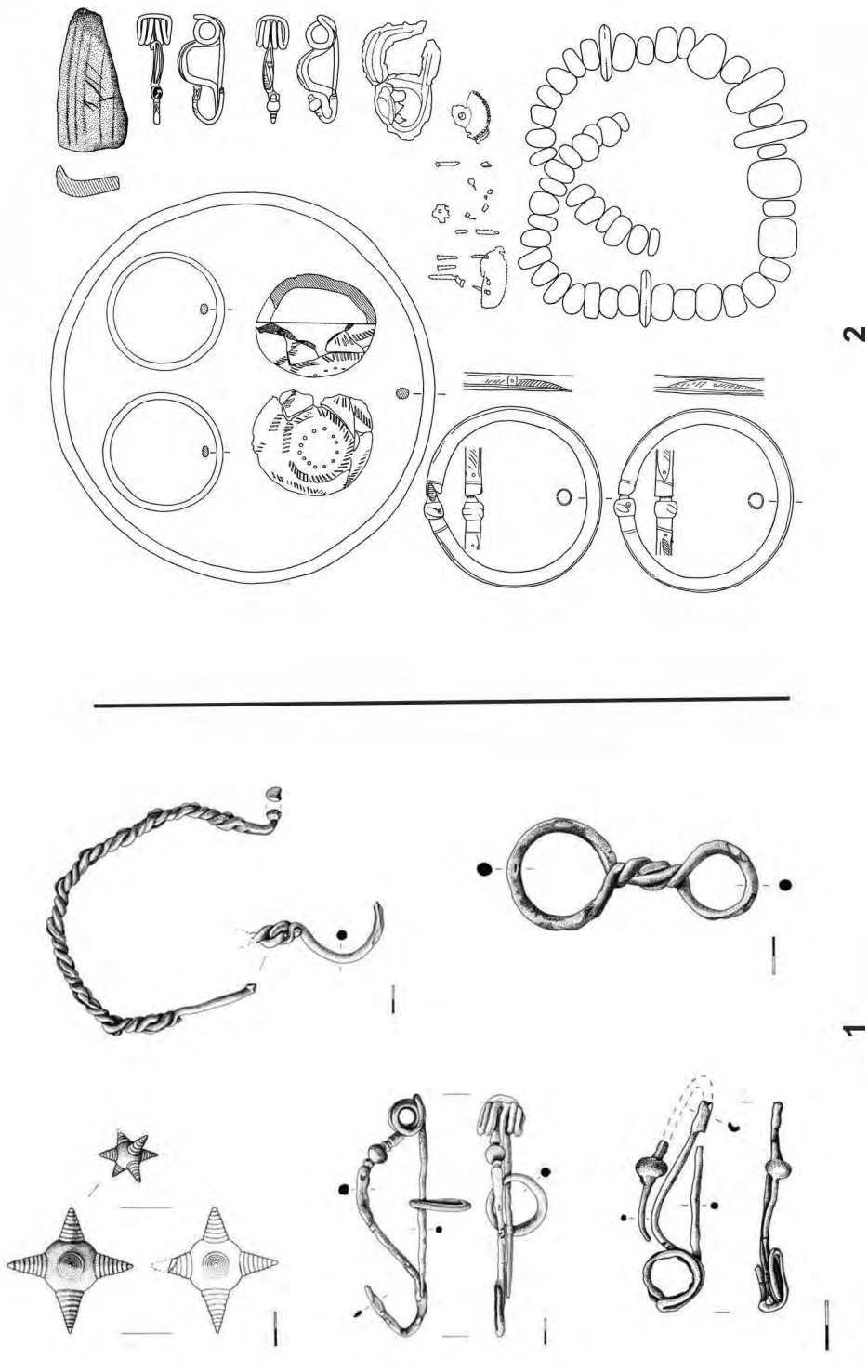

Fig. 4. Ceramic rattles discovered in funerary contexts. 1 – Bucsu, female grave no. 126 (after ILON 2008); 2 – Münsingen, child grave no. 23 (after HODSON 1968).

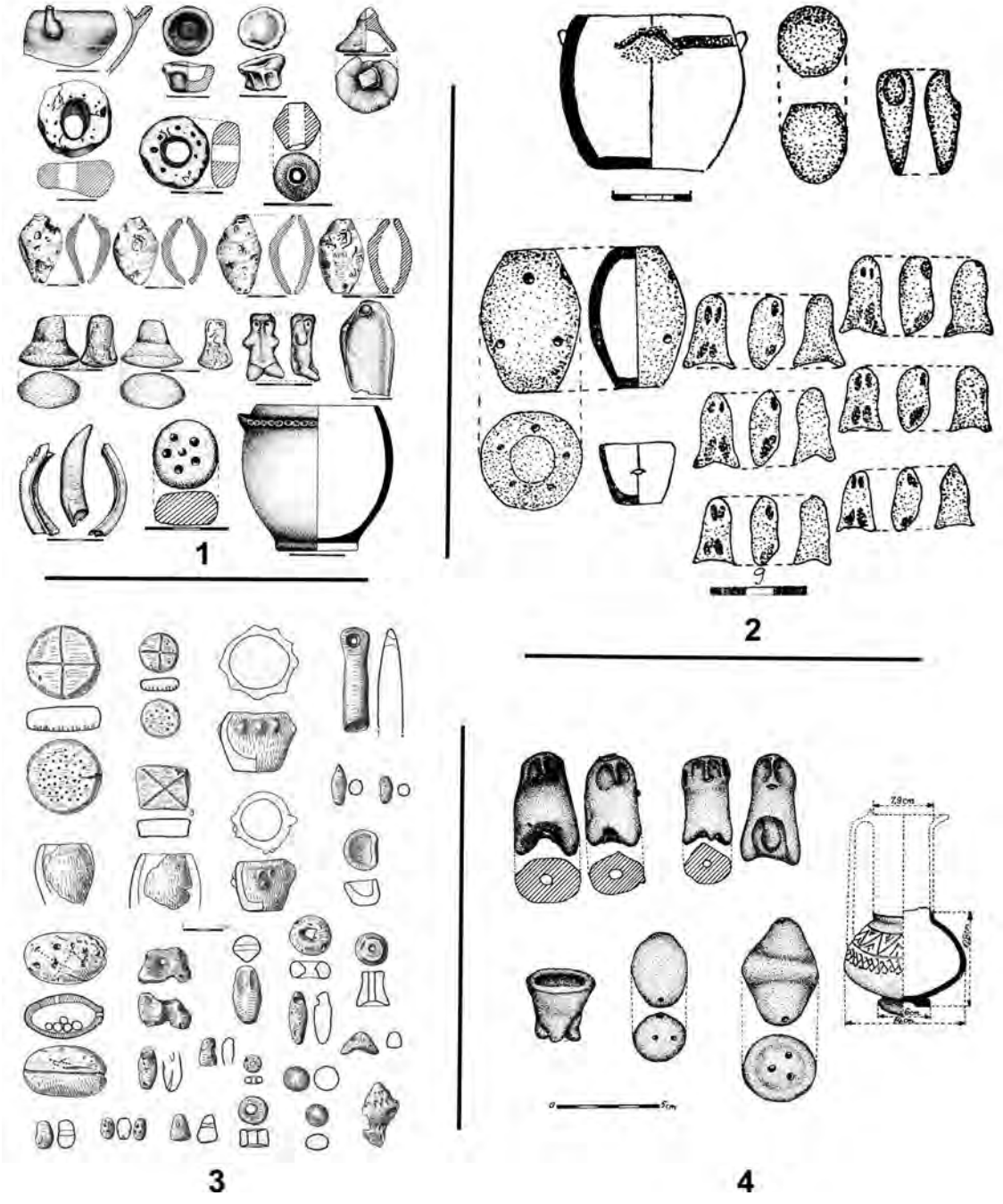

Fig. 5. Ceramic rattles in the inventory of some magical or witchcraft toolkits. 1 – Hanska-Toloacă; 2 – Buneşti-Avereşti; 3 – Zimnicea; 4 – Poiana (Galaţi County) (after SÎRBU 1993b and GANCIU/MĂNDESCU 2014).

Fig. 6. 1 – Grave LT 4 with weapons at Zvonimirovo containing a metal rattle in its inventory; 2 – Metal rattle from grave LT 4 at Zvonimirovo (after DIZDAR 2013); 3 – Metal rattle strapped on the leg of a "Căluşar" dancer; 4 – Similar rattles on horse harnesses (after Google Images).