



Thracian silver jewellery from the 4th c. BC: investigations on objects from the collection of the Roman–Germanic Central Museum, Leibniz Research Institute for Archaeology

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ABSTRACT

In 2021, eight Thracian silver objects came to my attention during a research stay at the Roman-Germanic Central Museum, Leibniz Research Institute for Archaeology (RGCM) Mainz, Germany, which have been ignored by the scientific community so far. The presented silver convolute, which forms part of the collection of the RGCM, consist of two bracelets, three fibulae and three hemispherical fragments. As the archaeological context is missing, the objects had been analysed and placed in a chronological and geographical context with other objects of this kind. It was established that the three fibulae belong to the Bukyovtsi Type. The bracelets have strong similarities with pieces from several hoards in north-western and central Bulgaria, for example from Vladinya (Lovech region) or Granitovo (Belogradchik region). Due to the stylistic features of the objects, they can be dated to the second half of the 4th century BC.

KEYWORDS

Silver jewellery, Thracian, Bracelet, Fibulae, Bukyovtsi Type

Introduction

During research on Thracian gold- and silver art, a convolute was brought to light in the collection of the Department of Pre- and Protohistory at the Roman-Germanic Central Museum, Leibniz Research Institute for Archaeology (RGCM) Mainz, Germany. It was labelled with the following information: discovery site: Bulgaria, find context: unknown and date: late Iron Age 320–150 BC (Inventarbuch RGZM 33, 1–3)¹. The convolute with inventory numbers O.42054/001-008 consists of two silver bracelets, three silver fibulae and three silver hemispherical fragments (fig. 1). It was acquired by the RGCM from a Munich art dealer in 1998. Up to now, it has only been briefly presented in the Jahrbuch des RGZM (Jahrb. RGZM 1999, 2, 529–531) and is hardly known in the scientific community. For this reason, the jewellery will be presented in detail and placed in context with other objects of this kind from Bulgaria and beyond (fig. 2).

¹ Inventarbuch des Römisch-Germanischen Zentralmuseums vol. 33,1-3. https://www3.rgzm.de/invbuch/page.php?lang=de&page_id=8675



Fig. 1. Presentation of the convolute in the *Jahrbuch des RGZM* (after *Jahrb. RGZM* 1999, 529, fig. 44)

Обр. 1. Представяне на находката в годишника на Римско-германския централен музей (по *Jahrb. RGZM* 1999, 529, фиг. 44)

Descriptions

Bracelets

The two bracelets from the Mainz convolute are made of silver and have open ends (figs. 3–4). They have a width of 3.09 cm and 3.00 cm, a length of about 27.3 cm and 27.7 cm and a weight of just under 100 g (98.3 g and 99.6 g). The inner diameter cannot be calculated due to the deformation of the objects. The bracelets consist of a wide silver strip that forms a triangular terminal. Both bracelets show three longitudinal ribs, which appear semi-circular in cross-section. The middle rib is longer than the two outer ribs and tapers towards its end to fit the conical ends of the bracelet (figs. 5–6).

The decoration of the three ribs consists of different kinds of geometric ornaments. The two outer ribs have oblique lines at their ends. The central rib is partly decorated with groups of transversal lines and arches next to the tapered ends. Parallel to the three ribs, a total of six ornamental lines run along the entire length of the main part: two along each side and one in each gap between the ribs (figs. 3–4). They give the impression of a beaded wire, although they are made with an ornamental punch.

The conical ends of bracelet number 1 (inv.no. O.42054_001) are decorated with a pattern of circular eyes, tangents and a line of punched elements running along the central rib and the sides. This line is double-barrelled in the conical end (fig. 5). The second bracelet (inv.no. O.42054_002) is very similar in design. Here, too, there are three horizontal ribs framed by six ornamental lines. The design of the tapered end is also similar, but here the punched line is not double-barrelled – it is only a single line (fig. 6).

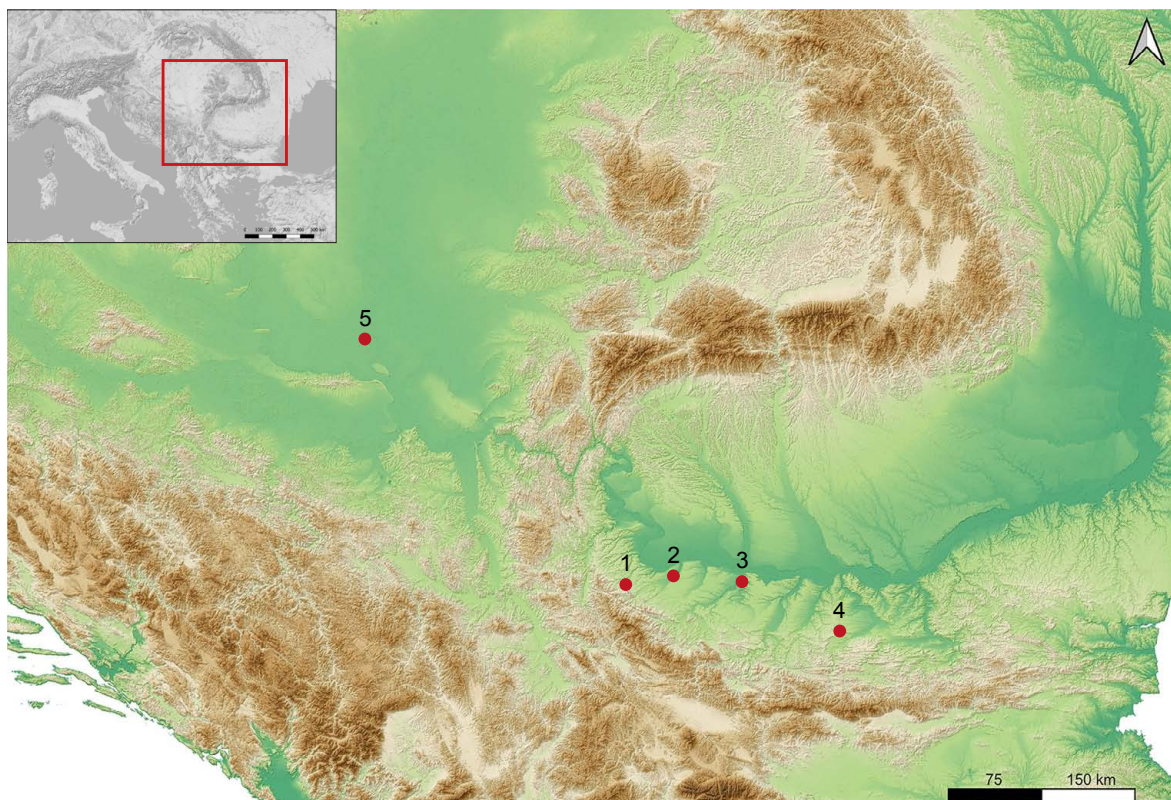


Fig. 2. Map of the findspots of bracelets and fibulae mentioned in the text. 1. Granitovo, Belogradchik municipality, 2. Staliyska mahala, Lom municipality, 3. Bukyovtsi, Vratza municipality, 4. Vladinia, Lovech district, 5. Čurug, Vojvodina region (figure S. Simon)

Обр. 2. Карта на находките от гривни и фибули, споменати в текста. 1. Гранитово, община Белградчик, 2. Сталийска махала, община Лом, 3. Букьовци, община Враца, 4. Владиня, област Ловеч, 5. Чуруг, област Войводина (автор С. Симон)

Both bracelets show multiple damages. They are bent, cracked and scratched. On the back of bracelet number 1 (inv.no. O.42054_001) a soldered silver plate, has been attached, probably to repair a crack in the material (fig. 7). Whether this was made in antiquity cannot be clearly determined at present, as material analyses are still lacking. Bracelet number 2 (inv.no. O.42054_002) was broken and shows clear signs of repair. Here, synthetic resin and a silver lacquer were used², and next to it, a part of the bracelet is bent backwards.

Concerning the manufacturing technique, the bracelets were probably forged from a pre-cast silver ingot. A mold could have been used to create the horizontal ribs. This would be indicated by the tool marks on the back (fig. 8). A mold could also have been used for the conical ends. Another possibility could be that the bracelet was completely cast and the surface reworked for the fine details. The engraved lines and punched patterns were introduced with stitches and different punches after the base of the bracelet was finished. It is noteworthy here that the circular eyes were made with two different punches, because the eye is not always in the centre of the circle (figs. 5–6).

The arches on the central rib are also made with different punches, since some arches are pointed. A final step in the processing is to form a circular bracelet with overlapping terminals from the flat silver. So far, no evidence of two plates forged on top of each other has been found on these

² Personal note from the restoration team of the RGCM.



Fig. 3. Bracelet inv. no. O.42054_001 from Roman-Germanic Central Museum
(courtesy museum, photo R. Müller)

Обр.3. Гривна с инвентарен номер O.42054_001 от Римско-германския централен музей
(с любезното съдействие на музея, снимка Р. Мюлер)



Fig. 4. Bracelet inv. no. O.42054_002 from Roman-Germanic Central Museum
(courtesy museum, photo R. Müller)

Обр.4. Гривна с инвентарен номер O.42054_002 от Римско-германския централен музей
(с любезното съдействие на музея, снимка Р. Мюлер)



Fig. 5. Ends of bracelet inv. no. O.42054_001 (courtesy museum, photo R. Müller)

Обр.5. Краят на гривна с инвентарен номер O.42054_001 (с любезното съдействие на музея, снимка Р. Мюлер)



Fig. 6. Ends of bracelet inv. no. O.42054_002 (courtesy museum, photo R. Müller)

Обр. 6. Краищата на гривна с инвентарен номер O.42054_002
(с любезното съдействие на музея, снимка Р. Мюлер)



Fig. 7. Back of bracelet inv. no. O.42054_001 with the soldered silver plate
(courtesy museum, photo R. Müller)

Обр. 7. Вътрешната страна на гривна с инвентарен номер O.42054_001 със запоена сребърна плоча
(с любезното съдействие на музея, снимка Р. Мюлер)



Fig. 8. Some of the toolmarks on the bracelet (courtesy museum, photo R. Müller)

Обр. 8. Следи от инструменти върху гривната (с любезното съдействие на музея, снимка Р. Мюлер)



Fig. 9. Front- and back view of the fibulae inv. nos. O.42054_004 and O.42054_005 from Roman-Germanic Central Museum (courtesy museum, photo R. Müller)

Обр. 9. Поглед отпред и отзад на фибулите с инвентарни номера O.42054_004 и O.42054_005 от Римско-германския централен музей (с любезното съдействие на музея, снимка Р. Мюлер)

bracelets, as it has been described by K. Chukalev and M. Tonkova for the bracelet from Vladinia, Lovech region (Chukalev, Tonkova 2017, 50, No. 34). Furthermore, a structure of several plates, as described by A. Dimitrova (Dimitrova 1966, 123) for a similar bracelet fragment, could not be confirmed. Here it would be necessary to clarify by X-ray and XRF analysis whether there are two plates, perhaps even with different compositions.

Fibulae

The three fibulae from the Mainz convolute are the so-called ‘Hinged fibula’ with star-shaped decorative elements on the bow (Vasić 1999, 109).

Two of the fibulae (inv.no. O.42054_004; inv.no. O.42054_005), are probably belonging to a pair, as they are a right and a left fibula with the same design (fig. 9).

These fibulae have a weight of 53.4 g and 51.6 g. They consist of a head-plate, a bow with star-shaped elements and a catch-plate. The palmette-shaped head-plates are decorated with curved punched lines and are enclosed by a surrounding line of silver beads (fig. 10 a–b), although some are missing on both fibulae. These silver beads are usually not spherical, but rather lenticular. The bows are decorated with five star-shaped and six cylindrical elements. At the transition from one element to another is a decorative rim. The catch-plates are decorated with open grooves running horizontally, with hemispheres on top and with a line, consisting of a series of dots. The lower parts of the catch-plates are also decorated with this element (fig. 10 c–d). The part where the pin fits in was bent from the decorated front to the back. On one of the fibulae, it is still preserved like this, on the other one it is strongly bent upwards.

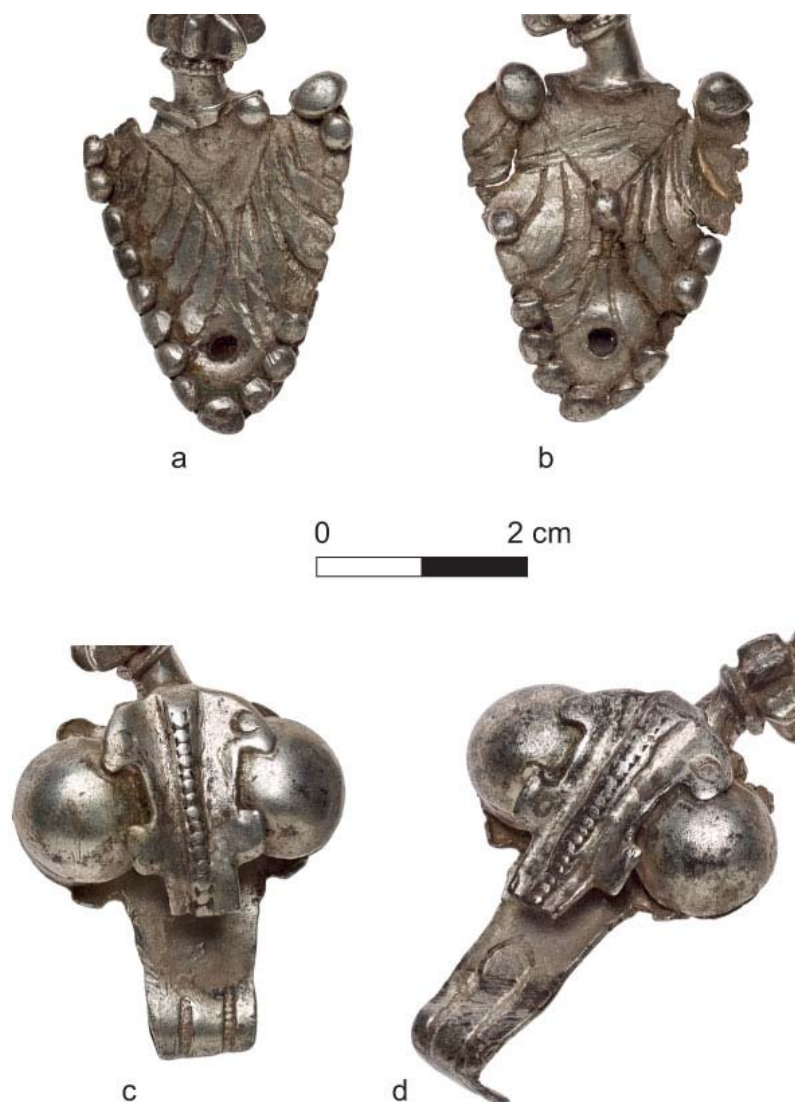


Fig. 10. Detail of the head- and catch-plates (courtesy museum, photo R. Müller)

Обр. 10. Детайл на челните плочки и иглодържателите
(с любезното съдействие на музея, снимка Р. Мюлер)

Both fibulae are damaged, the pins are missing, as well as elements of the design on the head-plates and the catch-plates, which can be seen in the solder residue on the surface. The star-shaped decorative elements and the decorative rims are heavily rubbed in places, which could be a trace of frequent wearing. The palmette-shaped head-plates are split in the area where the pin was fixed.

The third fibula (inv.no. O.42054_003) is similar in design but somewhat different in manufacture (fig. 11). It consists of a palmette-shaped head-plate, a bow with five star-shaped elements and a catch-plate.

Here, however, the palmette-shaped head-plate is decorated with straight engraved lines. This plate is framed by a surrounding line of individual beads. The bow is decorated with five star-shaped ornamental elements alternating with six cylindrical ones. Between the individual links there is a small decorative rim. The catch-plate is decorated with a line of punched dots, which run along right and left underneath the soldered elements.

As the other two fibulae, this fibula shows several damages such as scratches on the catch-plate, missing elements like some of the silver beads and the pin and the head-plate is split in the area where the pin was fixed. On one of the star-shaped elements on the fibula, a piece of the star-shaped



Fig. 11. Front- and back view of Fibula inv. no. O.42054_003 from Roman-Germanic Central Museum (courtesy museum, photo R. Müller)

Обр. 11. Поглед отпред и отзад на фибулата с инвентарен номер O.42054_003 от Римско-германския централен музей (с любезното съдействие на музея, снимка Р. Мюлер)

element has broken off. Most of the design elements of the catch-plate, are missing. Only an open frame, made of a circular sheet, and a silver bead next to it, are still attached.

Presumably, a design in the form of a bucranium (Chukalev, Tonkova 2017, 50) was applied to all catch-plates of these three fibulae. All three fibulae can be assigned to the Bukyovtsi type (Popov 1926).

It is possible that the pins were made of iron, as there are traces of iron on the head-plate of one fibula (inv.no O.42054_003)³.

The fibulae were made by lost-wax-casting, in which the bow together with all the elements was modelled in wax and then cast. The head-plate and the catch-plate were then forged out of the overlaying material. The X-ray images confirm this, as a homogeneous structure is indicated here. Material analyses could provide further clues to the crafting, with regard to soldering and the fineness of the silver. These are still pending.

Hemispherical fragments

In addition to the bracelets and fibulae, there are three hemispherical fragments in the convolute from the collection of the RGCM. One of them (inv.no. O.42054_006) is a hemisphere made of silver sheet. It has a weight of 1.9 g and a height of 5.4 mm, a width of 10.5 mm and a length of 13.5 mm, it is slightly oval. This hemispherical fragment could have been an element of a fibula; for example, it could have been soldered to the catch-plate to be part of a bucranium, as on the three presented fibulae above. A reference to this would be the remains of soldering on the back (fig. 12a).

The other two hemispherical objects (inv.no. O.42054_007 and O.42054_008), are two massive lenticular objects made of silver (fig. 12b–c). They have a weight of 10.9 g and 10.7 g. They are slightly higher (6.8 mm and 6.3 mm) and larger (15.9 x 16.1 mm and 16.4 x 17.9 mm) than the single hemisphere. But they also have traces of soldering on the back (fig. 12b–c). It cannot be determined whether these were elements of other jewellery objects, but the traces of soldering indicate that these objects were attached to others.

³ Personal note from the conservators of the RGCM.



Fig. 12. Front- and back of the hemispherical fragments inv. nos. O.42054_006, O.42054_007, O.42054_008 from Roman-Germanic Central Museum (courtesy museum, photo R. Müller)

Обр.12. Предна и задна част на полусферичните фрагменти с инвентарни номера O.42054_006, O.42054_007, O.42054_008 от Римско-германския централен музей (с любезното съдействие на музея, снимка Р. Мюлер)

Comparisons with other objects

Bracelets

Bracelets of the type described above are known from other sites and all of them are hoard finds. The largest number of bracelets of this type is known from Bulgaria. In total, five bracelets and fragment of a bracelet are known from the sites of Granitovo, Belogradchik region (Dimitrova 1966, 119–120, figs. 8–9; Chukalev, Tonkova 2017, 51), Vladinia, Lovech region (Dimitrova 1966, 118–119, fig. 6–7; Chukalev, Tonkova 2017, 50), Staliyska mahala, Lom Region (Dimitrova 1966, 121–122, figs. 10–13) and an unknown site (Dimitrova 1966, 123). Another pair of bracelets comes from a hoard from Čurug, Vojvodina region, Serbia (Garašanin 1954, 40, tab. 28, figs. 5–6).

The shape of these bracelets is the same: they consist of a wide silver strip which tapers towards the ends and have horizontal ribs, of which the middle one is the longest and are decorated with different lines, engravings and punches elements.

However, there are differences in width, weight and design. The two bracelets from Granitovo (NAIM, inv.no. 4036a; 4036b), as well as the bracelet from Vladinia (NAIM, inv. no. 8151) have a width of 45 mm (Dimitrova 1966, 119, 121; Chukalev, Tonkova 2017, 50–51), the bracelets from Staliyska mahala (History Museum Lom, inv.no. 178) have a width of 35 mm (Dimitrova 1966, 121) and the two bracelets from Čurug have a width of 29 mm (Garašanin 1954, 40, Nos. 2023, 2031; Vasić 1995, figs.1,4). The bracelets from Mainz have a width of 30.9 mm and 30.0 mm.

The weight of the individual bracelets also varies significantly, with the two specimens from the hoard find from Čurug being the lightest with 40 g and 32 g, while the bracelet from Vladinia has a weight of 149.45 g (Chukalev, Tonkova 2017, 50). There are also differences in the design of the surface. The number of decorative bands between the horizontal ribs differs, as do the engravings. All these bracelets were found in hoards, some of them together with fibulae, like the ones from Vladinia.

Fibulae

This type of fibula is named after the site of Bukyovtsi, today Mizia, Vratza region (Popov 1926), where five fibulae of this type had been found. They were discovered in 1925 together with two silver vessels (a phiala and a jug) and were part of an elaborate chest ornament consisting of originally six fibulae, chains and pendants (Popov 1926; Dimitrova 1969, 309; Tonkova 2003, 217). The assemblage is now kept in the National Archaeological Institute with Museum in Sofia (inv. no. 2558, 2558 A-B.). The five fibulae, two left ones and three right ones (Dimitrova 1969, 309) have a palmette-shaped head-plate with straight decorative lines, which is surrounded by a line of silver beads. The bow shows five star-shaped and six cylindrical ornamental links in alternation, the cylin-



Fig. 13. Front- and back of the fibula from Saarbrücken (photo S. Simon)
 Обр.13. Предна и задна част на фибулата от Саарбрюкен (снимка С. Симон)

drical ornamental links have a small ornamental ring at the ends. The catch-plates of the individual fibulae are designed as a so-called bucranium (Chukalev, Tonkova 2017, 50), which is formed from different design elements.

Two other fibulae of this type came from a hoard discovered in 1964 at Vladinia, Lovech region, together with a silver bracelet, which was described above (Dimitrova 1966, 116–117, fig. 2; 1969, 310–311, fig. 4). All objects from this hoard from Vladinia are in the collection of the National Archaeological Institute with Museum in Sofia (inv.no. 8148, 8149, 8151). The two fibulae have a palmette-shaped head-plate with curved decorative lines and are enclosed by spheres. The bow has six star-shaped and seven cylindrical alternating decorative elements. The cylindrical elements also have a small decorative ring on each side. Here, too, the catch-plate is designed as a bucranium (Chukalev, Tonkova 2017, 50). The fibulae are a pair, as there is a right and a left one. Both are damaged, their pins and some of the silver beads are missing.

Similar fibulae with star-shaped decorative elements are, for example, also known from other sites, such as Penkyovtsi, Tran Region (Chukalev, Tonkova 2017, 51), but here the catch- and the head-plate differs from those of the Bukyovtsi type. The palmette depicted here is more engraved and decorated with fewer beads.

Based on the bracelets and fibulae already known and mentioned here, the objects from the RGCM can most likely be assigned to an area in north-western Bulgaria, in the border region with Romania and Serbia (fig. 2). Since the finds from the collection of the RGCM are without a context, it is not possible to give an exact regional classification. The convolute can be dated to the same period as the hoards presented here, i.e., to the second half of the 4th c. BC (Chukalev, Tonkova 2017, 50–51).

It is possible that the presented fibulae are a local variant of the hinged fibula type, which has its origin probably in 6th–5th c. BC in Thessaly (Kilian 1975, 156, plate 59, fig. 1747) and Macedonia (Amandry 1963, 203, fig. 109; Vasić 1999, 102; Tonkova 2003, 218–219; 2017, 20–21). One fibula connected to this type, similar to the example mentioned by K. Kilian, belongs to the collection of the Department of Classical Archaeology from Saarland University (Germany). It is a small bronze fibula (in the catalogue described as an iron fibula) (Reinsberg 1998, 105, plate 53,7, Nr. 261) with five star-shaped elements on the bow (fig. 13). Like the fibulae from Mainz, the head-plate of the

fibula is split. One can see that the pin was attached probably inside the splitting, as there are some remains of bronze and a rivet pin.

Conclusion

The finds presented here provide further insight into Thracian craftsmanship and expand the spectrum of objects. The bracelets in particular show different methods of manufacture, although they are all similar in design, with horizontal ribs and geometric ornamentation, there is a clear difference in the weight of the bracelets. While the heaviest bracelet weighs 149.45 g and the lightest 32 g, the two from Mainz are in the upper range with almost 100 g each. The three fibulae are also special, since their design is most closely related to the fibulae from Bukyovtsi, as they are the only ones, apart from those from Bukyovtsi, to have five star-shaped decorative links. The fact that these finds have no find context, a gender-specific mode of wearing cannot be proven. The bracelet sizes give no indication of a gender-specific costume as well, as their circumference can vary. Further material analyses are necessary to clarify conclusive questions about the manufacturing technique.

Up to now, only a few bracelets with this type of design are known; thus the two pieces from Mainz expand our knowledge. Even if the discovery site is unknown, they probably originate from the distribution area of the previously known bracelets. A find context is usually not given for these finds, as they have so far always been found as hoards.

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Тракийски сребърни накити от IV в. пр.Хр. Изследвания на предмети от колекцията на Римско-германския централен музей към Изследователския институт по археология „Лайбниц“

Свеня СИМОН

(Summary)

През 2021 г. няколко тракийски сребърни предмети бяха идентифицирани в колекцията на Римско-германския централен музей към изследователския институт по археология „Лайбниц“ (RGCM) в Майнц, Германия. Артефактите са записани под общ инвентарен номер (инв. № O.42054/001-008). Те включват: две гривни, три фибули и три полусферични фрагмента и са закупени от музея през 1998 г. от мюнхенски търговец на произведения на изкуството с указания, че произхождат от България (обр. 1). До момента тези предмети са представени само в една илюстрация в Годишника на Римско-германския централен музей (Jahrb. RGZM 1999/2, 529–533).

Двете гривни са изработени от сребро и имат отворени краища (обр. 3–4). Те са с ширина 3,09 cm и 3 cm, дължина около 27,3 cm и 27,7 cm и тегло малко под 100 g. Имат три надлъжни ребра, които са украсени с различни геометрични орнаменти. Между тези ребра има шест орнаментални линии, които създават впечатление за нанизани на тел мъниста, но мотивът всъщност е щампован (обр. 5–6). И двете гривни показват множество повреди. На гърба на първата гривна е прикрепена сребърна пластина с цел поправка на пукнатина в мате-

риала (обр. 7). Не може да се установи точно дали тази поправка е извършена в античността, тъй като все още липсват анализи на материала, от който са изработени предметите. Втората гривна показва признаци на съвременна реставрационна намеса.

Що се отнася до производствените техники, гривните най-вероятно са изковани от предварително излят сребърен слитък с използване на матрица за изработването на хоризонталните ребра. Следите от инструменти на гърба подкрепят тази хипотеза (обр. 8). Досега не са открити доказателства за обработката на две изковани заедно пластини, оформящи съответно вътрешната и външната страна на гривните.

Трите фибули принадлежат към т. нар. шарнирни фибули със звездовидни елементи на лъка. Две от тях вероятно образуват двойка, тъй като има десен и ляв екземпляр с еднакво оформление (обр. 9). Челните плочки са във формата на палмети, заобиколени от линия от сребърни мъниста (обр. 10.a–b). Лъковете са украсени с пет звездовидни и шест цилиндрични елемента. Между отделните елементи има декоративен ръб. Иглодържателят е оформен като букраний, елементи от този естетико-технологичен подход все още личат на крачето (обр. 10.c–d).

Третата фибула е с подобно оформление (обр. 11), но линиите, които образуват палметата са гравирани, а не направени с насечки както при другите две. Всички фибули са с повреди и иглата им липсва. Възможно е иглите да са били железни, тъй като върху една от плочките има следи от желязо. Технически може да се каже, че фибулите са изработени чрез изливане по метода на изгубения восък. И трите фибули могат да бъдат отнесени към тип Букьовци.

Освен гривните и фибулите в находката има три полусферични фрагмента. Два от тях са масивни и сребърни и вероятно принадлежат на един артефакт (обр. 12.b–c). Третият е направен от лист сребро (обр. 12.a) и е оформен като полусфера. И трите фрагмента имат следи от спойка на гърба, което показва, че са били прикрепени към друг предмет.

Гривни от описания тип са част от състава на няколко съкровища в Северозападна България като Гранитово, Белоградчишко, Владиня, Ловешко, Сталийска махала, Ломско и един неизвестен обект, както и от съкровището от Чуруг в Сърбия. Представеният по-горе тип фибули е известен от Букьовци (днешна Мизия), Врачанско и от съкровището от Владиня, Ловешко. Подобни фибули със звездовидни декоративни елементи са открити и на други обекти като Пенкьовци, Трънско, но челната плочка и иглодържателят се различават от тези от типа Букьовци. Палметата, изобразена тук, е от врязани линии и украсена с по-малко мъниста.

Въз основа на вече познатите и споменати тук гривни и фибули, предметите от Римско-германския централен музей най-вероятно могат да бъдат отнесени към Северозападна България, в граничния район с Румъния и Сърбия, но без възможност за прецизна локализация (обр. 2). Гривните и фибулите от Майнц могат да бъдат датирани към същия период като споменатите съкровища, т.е. към втората половина на IV в. пр.Хр.

Представените тук артефакти допълват представата за тракийското майсторство и разширяват спектъра от находки. По-специално гривните показват различни методи на производство. Въпреки че всички те са сходни по вид, с хоризонтални ребра и геометрични орнаменти, има ясна разлика в теглото им. Фибулите от Майнц и тези от Букьовци са единствените с по пет звездовидни декоративни звена. Необходими са допълнителни анализи на материала, за да се изяснят окончателно въпросите относно производствената техника. Досега са известни само няколко гривни с това оформление като двата екземпляра от Майнц разширяват кръга на познанията ни. Дори и с неизвестно местонахождение, те вероятно произхождат от района на разпространение на известните досега гривни. Данни за местонамирането на подобни находки обикновено липсват, тъй като досега те винаги са намирани като част от съкровища или стават известни след постъпването им в музейни колекции.