

RETURNED FOOT EXTERIOR CHORD BROOCHES MADE OF A SINGLE METAL PIECE (TYPE ALMGREN 158) RECENTLY DISCOVERED IN THE WESTERN PLAIN OF ROMANIA. NOTES ON ORIGIN AND CHRONOLOGY¹

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Abstract: This study, without aiming at exhaustiveness, attempts, based on returned foot exterior chord brooches made of a single metal pieces (type Almgren 158) discovered in 2010 following the rescue archaeological excavations performed as a result of the construction of the Arad-Timișoara Highway, respectively section Arad-Seceani, in a series of Sarmatian graves of the cemetery investigated at Hunedoara Timișană, Șagu commune, Arad county, to analyse the brooches in this type discovered in the western territories of Romania.

The author examines the four specimens at Hunedoara Timișană within a broader context and concludes that similar brooches in both the Barbarian and Roman environments, where they are imports, date mainly to the chronological interval comprised between the last two decades of the 2nd c. – early 4th c. AD (stages C1a-C2).

The analysis of the graves in the cemetery showed that the graves where returned foot exterior chord brooches were found date sometime in the chronological interval comprised between the end of the 2nd c. AD and the third quarter of the 3rd c. AD. Moreover, the author notes that the distribution area of this brooch type is mainly the Barbarian world of German origin (the Przeworsk culture environment) or that in constant contact with the latter. Based on the analysis of the distribution area of the Almgren 158 type brooches it was concluded they originate in the Przeworsk culture environment from where they disseminated in the neighbouring south and south-east cultural environments. Last but not least, the author reaches the conclusion that brooches of the type were assumed by the Sarmatians in the Pannonian Plain from the German populations (most likely the Vandals) living in the northern vicinity of the area they inhabited. Another conclusion is that such returned foot exterior chord brooches are lacking from the north and north-west Pontic areas, including the Chernyakhov area. Finally, the author argues that returned foot exterior chord brooches are artifacts that evidence, beside other categories of German origin artifacts (for instance the

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headknob brooches, exterior chord and solid catchplate), the existence of contacts and cultural and economic interferences between various populations from territories in the east of Central Europe, accurately defining the movement direction of German population groups starting with the last third of the 2nd c. AD (C1a), in the Marcomannic wars' aftermath as well as the role they played in this region during the 2nd – 4th c. AD.

Based on above brooches and other artifact categories in the graves at Hunedoara Timișană, the author concludes the cemetery dates to the chronological interval comprised between the end of the 2nd c. and the third quarter of the 3rd c. AD.

Keywords: brooches, graves, the Vandals, the Germans, Dacia, Przeworsk, *Barbaricum*, the Pannonian Plain

During the summer of 2010, in occasion of the rescue archaeological excavations following the construction of the Arad-Timișoara highway, respectively the section Arad-Seceani², several archaeological sites and assemblages, among which also site B0_7-B0_8, were investigated. The surface research of the latter yielded 17 inhumation graves³, three of which (G 7, G 12, G 14) comprised among the funerary goods also brooches with returned foot and exterior chord made of a single metal piece.

The surface where the graves were discovered lies on an extended terrace, relatively flat, oriented north-south on the long axis. The terrace is located south-west Hunedoara Timișană village, delimited by a valley on the southern side slope base. It spreads on the left side of the stoned commune road Șagu-Hunedoara Timișană, at approximately 300 m east. In direct line, the site lies at ca. 2.5 km south the village Șagu and at ca. 1 km west the south-western limit of Hunedoara Timișană village, Șagu commune (Fig. 6).

In the southern part of the perimeter crossed by the highway route were also investigated 17 archaeological assemblages represented mainly by storage pits, later converted into refuse pits. They also included two domed kilns and two irregularly shaped buildings, most likely designed for household activities. On the same surface were identified and researched two perpendicular ditches, oriented NV-SE, located at a distance of 9.90 m one from the other. These archaeological assemblages are most likely a small portion of the south-eastern side of the settlement, whose centre was west the route of the future highway⁴.

² Cf. BÂRCĂ et alii 2011, 187–192. The investigated surface lies on the Arad-Timișoara highway between kilometres 23+170–23+690.

³ The identified graves form a small cemetery related to the settlement whose nucleus was west the highway route. 15 of the discovered and researched graves clustered on a surface 80 m long and 28 and 45 m width. This definitely evidences the northern and southern sides of the cemetery. Two of the graves were discovered in the eastern edge of the surface and other 3 in the western part, so one may suppose that eastwards and westwards, outside the limits of the investigated surface, other graves may be found. The other two graves were found at 145–165 m distance south the rest of the graves.

⁴ Following the checks performed on the soil surface, we noted the existence of a settlement west the axis of the current highway. Isolate, were found potshards also east the highway route. In addition, it was noted that the nucleus and most part of the settlement was at ca. 100/150 m west the highway route. A significant quantity of handmade and wheel-thrown pots, fragments of a tuff grinder, adobe pieces and animal bones were collected from there.

A first returned foot exterior chord brooch is part of grave 7, whose funerary pit was rectangular with rounded corners, oriented NNV–SSE. The accurate position of the skeleton cannot be specified though due to the few identified bone remains. The skeleton preserved anatomically the skull and the spine. This suggests that the deceased was placed lying on the back with the head towards NNV.

The grave goods consisted of a silver collar, two ring-shaped silver earrings, a few fragments of an iron object, strongly corroded, a fragmentary iron loop, a cylinder-shaped iron object, preserved fragmentarily and a large number of beads to which adds the bronze brooch, preserved fragmentarily, made of a single metal piece, with an arched bow, flat rectangular in section, while the partially preserved foot was returned and wound to the bow. The spring made of several coils and the chord did not survive. Preserved length – 3.6 cm (Fig. 1/1, 5/2).

The second returned foot exterior chord brooch comes from grave 12. The grave pit, rectangular with rounded corners, was oriented NNV–SSE. The skeleton did not preserve. In the northern part of the grave were identified a few bone fragments of the skull and human teeth. This evidences that the dead was placed in the grave with the head oriented NNV.

The grave inventory was composed of a wheel-made cup and a bronze fragmentary brooch made of a single metal piece, with the bilateral spring formed of 6 coils and exterior chord. The brooch body, circular in section, is arched, and the foot is slightly flattened. The lower part of the foot, which no longer preserved, was returned and wound to bow. Preserved length – 4.1 cm (Fig. 1/2, 5/1).

A third returned foot brooch comes from the inventory of grave 14. The grave pit, rectangular with rounded corners, was oriented NNV–SSE and was 1.60 m long and 0.51–0.57 m wide. The skeleton did not survive. In the central part of the grave, were identified a few human teeth, which evidences that the dead was placed in the grave with the head towards NNV.

The identified funerary inventory consists of two silver fragmentary earrings, a bronze ring bracelet, several amber and various glass coloured beads, a wheel-made cup, to which adds the bronze brooch. The latter was made of a single metal piece, with the bilateral spring made of 4 coils and exterior chord. The brooch body is strongly arched, being semicircular in section, while the returned foot is wound to the bow. Length – 6.1 cm (Fig. 2/1, 5/4).

Another returned foot exterior chord brooch was found beside a handmade cup at ca. 3 m east grave 14 and ca. 3–4 m south the Early Medieval house (Cx. 16). Following the archaeological investigations, it was noted that the two items come from a grave damaged once with the house construction. Evidence to this effect is also provided by the fact that in the earth around the brooch were also discovered small human bone fragments. The brooch, preserved fragmentarily, is made of a single metal piece and has the bilateral spring, partially preserved, formed of 4 coils and exterior chord. The brooch body is arched and is rectangular-oval in section, while the fragmentarily preserved foot was returned and wound to the bow. Preserved length – 5.9 cm (Fig. 2/2, 5/3).

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During the last three decades, numerous studies were published in the specialty literature examining, often in the broader context of the brooch typologies in the Roman or Barbarian environments, the returned foot brooches (type Almgren 158), like the specimens made of a single metal piece in the cemetery at Hunedoara Timișană. Beside the recent finds in the Barbarian environment, including that Sarmatian, from the eastern part of Central Europe, they provide today the opportunity for new contributions and a series of significant notes regarding the brooches belonging to this type⁵. Although such type brooches drew, over time, the attention of many researchers, today, similarly to the period when their investigation started, a series of technological and constructional aspects decisive for an accurate typological framing are disregarded when analysed, thus negatively impacting both the establishment of their origin and cultural assignment and a more precise chronological framing⁶.

The fastening of the brooches in this type is by bilateral spring, commonly made of 4–8 revolutions set simply and exterior chord. Their body is most often strongly curved, round, rectangular, slightly square or semicircular in section. The head is incorporated in the terminal part of the body, and the foot, short in relation to the body length, is returned forming a semicircular catchplate, which wounds on the lower body part by several coils. These brooches are made of one or several pieces⁷, the bronze being most often the metal used in their production, yet there are also silver and iron specimens.

The research of the Sarmatian cemetery at Hunedoara Timișană (Șagu commune, Arad county) beside other settlements and cemeteries (for instance Giarmata (Timiș county), Nădlac (Arad county), Arad etc.), discovered and investigated in the last years due to the rescue archaeological research performed following the construction of a new road infrastructure in the west and south-west of Romania, significantly contributes in both clarifying the historical realities in this region as well as the more accurate establishment of certain chronological aspects, key for this area outside the province of Dacia, which belonged to the Barbarian world. Evidently, among the archaeological materials discovered in a series of graves, the brooches, including those with returned foot and exterior chord made of a single metal piece play an important role, as we shall see below⁸.

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⁵ After the completion and submission for printing of this study, an article discussing the returned foot outside chord brooches belonging to type Almgren 158 and 166 from the western Romania, drafted by S. Cociș, has been published within *Archäologische Beiträge – Gedenkschrift zum hundertsten Geburtstag von Kurt Horedt*, Cluj-Napoca, 2014.

⁶ An example to this effect is the fact that often, when such brooches are published, the chord position is disregarded. Also, some researchers ignore a series of aspects (size, foot width, coil number, whether the body is decorated or not or whether they are made of a single or two pieces) defining for both the typological and chronological framings.

⁷ They are made of two elements, respectively the proper brooch, made of a metal piece and separately, the spring.

⁸ We thank this way our colleague dr. Sorin Cociș (Institute of Archaeology and Art History of Cluj-Napoca) for the mentioned bibliography, as well as for the discussions based on the brooches in this type.

For the first time, a typology of the brooches with returned foot was drafted by Oscar Almgren in his work of 1897⁹, later republished in 1923¹⁰. Although the proposed classification is rather simplistic and lacks clarity, due to the state of the archaeological research of the period, it was and still is the starting point in the research of such brooches framed in group VI¹¹. The Swedish researcher divided the brooches in this group into two subgroups. To the first are assigned the specimens with returned foot and to the second, the specimens deriving from those with returned foot. The brooches in the first subgroup are divided into two variants. The first variant includes items made of a single metal piece with exterior chord, while the second comprises brooches made of several metal pieces. O. Almgren mentioned that their origin is unclear, yet noted that similar brooches belonging to the first variant are missing from territories in south Russia (the north-Pontic area)¹².

During the interwar period, an analysis of the returned foot brooches discovered in Hungary and Transylvania was made by Georg Müller¹³. The author's typology is based on their production technique, separating specimens made of a single metal piece from those made of two metal pieces as well as depending on the exterior or interior position of the chord¹⁴. The author also argues that the returned foot brooches, wound to the bow, emerged after ca. 150 years of Roman control all over the areas inhabited by the Celts, as a result of the revival of the ancient traditions¹⁵.

In the same year when G. Müller's study was published, an ample study dedicated to the Roman remains discovered in the Hungarian Plain (Alföld), was issued by the Hungarian researcher, Mihály Párducz. The author also analyses the returned foot brooches, framing them in a first group identified in the investigated area, arguing they originate in Russia¹⁶.

A few years after the two studies, an analysis of the returned foot brooches was made by Ilona Kovrig, who, in her work dedicated to the brooches in Pannonia, mentions a series of items that belong to type Almgren 158¹⁷, listing a series of analogies in the Sarmatian environment of the Pannonian Plain¹⁸. Based on aspects specific to these brooches, the author concludes they originate in the Celtic world of the La Tène period¹⁹.

The discussion on the returned foot brooches is resumed, at a few years distance, by Erzsébet Patek, in the monograph dedicated to the brooches in Pannonia²⁰. The author analyses the brooches in this type which she considers specific to the Sarmatian world, also noting their large numbers in the German world²¹.

⁹ ALMGREN 1897.

¹⁰ ALMGREN 1923.

¹¹ ALMGREN 1923, 71–75, group VI.

¹² ALMGREN 1897, 75; ALMGREN 1923, 75.

¹³ MÜLLER 1931, 56–76.

¹⁴ For those with exterior chord see MÜLLER 1931, 58–59, 64–65, Pl. I, framed in group I of returned foot brooches.

¹⁵ MÜLLER 1931, 57, 69–71. The emergence of these brooches in the Danube provinces on the basis of those from the La Tène period was mentioned by O. Tischler (apud AMBROZ 1966, 58).

¹⁶ PÁRDUZ 1931, 144, 167, Pl. XIII/3–18.

¹⁷ Cf. KOVRIG 1937, 122–123.

¹⁸ Cf. KOVRIG 1937, 122–123.

¹⁹ KOVRIG 1937, 122–123.

²⁰ PATEK 1942.

²¹ PATEK 1942, 138, Pl. XXVI/1–2, 16.

In 1948, Bedřich Svoboda and Jan Filip argue such brooches emerged in south the former USSR during the 1st c. AD, receiving a body curve according to the "soldierly" brooch model, from where they entered during the 2nd c. AD, via the province of Dacia, Pannonia and from there, on the trade route, Moravia, Slovakia and Poland²². The north-Pontic origin of these brooches was also suggested by Józef Kostrzewski, who argued that in Poland, they were brought by the Goths²³.

The returned foot brooches were also discussed in the monographs dedicated to the Sarmatian finds in Hungary issued by Mihály Párducz. The author states they are of local origin and terms them ("ungarische Typ")²⁴, maintaining their emergence in the Sarmatian Iazyges environment approximately between AD 180–220 and their massive diffusion after AD 260–270²⁵.

A local development of these brooches in the Pannonian Plain, based on those with returned triangular foot and exterior chord specific to the north-Pontic area, brought by the Sarmatians arriving from the north of the Black Sea, was argued in 1961 by Jiří Zeman²⁶.

Special attention was granted to the returned foot brooches by researcher Titus Kolník. Within his study of 1965, the author analysed a significant number of such brooches discovered on the current territories of Hungary, the Czech Republic, Slovakia and Poland²⁷. Following the author's investigations, he concludes that the discussed items date to the chronological interval comprised between the end of the 2nd c. AD and the end of the 3rd c. AD, without though excluding the possibility that certain variants remained in use also in the 4th c. AD. In what these brooches are concerned, the Slovakian researcher agreed with the view of the north-Pontic origin, without though excluding their development in the Central-European area²⁸.

A year later, in the monograph dedicated to the brooches in the territories south the European part of the former USSR, A. K. Ambroz proposes a classification of the returned foot brooches in this part of Europe based on morphological and technological aspects. The author frames the brooches made of a single metal piece with exterior chord on the territory of the former USSR in group 16, subgroup 1. Within the subgroup, the author establishes two series: 1. the Upper Dnieper area series; 2. Central-European series. Within the second series, the author identifies three variants²⁹. The author mentions that the brooches in the Central-European series, vary in proportions, having different body shapes in section, the spring being regularly short and the chord usually exterior³⁰.

In variant 1, the author includes the specimens bent asymmetrically with round body in section, and in the

second those asymmetrical with semicircular, rectangular and circular body in section, often faceted. In variant 3 are included the items which large foot and body in the shape of a stripe, often faceted and engraved. Chronologically, the items in the first variant were dated to the end of the 2nd c. – 3rd c. AD, rarely also in the 4th c. AD, those belonging to variant 2 by the end of the 3rd c. – 4th c. AD, while the specimens in variant 3 in the second and third quarter of the 5th c. AD. One must notice yet that the dating proposed by A. K. Ambroz for these brooches made of a single metal piece with exterior chord relies on analogies and dating proposed for such items in the Central-European territory.

In what the distribution area for these brooches is concerned, A. K. Ambroz concluded it mainly comprises the territories inhabited by the German populations, the Sarmatian Iazyges in the Tisza-Danube interfluvium, Pannonia where they reached via the Germans and the Sarmatians, mentioning they are foreign to the space in the north of the Black Sea and lack from the province of Dacia and lower Vistula region³¹. The author maintains that chronologically, they date to the chronological interval comprised between the end of the 2nd c. – the 3rd–4th centuries AD, occasionally until the end of the 5th c. AD³².

The finds of brooches with returned foot and exterior chord made of a single metal piece in the Upper Dnieper region, assigned to the first series in subgroup 1 of group 16 dating to the 1st c. AD³³, synchronous with those with returned foot wound to the bow made of a single metal piece, bilateral spring made of four coils and exterior chord and characterised by the same thickness of the bow and foot³⁴, made A. K. Ambroz assert they originate in the Upper Dnieper area from where they entered the Przeworsk culture environment shortly after becoming one of the main forms³⁵. From the Przeworsk environment they were borrowed by the Germans inhabiting the current territories of the Czech Republic and Slovakia but also by the Sarmatians in the eastern part of the Pannonian Plain³⁶. Last but not least, the same author argues they are all historical evidence for the active role played by the Przeworsk culture bearers in the life of the Central-European territories as well as the close relations they had with the Sarmatian Iazyges and the inhabitants on the current territory of the Czech Republic and Slovakia³⁷.

A few years later, within an ample monograph for the Roman period brooches in Moravia, the Czech researcher Ivan Peškař analyses in detail a significant number of returned foot brooches with exterior chord made of a single metal piece that belong to type Almgren 158³⁸. Upon such analysis but also that of the assemblages where they were discovered, the author concludes they frame in the chronological interval comprised between early 3rd century and first half of the 4th century AD.³⁹

²² SVOBODA 1948, 114–118; FILIP 1948, 300.

²³ KOSTRZEWSKI 1955, 250. These brooches are deemed as north-Pontic imports also by K. Majewski (MAJEWSKI 1960, 45), who also mentioned that for the lack of clear criteria it is hard to divide Pontic imports from local copies.

²⁴ PÁRDUZ 1941, 69; PÁRDUZ 1942, 40, 81; PÁRDUZ 1956, 160.

²⁵ PÁRDUZ 1956, 160–161.

²⁶ ZEMAN 1961, 183–188.

²⁷ KOLNÍK 1965, 202–204, 206–210, 233–234.

²⁸ KOLNÍK 1965, 233–234.

²⁹ AMBROZ 1966, 57, 58–59, Fig 3/1–10.

³⁰ AMBROZ 1966, 58.

³¹ AMBROZ 1966, 58.

³² AMBROZ 1966, 58.

³³ AMBROZ 1966, 57–58, Pl. 11/1–3, 23/1, 1.

³⁴ They belong to group 15, series 1, variant 1 of brooches in A. K. Ambroz's classification (Cf. AMBROZ 1966, 47–49, Pl 9/1–5, 22/1).

³⁵ AMBROZ 1966, 58.

³⁶ AMBROZ 1966, 58.

³⁷ AMBROZ 1966, 58.

³⁸ Cf. PEŠKAŘ 1972, 110–113, Pl. 21–30.

³⁹ PEŠKAŘ 1972, 110–113.

These brooches and their permanent use as significant dating elements for the chronological framing of the remains in the Central-European area are discussed by the famous researcher Kazimierz Godłowski in almost all of his works tackling chronological issues of the Roman period of the first centuries AD in this part of Europe⁴⁰.

An analysis of these brooches coming from the Przeworsk culture environment, based on grave finds within two cemeteries, was made by Roman Kenk⁴¹. Starting from finds in the Przeworsk area, the author analysed, within a broader framework, the finds known at that date in Europe. R. Kenk concluded that the origin of this brooch type is found in the Barbarian environment from the eastern part of Central Europe, respectively the Sarmatian Iazyges world on the current territory of Hungary and in the Przeworsk culture area⁴². Based on the association within assemblages of the returned foot exterior chord brooches made of a single metal piece with other brooch types and artifacts, which are good dating elements, R. Kenk dated the discussed brooches, including those in type Almgren 158, to the chronological interval comprised between AD 180–250⁴³.

Two years later, discussions on the returned foot brooches made of a single piece from Central Europe, were resumed by the Polish scholar Jerzy Szydlowski⁴⁴. Within his study, the author analyses in detail the returned foot brooches on the territory of Austria but also a series of aspects related to the origin and emergence of these brooches in the Central-European area. Based on finds of such brooches in Central Europe, J. Szydlowski noted that in the Przeworsk culture environment, their numbers is extremely high. Such archaeological reality makes the same author conclude that their origin must be sought in the Przeworsk culture area, yet mentions that a rather large number of brooches with returned foot also exist in the Sarmatian environment of the Pannonian Plain⁴⁵.

An analysis of the returned foot brooches made of a single metal piece was carried out for the finds in the Sarmatian environment on the territory of Szolnok county (Hungary) by Andrea Vaday⁴⁶. Without emphasis on the renowned Hungarian researcher's views, we only mention that A. Vaday dates these brooches to the second half of the 2nd c. – 3rd c. AD⁴⁷.

The Czech researcher Jaroslav Tejral also examined the returned foot brooches belonging to different variants, who, in most of his studies dedicated to the issues in this part of Europe during the 2nd–4th/5th centuries AD, approaches or uses for a series of chronological framings, this brooch category, including those in type Almgren 158⁴⁸.

A punctual and pertinent approach of the returned foot exterior chord brooches belonging to types Almgren

158 and 166 coming from the Upper Tisza area was made by the Ukrainian researcher Vyacheslav Kotigoroško⁴⁹. Based on specimens made of silver, bronze and iron, known at that date by the author in the region under analysis, V. Kotigoroško proposed, based on morphological criteria, the division of these brooches into five distinct variants.

The specimens in the first variant (A), according to the author, are characterised by round section and curved semi-circular bow⁵⁰, variant B by round section, bow curved in knee shape and faceted foot⁵¹, variant C by semicircular section, asymmetrical curved bow and wider foot⁵², variant D by massiveness, flat, polished, wide and asymmetrically bent bow⁵³, and the last variant (E) by bow and foot decoration and knobbed foot⁵⁴. Chronologically, they date to stage C1 (variant A), stage C2 – mid 4th century AD (variant B), stage C2 (variant C), stage C2 – early stage C3 (variant D) and to stage C1b those framed in variant E represented by Almgren 166 brooches.

For the southern region in west Ukraine (Transcarpathia) a significant contribution to the study of the returned foot exterior chord brooches (type Almgren 158) was made by researcher Liana V. Vakulenko⁵⁵. The author repertories these brooches in the region and updates existent information in the specialty literature. Upon the analysis of the find contexts, the Ukrainian researcher notes that in Transcarpath, two groups of such brooches may be distinguished. The first group is dated to the end of the 2nd c. – early 3rd c. AD (stage C1a) and the second to the second half of the 4th c. AD⁵⁶. Based on the association with other materials, the returned foot exterior chord brooches made of a single metal piece were dated at Solončy to the second half of the 4th c. – early 5th c. AD (C3/D1)⁵⁷. Following her approach, L. V. Vakulenko supports the German origin of the brooches of type Almgren 158 and asserts that in the southern part of the territories in west Ukraine, alike the most part of the Central-European area, they were spread by the German populations⁵⁸.

For finds of returned foot brooches made of a single or two metal pieces with interior or exterior chord coming from the territory of the province of Dacia we should mention the work of the Cluj researcher Sorin Cociş⁵⁹. The extremely high number of the specimens made of two pieces on the territory of Dacia made S. Cociş conclude they originated there, being exported to the entire Roman world but also beyond its borders⁶⁰. In what the specimens made of a single piece with exterior chord and framing to type Almgren 158 are concerned, the same author sub-classified them according to the execution system, chord position and body section, in two sub-variants (type 37a1c and 37a3c)⁶¹ termed, beside those

⁴⁰ GODŁOWSKI 1970, 19–20, Pl. II/4–6; GODŁOWSKI 1992, 27, Pl. 13/2, 7; GODŁOWSKI 1992a, 30–31, Fig. 13/1–2, 3; GODŁOWSKI 1993, 78–79; GODŁOWSKI 2000, 68–86.

⁴¹ KENK 1977, 318–329.

⁴² KENK 1977, 326.

⁴³ KENK 1977, 370–373.

⁴⁴ SZYDŁOWSKI 1979, 21–29.

⁴⁵ SZYDŁOWSKI 1979, 25–28.

⁴⁶ VADAY 1989, 86–87, Pl. 15/1–14.

⁴⁷ VADAY 1989, 87.

⁴⁸ TEJRAL 1988; TEJRAL 1992; TEJRAL 1999, 200–204; TEJRAL 2011.

⁴⁹ KOTIGOROŠKO 1995, 155–156.

⁵⁰ KOTIGOROŠKO 1995, 156, Pl. 125/13.

⁵¹ KOTIGOROŠKO 1995, Pl. 125/38.

⁵² KOTIGOROŠKO 1995, 156, Fig. 103/1, 105/17.

⁵³ KOTIGOROŠKO 1995, 156, Fig. 103/3–5, 125/32.

⁵⁴ KOTIGOROŠKO 1995, 156, Fig. 125/21.

⁵⁵ Cf. VAKULENKO 1998, 241–247.

⁵⁶ VAKULENKO 1998, 246.

⁵⁷ VAKULENKO 1998, 242–245, Fig. 2/2, 4, 6, 7.

⁵⁸ VAKULENKO 1998, 246.

⁵⁹ COCIŞ 2004, 142–147.

⁶⁰ COCIŞ 2004, 146–147.

⁶¹ COCIŞ 2004, 142, 143.

of type 37a5g and 37a8, the "Barbarian type"⁶². Without further emphasis on the author's views, we only wish to mention that S. Cociş dates these brooches from Dacia to the 3rd c. AD and argues they were produced at Porolissum⁶³.

Last but not least, we should mention within this brief historiographical dissertation the work of the Polish researcher Magdalena Maczyńska, author of some complex studies on the brooches in the Przeworsk culture area, wherein the returned foot exterior chord brooches made of a single metal piece are also approached⁶⁴. In 2011, the same researcher resumes the discussion concerning these brooches⁶⁵ in the work dedicated to the deposit at Łubiana (north Poland). Based on body and foot specificities, the author establishes a series of sub-variants⁶⁶. Based on their analysis and the examination of the find contexts, the scholar dates the Almgren 158 brooches to stages C1a-D1 (AD 180–410) in the Central-European chronology.

* * *

As noted from the above, the returned foot wound to the bow brooches made of a single metal piece, with bilateral spring and exterior chord belonging to type 158 in O. Almgren's classification, enjoyed over the years the attention of a large number of scholars. Although their number in Central-European territories is rather impressive, today, alike the early 20th century, there is neither an ample study setting up a detailed typology nor a synthesis establishing their chronology.

Moreover, there is no consensus either in connection to their origin and implicitly the centres where they were primarily produced. Most often, in the establishment of their origin was considered the state of knowledge at the date of the work's issue, other times though, when origin was established, a series of national ideological aspects and interests also counted.

Although O. Almgren mentioned their origin is unclear and noted that similar brooches lacked from territories in south Russia (north-Pontic area)⁶⁷, until the mid 60'ies of the 20th century it was believed, despite the fact that most of the published items came from the Sarmatian Iazyges environment of the Pannonian Plain and the German world located northwards, that they originate in the north-Pontic area (M. Párducz, B. Svoboda, J. Filip, J. Kostrzewski, K. Majewski) and that they are specific to the Sarmatian world (E. Patek). Nevertheless, their large numbers in the German world (E. Patek, A. K. Ambroz), their presence in Pannonia (I. Kovrig), but also their lack from the north-Pontic area (A. K. Ambroz) were noted. Based on the large number of such brooches discovered in the Sarmatian environment on the current territory of Hungary, it was also argued they are of local origin (M. Párducz), that they developed in the Pannonian Plain based on those brought by the Sarmatians arriving from the north of the Black Sea (J. Zeman) or that

they originate in the Upper Dnieper area from where they entered the Przeworsk culture environment where they shortly became one of the main forms (A. K. Ambroz). The fact they lack from the north-Pontic area makes the view of their origin in the north-Pontic area implausible. There are no scientific grounds either for the view expressed by J. Zeman, against which stand a series of realities, like the lack of the returned foot Pontic type brooches in the Sarmatian Iazyges environment of the Pannonian Plain, but also the fact that in this area, the returned foot brooches specific to the Central-European area emerged abruptly, being of several types and variants. There are not enough arguments for A. K. Ambroz's view according to which the returned foot exterior chord brooches made of a single metal piece from Central Europe originate in the Upper Dnieper area from where they disseminated in the Przeworsk culture environment where they shortly became one of the main forms. On simple inspection of the brooches in the Upper Dnieper area, dated to the 1st c. AD, which A. K. Ambroz believes as the origin of those Central-European, it may be noted, based on morphological specificities and sizes, that they are very close to rather the north-Pontic brooches with returned foot wound to the bow and made of a single metal wire, with bilateral spring of four revolutions and exterior chord, characterised by the same thickness of the bow and foot⁶⁸.

Although E. Patek recorded in his 1942 work a large number of type Almgren 158 brooches in the German world, only after the issue of T. Kolnik and I. Peškař's studies analysing the numerous brooches in this type from the territories north, north-east and east the Mid Danube, the idea of their origin and development in the northern half of the Central-European area begins to be clearly outlined, finally proved and confirmed by R. Kenk, J. Szydłowski, K. Godłowski, J. Tejral, M. Oledzki, L. V. Vakulenko, M. Maczyńska etc. Last but not least, one should mention that the archaeological finds of the last three decades as well as the studies dedicated to both the chronology in the Central-European *Barbarianicum* as well as those approaching a series of aspects on the migrations of the German populations of the 2nd–4th c. AD and the events of that period rather clearly show both the origin of these brooches in this part of Europe as well as the fact that from the north of the Central-European area, beside the brooches with interior chord, they disseminated southwards and south-eastwards, thus reaching the Sarmatian Iazyges and the Roman provincial environment⁶⁹.

Despite the very large number of such brooches, currently there is no adequate typology for the returned foot exterior chord brooches made of a single metal piece (type Almgren 158). However, any typology of the sort is difficult to draw up in the circumstances of a great variety of their general appearance. Also, such typology is hindered by the fact that many brooches, when published, are inadequately illustrated and have no appropriate description allowing for

⁶² COCIŞ 2004, 147.

⁶³ COCIŞ 2004, 147.

⁶⁴ MACZYŃSKA 1998, 417–424; MACZYŃSKA 2003, 553–567.

⁶⁵ MACZYŃSKA 2011, 73–79.

⁶⁶ MACZYŃSKA 2011, 73–79.

⁶⁷ ALMGREN 1897, 75; ALMGREN 1923, 75.

⁶⁸ They belong to group 4, series I, variant 1 of brooches in V. V. Kropotov's typology (KROPOTOV 2010, 65–72, Fig. 29–30), but also with some specimens in the second variant, yet of smaller sizes (Cf. KROPOTOV 2010, 72–74, Fig. 31–32). The specimens of the first variant date by the end of the 1st c. BC – mid 1st c. AD, while those in variant 2 to the second half of the 1st c. – early 2nd c. AD (Cf. KROPOTOV 2010, 72, 74).

⁶⁹ Cf. COCIŞ 2004, 142–147 with complete bibliography.

a more accurate framing. In addition, there are many cases when the brooches are published by photos or drawings that make impossible a pertinent morphological analysis and ultimately, an accurate framing.

* * *

Beside the specimens in the Sarmatian cemetery at Hunedoara Timișană, such brooches, not many, were discovered over the years in the south-west, west and north-west of Romania. Though very few, compared to the finds in the territories located west, north-west and north the current borders of Romania, one should mention they come from both the Barbarian environment in the territories near the west and north-west of Roman Dacia⁷⁰ as well as the province territory⁷¹.

The small number of these brooches in the territories south-west and west of Romania is due to the much smaller number of archaeological researches performed in Roman imperial period sites in the area. They are slightly more numerous in the territories located north-west the borders of the province of Dacia. When archaeological investigations began to be performed on large scale, the number of this type brooches and other artifact categories, increased sensibly. An example to this effect are the finds of the last three years yielded by the rescue archaeological research made following the construction of highway sections (Nădlac-Arad, Arad-Timișoara) in the west and south-west of Romania.

The specimens in the Barbarian environment in the territories located south-west, west and north-west the province of Dacia come from graves and settlements, being mainly bronze made, but there are also specimens made of silver (Șag, Timiș county)⁷² or iron (Curtuișeni, Bihor county)⁷³.

Several views concerning the chronological framing of these brooches from the territories inhabited by the Barbarian located west and north-west the province of Dacia were expressed, based on their association with other artifact categories.

Robert Gindele has recently proposed to date this type of items in the Barbarian environment of north-west Romania to stages C2-C3 (210/220–370/380)⁷⁴. The author supports his statements firstly on the finds of brooches with returned foot exterior chord made of a single metal piece (type Almgren 158) at Csengersima-Petea Vamă, Curtuișeni-”Vincze tag”, Lazuri-”Lubi tag”, Satu Mare-”Fernele 2–4”, Berveni-Holmoș⁷⁵ and, in the same area, on finds of

brooches with returned foot made of two metal pieces and the stamped pottery⁷⁶.

Following the analysis of the Barbarian remains from the Late Roman imperial period and early migrations in the north-west of Romania, Ioan Stanciu proposes to date the returned foot brooches with exterior chord made of a single metal pieces at Lazuri-”Lubi tag” and Satu-Mare in stages C3-D1⁷⁷. This chronological framing is based on the comparative analysis of the pottery with that at Solontsy (Transcarpathia)⁷⁸ but also on the bone comb with semi-circular handle, made of three pieces, found in the excavation at Lazuri-”Lubi tag”⁷⁹, belonging to type I, variant 2 in Thomas’s classification, as well as based on the two brooches at Lazuri-”Lubi tag”⁸⁰, which I. Stanciu describes as more massive, with flat rectangular foot, and which he compares with a late variant of the basic shape of type Almgren 158⁸¹. Without further emphasis on the archaeological context of the discovery of both the comb and the two brooches, we wish to mention that combs of the type are mainly spread in the second half of the 3rd c. – early half of the 4th c. AD⁸², while the two brooches, which are not that massive, are 4.4 cm long and respectively 4.8 cm, having close analogies among the specimens coming from archaeological contexts dating to the last part of stage C2 and stage C3⁸³.

It was argued that the brooches in this type from the Sarmatian environment on the current territory of Hungary, massively distributed in the Sarmatian environment after AD 260–270, emerging though sometime between AD 180–220⁸⁴. Following the analysis of many Sarmatian remains on the current territory of Szolnok county (Hungary), A. Vaday dates the returned foot exterior chord brooches made of a single metal piece in the Sarmatian environment on the current territory of Szolnok county (Hungary), mainly to the 3rd c. AD⁸⁵. A rather high number of such brooches was discovered in the Sarmatian cemetery at Madaras⁸⁶, where such items come mostly from graves dating mainly to the 3rd c. – early 4th c. AD (end of stage C1a-C2). The excavators mention though that certain variants of these brooches in the Sarmatian environment of the Pannonian Plain are still in use until early 5th c. AD⁸⁷. Noticeably, the brooches of this type in G 363 and G 411 in the cemetery at Madaras are 6.7

information supplied in connection to these brooches.

⁷⁰ GINDELE/ISTVÁNOVITS 2009, 69, 77–79; GINDELE 2010, 137–139.

⁷¹ STANCIU 2008, 148, 154.

⁷² STANCIU 2008, 148–149.

⁷³ STANCIU 2008, 153, Pl. 1 /17; STANCIU 2011, Pl. 1/17.

⁷⁴ Cf. MATEI/STANCIU 2000, 60, Pl. 336/9–10; STANCIU 2011, Pl. 1/18–19.

⁷⁵ STANCIU 2008, 154, Pl. 1/18–19.

⁷⁶ THOMAS 1960, 77, 92, 94

⁷⁷ Still from Lazuri, yet in point “Râtul lui Béla”, located at ca. 800 m from point -”Lubi tag”, comes a massive brooch with returned foot worked of a single 6.6 cm long piece, identified beside materials dating to D1 (Cf. MATEI/STANCIU 2000, 61, Pl. 336/7; STANCIU 2008, 153, Pl. 2/25; STANCIU 2011, 34, Pl. 2/25). We thank this way our colleague dr. Ioan Stanciu (Institute of Archaeology and Art History of Cluj-Napoca) for his kindness in specifying a series of aspects related to the place and context of the find.

⁷⁸ PÁRDUCZ 1956, 160–161.

⁷⁹ Cf. VADAY 1989, 86–87.

⁸⁰ KÖHEGYI/VÖRÖS 2011, Pl. 19/2, 48/3, 55/4, 74/4, 5, 75/3, 82/5, 95/3, 96/7.

⁸¹ KÖHEGYI/VÖRÖS 2011, 363.

⁷⁰ Cf. MULLER 1931, 72, Pl. 1. VI/6; DUMITRAȘCU/BADER 1967, 40, Fig. 19; DÖRNER 1970, 460–461, Fig. 16/1–2; NEMETI/GINDELE 1997, 667, Pl. 5/8; MATEI/STANCIU 2000, 60, 75, Pl. 336/9–10, 338/5; GINDELE/ISTVÁNOVITS 2009, 335, Pl. 77/3.

⁷¹ GUDEA/LUCĂCEL 1979, 337, Pl. XIV/157; BAJUSZ/COCIȘ 1995, 42, Pl. III/18; COCIȘ/ARDEVAN/PINTEA 1992, 329–330, Pl. VI/81, 85; COCIȘ 2004, 142, tip 37a1c, 143, tip 37a3c, 216, cat. no. 1789–1792, 218, cat. no. 1840, Pl. CXXIX/1789–1792, CXXXIII/1840. On the territory of the province of Dacia, the number of the brooches with returned foot made of a single or two pieces and interior or exterior chord is rather high (Cf. COCIȘ 2004, 142–147).

⁷² MULLER 1931, 72, Pl. 1. VI/6.

⁷³ NEMETI/GINDELE 1997, 667, Pl. 5/8.

⁷⁴ GINDELE/ISTVÁNOVITS 2009, 69; GINDELE 2010, 137–139.

⁷⁵ GINDELE 2010, 137–139, Fig. 66/1, 7–9, 13, 16. We thank this way our colleague dr. Robert Gindele with the County Museum of Satu Mare for the

cm long, the foot being wider than the rest of the body⁸⁸. All the grave goods evidence, in our view, their chronological framing to the first half of the 4th c. AD. The presence in the Sarmatian environment of the Panonnian Plain of these brooches during the first decades of the 4th century AD is also supported by the recent archaeological finds in the cemetery at Pócspetri⁸⁹. In grave 10 there, were discovered two brooches with returned foot and exterior chord made of a single metal piece beside a rich funerary inventory among which a silver "omega" (*penannular*) brooch ending with flat spherical projections filled with enamel⁹⁰, a disk mirror, a bone comb with arched handle, worked of three pieces etc.⁹¹. All these artifacts indicate, in our view, a dating of the grave sometime to the chronological interval comprised between the end of stage C2 and early/first half of stage C3 and under no circumstances to the second half of the 4th century AD⁹². In the case of the two brooches in G 10 at Pócspetri, although they mostly correspond to the morphological specificities mentioned by us above, their foot is slightly widened compared to the rest of the body.

In the chronological interval comprised between the end of the 2nd c. AD and end of the 3rd c. AD (stages C1a-C2) are dated the returned foot brooches, with the morphological specificities mentioned by us above, discovered in the territories located north the Upper Tisza⁹³. In the same area there are items also dated to the 4th c. AD (stage C3), yet, they are much more massive and the large foot is often much widened⁹⁴. In Transcarpathia (Ukraine) similar brooches morphologically were framed by L. V. Vakulenko in the chronological interval comprised between the end of the 2nd c. – early 3rd c. AD (stage C1a)⁹⁵. In the same geographical area there are late specimens, which have though other

morphological specificities, being of larger sizes and having a widened foot.

Without further emphasis on the chronological framing of such brooches from the Barbarian environment in the territories neighbouring the west and north-west of Romania, we only wish to mention that in the Przeworsk environment, brooches with similar morphology, which we believe we may call the "classical" variant, are mainly specific to stages C1a-C2 (AD 180–310), while those massive and of larger sizes with elongated foot and often widened to stages C3-D1 (AD 310/320–400/410). New finds in the Przeworsk culture environment support our arguments, furthermore confirming that brooches of this type date, depending on their morphological specificities, to these chronological intervals⁹⁶. A series of items discovered in the Barbarian environment on the current territory of Romania⁹⁷ confirm that the massive specimens with elongated, often widened foot are specific to stages C3-D1.

Although on the territory of the former province of Dacia the number of the finds of returned foot brooches made of a single or two metal pieces with interior or exterior chord is rather large, those belonging to type Almgren 158 are represented, according to the repertory in the monograph of S. Cociș, by only 5 specimens⁹⁸. Three items come from forts (Gherla, Potaissa), a specimen was discovered in the amphitheatre at Porolissum and in the case of the fifth item, coming still from Porolissum, the exact location of the find is unknown. In their case is worthy of note that their distribution area is limited to the area of Dacia Porolissensis. Interestingly, the other types of brooches with returned foot in Dacia come mainly from the territory of Dacia Porolissensis, which is explainable since territories north and north-west of Dacia were mainly inhabited by German populations. Last but not least, we wish to mention that in all points where brooches of the type were found, they emerged beside other brooch types or Barbarian artifacts of northern origin⁹⁹. An example to this effect are the brooches with solid catchplate, the headknob and exterior chord variant (group Almgren VII series I), known in the specialty literature as "Sarmatian" brooches, yet which, as shown above, originate in the Przeworsk culture environment from where they diffused southwards and eastwards¹⁰⁰.

Given the small number of the brooches with returned foot and exterior chord made of a single metal piece yet

⁸⁸ KÓHEGYI/VÖRÖS 2011, 115, 127, Pl. 82/5, 95/3.

⁸⁹ HULLÁM 2012.

⁹⁰ In the Sarmatian environment of the north-west Pontic area, two similar brooches with the specimen in G 10 at Pócspetri come from T 2 G 1 at Diviziya and G 5 at Bădragii Noi – „La Stâncă” (Cf. SUBOTIN/DZIGOVSKIJ 1990, 4, Fig. 3/4; KURCIATOV/BUBULICI 1997, 224, 228–229, 230, Fig. 3/1; BĂRCĂ/SYMONENKO 2009, 243, Fig. 97/22–23). The grave goods of T 2 G 1 at Diviziya include a disk mirror with thickened rim and side rectangular, perforated handle. The exterior part of the mirror is decorated in relief with tamga signs (Cf. SUBOTIN/DZIGOVSKIJ 1990, 4, Fig. 3/9; BĂRCĂ/SYMONENKO 2009, 246–147, Fig. 98/10). In the Sarmatian environment of the north-Pontic area, most of the mirrors of the type come from graves dating to the second half of the 2nd c. – early half of the 3rd c. AD (SIMONENKO 2004, 152; BĂRCĂ/SYMONENKO 2009, 246–249). Some mirrors of the type are rarely found in graves dated to the mid and second half of the 3rd c. AD (Cf. SIMONENKO 2004, 152; BĂRCĂ/SYMONENKO 2009, p. 247). The grave inventory of the grave at Diviziya also included a returned foot brooch wound to the bow with interior chord, the slightly widened foot being made of two metal pieces. Such brooches, according to V. V. KROPOTOV, emerge by mid 3rd c. AD and date mainly to the second half of the 3rd c. AD (Cf. KROPOTOV 2010, 150–154, group 4, series III with complete bibliography and existent views) which points to a dating of the grave at Diviziya sometime to this chronological interval. In what G 5 at Bădragii Noi – „La Stâncă” is concerned, one must mention it is part of a small cemetery dated to the end of the 2nd c. – early/first half of the 3rd c. AD (KURCIATOV/BUBULICI 1997, 230).

⁹¹ HULLÁM 2012, 356–357, Pl. 9.

⁹² HULLÁM 2012, 372.

⁹³ KOTIGOROŠKO 1995, 155–156, variants A and C in the typology proposed by V. Kotigoroshko.

⁹⁴ KOTIGOROŠKO 1995, 155–156. In V. Kotigoroshko's classification they are assigned to variants B and D.

⁹⁵ VAKULENKO 1998, 246.

⁹⁶ See to this effect the finds in the cemetery at Opatów MADYDA-LEGUTKO/RODZIŃSKA-NOWAK/AGÓRSKA-TELEGA 2011, vol. 1 (2), Pl. IV/14, XXIX/2, XLVII/1, XLVIX/2, L/10, LV/2, LVIII/10, LXI/2, LXVI/1, LXVIII/1, LXX/5, LXXVII/6, CI/3, CVIII/4, CXIII/1, CXXXV/2, CXXXVI/1, CLIV/25–26, CLXXVII/5, CLXXIX/3, CLXXXVIII/9, CXCIV/10, CCI/9, CCXXI/3, CCXXIII/2, CCXXII/42, CCXXXIII/3, CCXXXVI/42, CCLIV/1, CCLV/1, CCCIX/2, CCCXIX/2, CCCXXIII/1, CCCXXII/6, CCCXXVI/2, CCCLXIII/30, CCCLXVIII/2, CCCLXXI/8, CCCLXXX/2, CCCLXXXIII/2, CDII/1, CDXII/91–92, CDXIII, CDXIV. For the assemblages to which these brooches belong and their dating see the catalogue of finds in tome 1 (1).

⁹⁷ Cf. KOVÁCS 1912, 298, Fig. 62/2a, b; BÄRZU 1973, 63, Pl. XXV/3a-b, 4; MARINESCU/GAIU 1989, 128–130, Fig. 3A/1–2, 3B/2, 4A/1; GAIU 1995, Pl. V/1–2, 4; NEMETI/GINDELE 1997, 630, 662–663, Pl. 1/1; MATEI/STANCIU 2000, Pl. 337/10, 338/3; ȘOVAN 2005, 132–133, 153, Type 7, Pl. 248A/1, 303/16; OPREANU 2013, 51, Pl. I/2.

⁹⁸ COCIȘ 2004, 142, type 37a1c, 143, type 37a3c, 216, cat. no. 1789–1792, 218, cat. no. 1840, Pl. CXXIX/1789–1792, CXXXIII/1840.

⁹⁹ See to this effect COCIȘ/OPREANU 1998, 195–228; OPREANU/COCIȘ 2002, 227–265.

¹⁰⁰ Cf. COCIȘ/BĂRCĂ 2013, 161–175; COCIȘ/BĂRCĂ 2014.

also the archaeological context of their discovery we believe they were used on the territory of Dacia in the chronological interval comprised between AD 180/190 – 260/270 (stage C1a – early stage C2).

Finally, we would like to mention that the rather small number of this type of brooches (type Almgren 158) in the territory of Roman Dacia, their discovery especially in the north side of the province, their almost entire lack from the territory of the other Roman provinces by the Mid and Lower Danube and also their massive presence in the limes area and the neighbouring territories prove they are Barbarian artefacts of German origin and that they were not produced by the Romans. Their presence, together with other artifact categories, including brooches, evidence, in our view, the fact that these Barbarians inhabited the territories from the north and north-west proximity of the province starting the end of the 2nd c. AD, as well as the existence of an intensive trade between the Romans and the German populations (the Przeworsk culture bearers) by the northern border of Dacia.

As for the presence of returned foot exterior chord brooches made of a single metal piece within the graves in the Sarmatian cemetery at Hunedoara Timișană – they further prove the close relations between the Sarmatians from the Pannonian Plain and the German populations in the northern vicinity.

This type of brooches from the cemetery at Hunedoara Timișană is part of a group of graves located in the north area of the cemetery. The group was formed of graves 4, 7, 8, 9, 10, 11, 12, 13, 14, plus the pieces from the grave destroyed by the erection of the early medieval house. The central point of this group of graves is G 10 and the entire group was located on a space with 25–30 m diameter. Another group from this cemetery is located at approximately 30 m south the first and included graves 1, 2, 3, 5, 6, 17.

The graves in the first group had the dead laid in the funerary pit with their heads towards the north, north-north-west and north-north-east, the second group also included graves whose dead were buried with their heads towards south-south-east (M 1) and south-east (M 3). In the graves from the first group, besides the brooches subject of our analysis were also discovered other type of brooches (Fig. 5/5–7), which simplifies the chronological framing of this group of graves, but also allows a series of findings and assessments in relation to the returned foot exterior chord brooches made of a single metal piece (Almgren 158 type). Thus in graves 9 and 10, besides other inventory pieces were also discovered brooches with solid catchplate, exterior chord and fastening system (G 9) (Fig. 3/1, 5/6) or headknob (G 10) (Fig. 3/2, 5/7) (Almgren group VII, series 1), known as “Sarmatian” brooches, but which, as we have recently shown, are of German origin, formed in the Przeworsk culture environment¹⁰¹. Following the analysis of the pieces resulted from a series of well datable assemblages (graves), it was found the brooches with solid catchplate, exterior chord and headknob were mainly used in the chronological period between the last two decades of the 2nd c. AD and mid 3rd c. AD (stages C1a–C1b)¹⁰².

The goods in G 8 include a disk-shaped bronze brooch made of two elements. The brooches body is flat and the edge is decorated with six projections approximately circular, laid symmetrically, of which only five were preserved. The outer surface of the body was decorated with enamel, which did not survive either. The hinged fastening system on the interior part was formed of a plate where was inserted the axis around which the pin revolved. The pin did not preserve too¹⁰³ (Fig. 4/1–2, 5/5).

The spread area of the enamelled brooches includes the entire Roman Empire, but the maximum concentration area is Britannia, Gallia and the Rhine region¹⁰⁴. In Dacia the enamelled brooches are few¹⁰⁵. There are Roman enamelled brooches also in the Sarmatian environment from the Pannonian Plain¹⁰⁶ and in the north-Pontic area¹⁰⁷.

Brooches similar to the specimen in G 8 are spread on the entire territory of the Roman Empire¹⁰⁸, in the German environment¹⁰⁹ and in the Sarmatian environment of the Pannonian Plain¹¹⁰. K. Exner assigns these pieces to type III.24¹¹¹, E. Riha frames them into type 3.15.1¹¹², A. Böhme to type 41x¹¹³ and A. Mazur to type 3/15 in his typological classification¹¹⁴. As for the chronological framing of the brooches similar to the specimen within the grave at Hunedoara Timișană we could say that the views expressed by researchers are not very different. A. Böhme dated such brooches in the 2nd c. AD and partially in the 3rd c. AD¹¹⁵ and E. Riha frames the specimens from Augst to the end of the 2nd c. AD, mentioning that elsewhere, such brooches are encountered also by early 3rd c. AD¹¹⁶. I. Sellye concluded this type dates no later than Caracalla¹¹⁷. A. Mazur dated these brooches in the chronological period between AD 100 and 200¹¹⁸.

The item in G 8 at Hunedoara Timișană, in correlation with the rest of the grave inventory, points its dating by the end 2nd c. – early 3rd c. AD.

Based on the brooches and other categories of artifacts in the graves at Hunedoara Timișană, we can conclude that this cemetery dates to the chronological period between the end of the 2nd c. AD and the third quarter of the 3rd c. AD.

¹⁰³ A bronze fragmentary brooch made of two elements which did not preserve the body, that had a geometrical shape (probably disk), was found on the chest of the dead in G 3. It preserved the bilateral spring made of 8 coils, the pin and rectangular catchplate. The spring was attached in a rectangular support and the chord is, in its turn, passed through another orifice of the support. Both the support and the catchplate were attached to the body.

¹⁰⁴ EXNER 1939, 31–121; SELLYE 1939; PATEK 1942, 45–50, 118–123; RIHA 1979, 29–34; FEUGÈRE 1985; SNAPE 1993.

¹⁰⁵ COCIȘ 2004, 121–125.

¹⁰⁶ Cf. VADAY 1989, 82–86, Fig. 14; VADAY 2003, 315–421.

¹⁰⁷ Cf. KROPOTOV 2010, 302–326.

¹⁰⁸ Cf. EXNER 1939, 103, Pl. 13/5; SELLYE 1939, 40, 59–60, Pl. VIII/16, XIX/8; PATEK 1942, 49–50, Pl. XV/14; BÖHME 1972, 38, 66, Fundliste 34, Pl. 26/989–990; RIHA 1979, 87, Pl. 13/306.

¹⁰⁹ THOMAS 1966, 177, Pl. 9/13; BÖHME 1972, 66, Fundliste 34/5–10.

¹¹⁰ VADAY 1989, 84, cat. no. 323/1 Fig. 14/5, Pl. 110/1; VADAY 2003, 335, 337, 338, cat. no. 9/2, 55/1, 56, 67, 82/4, 85, 87, 94, 95/1, 111/1, 113, 114, Fig. 10.

¹¹¹ EXNER 1939, 103.

¹¹² RIHA 1979, 87.

¹¹³ BÖHME 1972, 38.

¹¹⁴ MAZUR 1998, Pl. I.

¹¹⁵ BÖHME 1972, 38.

¹¹⁶ RIHA 1979, 87.

¹¹⁷ SELLYE 1939, 11.

¹¹⁸ MAZUR 1998, Fig. 3.

¹⁰¹ Cf. COCIȘ/BÂRCĂ 2013, 161–175; COCIȘ/BÂRCĂ 2014.

¹⁰² COCIȘ/BÂRCĂ 2014.

Therefore, following the analysis of the specimens in the cemetery at Hunedoara Timișană and those with similar morphology coming from well dated graves and assemblages, both from the Sarmatian environment and the Przeworsk culture, we may argue that the returned foot exterior chord brooches, made of a single metal piece (Almgren 158 type) with the characteristics described above were used on the entire territory from the eastern part of Central Europe in stages C1a-C2 (AD 180–310) while the larger brooches, with elongated, often widened foot to stages C3-D1 (AD 310/320–400/410).

The analysis of the returned foot exterior chord brooches made of a single metal piece from the cemetery at Hunedoara Timișană in a wider context and as result of the findings concerning this type of brooches from the Central-European territories enable us to draw a few conclusions related to the origin, distribution area and chronology.

1. The distribution area of the returned foot exterior chord brooches made of a single metal piece clearly encompasses the Barbarian environment, mainly the German world or in close relation with it, further more confirming their Barbarian origin.

2. Based on the distribution area and the high number of such items discovered over time it may be concluded with utmost certainty that they originate in the environment of Przeworsk culture, which records the earliest discoveries and also the most discovered specimens.

3. From the Przeworsk culture environment these brooches spread, as result of the migration of new Vandal communities coming from the north to the south and south-eastern territories.

4. In the Sarmatian environment from the Pannonian Plain the number of brooches belonging to this type is much smaller than in the German world from the territories located northwards, while in the Sarmatian world from the north and north-west of the Black Sea such brooches are missing.

5. This type of brooches are foreign to the north-Pontic territory, being absent including from the Chernyakhov culture area in this region, which could indicate that among the groups of German populations that migrated eastwards, probably starting with stage C1b, there were no groups of Germans that manufactured and used this type of brooches.

6. The discovery of these brooches in the Sarmatian environment from the Pannonian Plain, sometimes in association with other categories of artifacts of German origin, as well as the relations with the German world¹¹⁹ are certain evidence that this type of brooches were taken over by the Sarmatian *lazyges* from the German populations (most likely the Vandals), once with their arrival and settlement in the regions from the northern proximity of the space inhabited by the Sarmatians, in Marcommanic Wars' aftermath and the period immediately after the end of this military conflict.

7. This type of brooches (Almgren 158 type) appears in the Sarmatian environment from the Pannonian Plain in the same period as those with solid catchplate, exterior chord and fastening system or headknob (Almgren group VII, series 1).

8. As early as the emergence of this type of brooches, their body had different shapes in the section, which does not allow in the current stage of knowledge any further more restricted nuances and chronological framing based on this criterion.

9. The returned foot exterior chord brooches made of a single metal piece (Almgren 158 type) with the morphological specificities listed by us above, which we termed the "classical" variant, may be dated in the chronological timeframe between the end of the 2nd c. AD and early 4th c. AD, while the massive brooches, of much larger sizes and elongated, often widened foot mainly belong to AD 310/320–400/410.

10. Following the morphological analysis of this type of brooches one might conclude that by the end of stage C2 some of the brooches in the analysed type start to have a series of features (widened foot, larger sizes) specific to the samples dated to stages C3-D1.

11. The presence of this type of brooches both in the Sarmatian *lazyges* environment and the province of Dacia records cultural and economic contacts and interferences in the region, accurately evidencing the movement direction of some German population groups starting with the last third of 2nd c. AD. (C1a), in the Marcommanic Wars' aftermath, but also the subsequent migration from the north of new German communities (the Vandals) towards the south and south-east, as well.

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¹¹⁹ Cf. VADAY 2003a, 207–225.

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1



2

Fig. 1. Brooches in grave 7 (1) and grave 12 (2) at Hunedoara Timișană.



1



2

Fig. 2. Brooches in grave 14 (1) and the damaged grave by the erection of the early medieval house at Hunedoara Timișană.



1

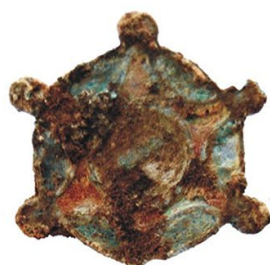


2

Fig. 3. Brooches in the variant with solid catchplate, simple spring, exterior chord, fastening system (1) or headknob (2) in grave 9 (1) and grave 10 (2) at Hunedoara Timișană.



1



2

Fig. 4. 1-2. Enamelled brooch in grave 8 in the cemetery at Hunedoara Timișană.

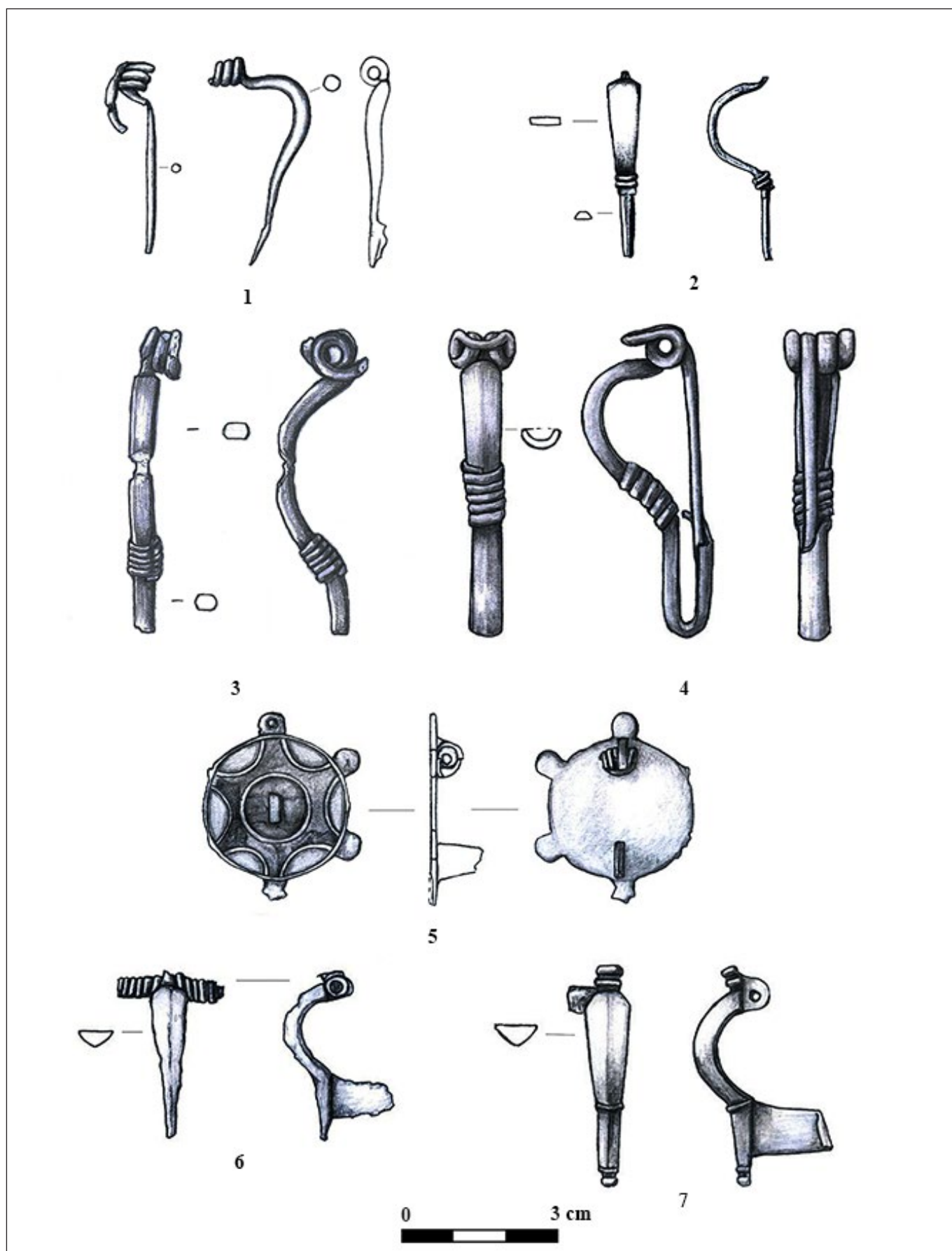


Fig. 5. 1–4. Returned foot exterior chord brooch made of a single metal piece in the cemetery at Hunedoara Timișană (1. grave 12; grave 7; 3. the damaged grave by the erection of the early medieval house; 4. grave 14); 5. Enamelled brooch in grave 8; 6. Brooch with solid catchplate, exterior chord and fastening system in grave 9; 7. Brooch with tall catchplate, exterior chord and headknob in grave 10.

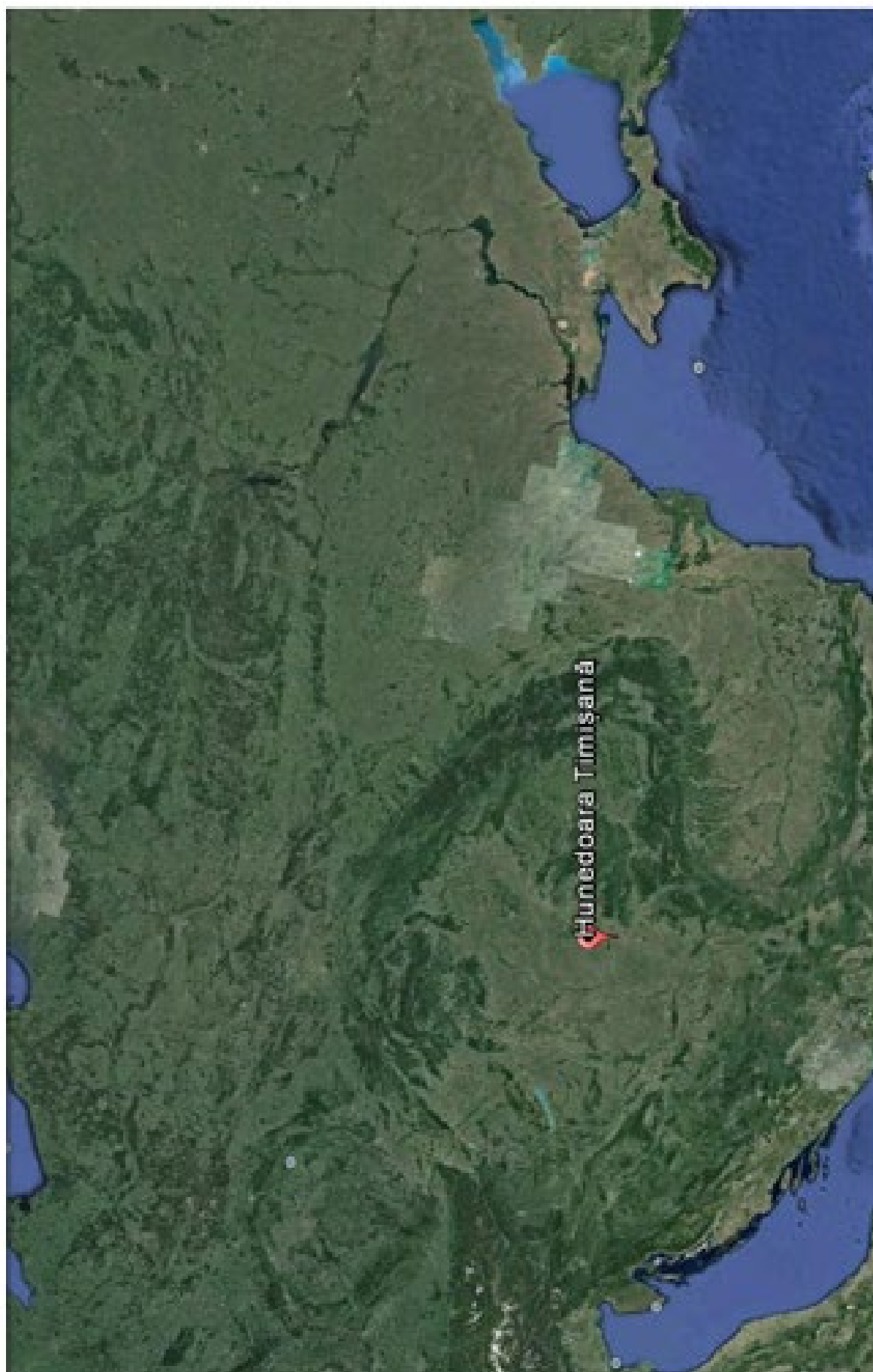


Fig. 6. Location of the cemetery at Hunedoara Timișană.