MIGRATION PERIOD FINDS FROM CÍFER-PÁC¹

JÁN RAJTÁR[®] – JOZEF ZÁBOJNÍK[®]

The paper presents three artefacts from the Migration Period collected by systematic survey at the settlement Cífer-Pác. They are the fragments of two fibulas with triangular headplate, which can be dated to the period around half of the 5th c. and the thorn of buckle probably from the same period. Analysis by X-ray fluorescence spectrometry (ED-XRF) showed that all of them were made from the alloy of copper (Cu) and zinc (Zn) with the admixture of lead (Pb), therefore from the lead brass. Together with some of the older findings, as settlement feature with silver gold-coated fibula with three knobs on the head and also recently found cemetery with the finding of fibula of type Prša-Levice, they fill up the mosaic of settlement of this site in the migration period.

Keywords: Western Slovakia, Migration Period, settlement, fibulas.

INTRODUCTION

First archaeological site in Cífer-Pác was discovered in 1965 by the then external employee of the Institute of Archaeology of SAS Viliam Kráľovič on the right bank of the Gidra stream, opposite a former mill (Varsik 2019, 223). Later, in 1969–1980, Titus Kolník conducted extensive systematic excavations at the site. They were focused mainly on research of a Germanic settlement with a residence of the Quadi elite from the 4th c.; however, other numerous evidences of multiple settlement in various periods of prehistory and until the Middle Ages was also uncovered there (review in Kolník 1991). Only about 200-250 m southwest of the uncovered area of the Germanic residence, a burial ground from the Avar Khaganate period was discovered and investigated (Fusek 2006; Zábojník 2008, 272, 273).² Further collections and aerial surveys confirmed that the settlement on the right bank of the Gidra stream was considerably intense and extensive there (Fig. 1: 1, 2, 8).

In 1993, a rescue excavation was carried out on the opposite – eastern – bank of the Gidra stream, at Záhumenice site, in association with relocation of oil pipeline (*Cheben/Ruttkay 1995*). Several settlement features with important finds mainly from the La Tène period (*Cheben/Ruttkay/Ruttkayová* 2012), Roman period (*Cheben/Ruttkay* 2010) or the Great Migration period (Fig. 1: 3; *Cheben/Ruttkay* 1997) were uncovered there during the excavation. Traces of two temporary Roman field camps were

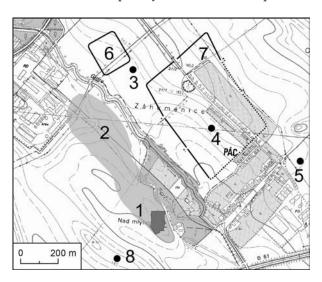


Fig. 1. Cífer, ward of Pác, Trnava distr. Map with indicated sites. 1 – excavated area in 1969–1980; 2 – extension of the settlement on the right bank of the Gidra stream; 3 – location of feature 8/1993; 4 – localization of the collected finds from the Great Migration period; 5 – burial ground from the Great Migration period; 6, 7 – Roman field camps; 8 – burial ground from the Avar Khaganate period.

 $^{^{\}rm 1}~$ The article was written as part of VEGA 2/0115/18 and 2/0088/20 projects.

² The burial ground was discovered under remarkable circumstances. Titus Kolník had been considering how important it would be to discover a cemetery for the studied Germanic elite's residence. Vilam Kráľovič detected an indistinct elevation in the surrounding flat landscape, where – according to his long experience from walks and field surveys or intuition – a cemetery might be situated. T. Kolník was sceptical, but had a trench excavated there. To his great surprise, a cemetery was discovered there indeed. However, it came from the Avar Khaganate period.

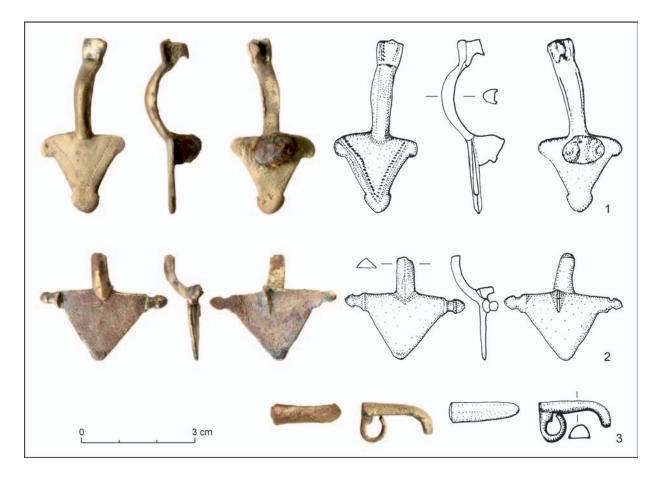


Fig. 2. Cífer, ward of Pác, Trnava distr. Collected finds from the Great Migration period (photo by J. Rajtár, reto drawings by J. Marettová).

identified in the area by means of aerial photos in 2008 (Fig. 1: 6, 7) and based on investigation and also previous finds, they were classified in the period of Marcomannic wars (Rajtár 2013). To verify their dating, an extensive systematic areal surface collection with metal detectors was carried out at accessible sites in 2017 over an area of almost 40 ha. Together with numerous finds from the Roman period which reliably confirm dating of these field camps to the Marcomannic wars period (Komoróczy et al. 2020, 197, 198, fig. 28-30), several remarkable artefacts from the Bronze Age (Mitáš/Rajtár/Tirpák 2020) and the La Tène period (Kolníková/Rajtár 2020) were discovered as well as numerous finds from other periods, primarily from the Middle Ages and the Postmedieval period. In the course of collection near the village's gardens (Fig. 1: 4), a small but remarkable group of three artefacts from the Great Migration period was found with the artefacts close to each other. We are dealing with this group in the presented article.

Description of the finds

- 1. Fragment of a fibula made from copper alloy with a flat triangular headplate bearing annular oval projections, low bow arc with D-shaped cross-section, a shallow longitudinal groove on the bottom and a short part of a broken foot. The headplate is decorated with miniature angular dimples and dots arranged in lines parallelly with the sides in the V shape oriented towards the tip. Similar traces of decoration are slightly visible on the broken foot as well. On the bottom of the head, there are remains of a strongly corroded iron spring, and there is a short trapezoidal catchplate on the broken foot. Surface of the headplate is considerably worn. The preserved length is 45 mm; width and length of the head is 22 mm; width of the bow is 4–5 mm. Place of deposit: Institute of Archaeology of SAS, Nitra, acc. no. 23/2017 (Fig. 2: 1).
- 2. Fragment of a fibula made of copper alloy with a flat triangular headplate with two preserved semi plastic profiled side knobs and a part of a broken-off low arc of a bow with triangular cross-section. On the flat bottom part of the head, near the bow stem, there are remains of a broken catchplate of the spring. The central knob, which was probably placed on the head's tip, is probably broken off as well. The preserved length is 28 mm; width

- of the head is 32 mm; the preserved length of the head is 18 mm; width of the bow is 5 mm. Place of deposit: Institute of Archaeology of SAS, Nitra, acc. no. 107/2017 (Fig. 2: 2).
- 3. Prong of a buckle made of copper alloy with a beaked tip, slightly widened, straightly cut rear, with D-shaped cross-section and annularly bent strip catch ring. Length 19 mm, width 5 mm, height with ring 9 mm. Place of deposit: Institute of Archaeology of SAS, Nitra, acc. no. 30/2017 (Fig. 2: 3).

CHEMICAL COMPOSITION OF ARTEFACTS AND COMMENTS ON THE METHOD OF THEIR PRODUCTION

The chemical composition of all three artefacts was studied by X-ray fluorescence spectrometry (ED-XRF) after they had been carefully cleaned. NITON XL 3t GOLDD X-ray fluorescence spectrometer³ was used for the analyses. It measured the fibula on the surface of the flat heads and the buckle prong on the upper, relatively straight, side. Measuring was limited only to the surface of the artefacts, however, it showed noteworthy results.

The analysis of the first fibula (Fig. 2: 1) documented that it was made of alloy of non-ferrous metals with the prevalent share of copper (Cu 79.79%), significant share of zinc (Zn 15.42%) and considerable admixture of lead (Pb 3.82%). Therefore, it was made of brass with admixture of lead or lead brass. The body of the fibula with the projections on the head with a catchplate for the spring axle with remarkably short catcher on the foot was probably cast in a bipartite mould. In the middle of the longitudinal groove on the bottom side of the bow, there are weak traces of blows, thus, its arc was obviously mechanically finished. Irregular annular or rounded projections on the head are considerably worn, but they probably had no decoration. The punched decoration on the head in form of lines of densely arranged small diamond-shaped dimples was punched with a tool with an identically shaped tip. These lines were lined by two dense lines of dots or scratches on the outside (due to the worn surface it is hard to recognize them). They were probably made with a burin with a sharp tip. Weakly visible traces of similar decoration on the preserved torso of the foot suggest that it had identical punched decoration on its sides. The catchplate on the bottom of the head is covered with corroded remains of an iron spring. Therefore, it is obvious that after the axle hole was drilled, a spiral with a pin made from iron wire was attached in it.

Measuring on the surface of the other fibula's head (Fig. 2: 1, 2) showed a partly different composition of the alloy. Its main component with a slightly lower share was copper (Cu 71.79%), the proportion of zinc was lower, too (Zn 13.93%), but the proportion of lead was considerably higher (Pb 7.27%) and a high proportion of tin was added (Sn 6.69%). Nevertheless, the fibula's surface bears visible traces of a grey metallic layer, so it is probable that the fibula's body cast from lead brass in a bipartite mould was additionally tinned on the surface. Apart from the semi-plastical profiled side knobs, a similar cast knob might have been placed also on the head tip; however, it is broken off. The material of the spring and pin is unknown. The preserved fragment does not show traces of any other decoration, but the tinned and polished surface might have made it look like a more luxurious silver brooch.

Identically, results of the analysis of the third artefact – the buckle prong (Fig. 2: 3) – confirmed that it was made of brass. Copper (Cu 82.09%) was the main component of the alloy which also contained a high proportion of zinc (Zn 16.37%) and a low admixture of lead (Pb 1.26%) and a trace amount of nickel (Ni 0.214%). The prong was probably cast in a bipartite mould already with its bent tip but with straight strip projection on the other end which was reinforced at its base. This projection was bent and wound around the axle into a circular ring and attached the prong movably to the buckle.

The analyses showed that all three artefacts were made of brass with a considerably high proportion of zinc (about 15%) and lower or higher proportion of lead (1.26%/3.82%/7.27%). Such composition of brass with a high proportion of zinc adds good plasticity at casting - even in comparison with bronze - and allows easy shaping and further finish of the cast artefact. The admixture of lead considerably reduces the temperature of melting, although it influences the process of casting and solidification if it is not homogeneously mixed with copper (Hammer 1998, 179, 184). Brass with high content of zinc suddenly occurred in the production of Roman metal artefacts and became widely used in the Augustinian period. Nevertheless, from the end of the 1st c., the proportion of zinc was gradually reduced and it was replaced by alloys of copper with cheaper lead and tin. The tumultuous times of great power-political changes, such as the turbulent Great Migration period, influenced the availability and supplies of raw material sources and, thus, the composition of metal artefacts. However, there are too few analyses of metal artefacts from this period

³ V. Mezey executed the analyses in the IA SAS laboratories.

to make any general conclusions (*Riederer 1998*, 202, 203). Results of the analyses of the three artefacts from Cífer-Pác documented their surprisingly similar chemical composition and almost standard alloying of the copper alloy with zinc, with a lower and variable proportion of lead. It has been commonly stated about such artefacts, according to their visual evaluation, that they were made of bronze. Their further serial analyses might bring important new information.

TYPOLOGICAL AND CHRONOLOGICAL CLASSIFICATION OF THE FINDS

Both fibulae belong to the group of so-called metal plate bow-shaped fibulae with triangular headplates. The first fibula (Fig. 2: 1) can be – according to the shape of its head and other preserved features – classified in the Bratei type, which was distinguished by V. Bierbrauer (1989) together with similar fibulae of the Vyškov type. He named them after finds from grave 3/1968 at a burial ground in Romania (*Bârzu 1986*, 100–102, fig. 6: 2, 3) and a find from Moravia (Tejral 1974, 15, 16, fig. 5: 1a, b). Previously collected exemplars of cast 'bronze' fibulae of the Bratei type were characterized by typical triangular headplates with three circular projections on their tips and longitudinal rhomboidal feet widest in their middle, usually also with two side and one end projection. Decorated exemplars had single zigzag lines engraved along their head edges and feet, some had single or double punched lines, some also had punched loops on the circular projections, but there were undecorated fibulae as well. Their sizes were approximately identical and their lengths varied between 7.2 and 9.8 cm (Bierbrauer 1989, 141–143, fig. 1: 1-8). Some of them showed features formally identical with the related Vyškov type, such as two circular projections on the head tips or decorated rivets on the same spots or two additional identical projections on the foot (Bierbrauer 1989, fig. 1: 3, 8, 12). For the distinguished Vyškov type, a shorter edge of the base and slightly arcuately cut sides of the triangular headplate ended with three circular or lobular projections on the tip were considered typical. It differed from the Bratei type with five projections, four side and one end, on the pentangular longitudinal foot (*Bierbrauer 1989*, 149, fig. 2: 1−5, 9). He considered the Bratei type fibulae derivatives or cheap and affordable 'bronze' cast imitations of luxurious silver fibulae with triangular headplates, like those discovered in Untersiebenbrunn and Tápé-Lebő as well as their models from the Black Sea territory (Bierbrauer 1989, 143-147, fig. 1: 9-12, 16). He saw models for the Vyškov type fibulae in

the luxurious fibulae which were discovered in pairs in the richly equipped burial in Regöly from the same chronological horizon 'Untersiebenbrunn/ Laa a. d. Thaya' and in the exemplars from the Black Sea region dated to the first quarter of the 5th c. (*Bier*brauer 1989, 150, 151, fig. 2: 6, 9, 11). In his opinion, the origin of both these related fibula types can be probably searched in the northern Pontic regions, where such fasteners occurred in the first quarter of the 5th c. From there, they arrived in the Danube territory as a result of extensive migration processes and moves of the eastern Germanic population groups. Not numerous grave finds point to the fact that such fibulae were part of female garment. In central and south-eastern Europe, they occurred mainly at burial grounds with small numbers of graves usually with poor grave goods. It suggests that they were used in a rather short period around the middle or in the second third of the 5th c. and their owners ranked among socially lower 'popular' groups of inhabitants (*Bierbrauer 1989*, 152–157).

Many researchers have paid attention to these fibulae – either in association with some finds or within selected geographical regions in the Great Migration Period (*Charalambieva 1991, 35, 36; Haralambieva 1990, 80; Harhoiu 1997, 100; Kiss 1981, 192–200; Tejral 1974, 15, 16*). I. O. Gavrituchin dealt with them in a wider geographical context and renamed them as the Bratei-Brigetio and Vyškov-Chersones types. He also distinguished several series and variants within these two main types (*Gavrituchin 2000, 281–290, 309–311*).

The last one to deal with the fibulae was J. Tejral in his study focused on the topic of production of miniature metal industry in the territory of the Middle Danube in the 5th c. (*Tejral 2015*, 297–307). He followed mainly from the assumed hoard with a collection of tools and other metal artefacts from Buschberg-Steinmandl in Burgenland, Austria, which also contained three unfinished cast bronze fibulae of the Bratei type (Szameit 1997, 236, 240, pl. 5: 1–3). He also collected more newer finds of fibulae of both related Bratei and Vyškov types represented by multiple alternations, variants and transitional forms especially in the territory of the Middle and Lower Danube, the Balkans and the Black Sea region. After their stylistical analysis, he came to a conclusion that mediation of such forms from the Pontic region was not necessarily the direct evolution line of these small Middle Danube fibulae; their origin in the Middle Danube region was probably allowed by specific development tendencies and influences. Similarly to V. Bierbrauer, when explaining the origin of the Bratei type fibulae in the Danube region, J. Tejral attributed special importance to the silver fibula with a triangular

headplate from a female burial in Untersiebenbrunn, which was decorated by triplets of globular rivets on the head and a rhomboidal foot and dated to the early Great Migration period. He assumes that these decorative rivets, which occurred also on some other exemplars as well as on fibulae with semi-annular plates, were later replaced by circular or lobular projections on fibulae of the Bratei and Vyškov types (*Tejral 2015, 302–304, fig. 8: 4–6*). He considered the pair of small gilded fibulae discovered in a grave from Vranja near Hrtkovci in Serbia an interlink in this development. Both cast fibulae from this female burial have three miniature knobshaped projections placed on triangular heads' tips and three identical projections are on the angles and ends of their rhomboidal feet. The fibulae were also decorated with lines of incisions on the edges of their heads and feet (Dautova-Ruševljan 1980–1981, 146, 147, fig. 3; pl. I: 1, 2). J. Tejral dates them to the late first half of the 5th c. or stage D2/D3 (Tejral 2015, 304). He supposes that luxurious silver fibulae with triangular headplates were soon imitated and produced in the Middle Danube region in cheaper bronze forms, as suggested by three exemplars in the hoard from Buschberg-Steinmandl. There are only very few reliable find assemblages for dating of the Bratei or similar Vyškov type fibulae. Based on their analysis, he dates their occurrences - identically with V. Bierbrauer – to the period around the middle/third fourth of the 5th c. (*Tejral 2015*, 307).

The fibula from the collection in Cífer-Pác can be classified in the same period. The closest parallels to it among the previous finds are represented mainly by exemplars from Brigetio (Komárom-Szőny; *Bierbrauer 1989*, 147, fig. 1: 6; *Kiss 1981*, 194, fig. 1: 5; *Tejral 2015*, fig. 4: 4) and from Carnuntum (Bad-Deutsch Altenburg; *Beninger 1930*, 37, fig. 17: 1; *Bierbrauer 1989*, 149, fig. 1: 4; *Tejral 2015*, fig. 5: 2) which have identically shaped heads and similar punched decoration; the fibula from Carnuntum has annular loops on the projections.

Classification of the second fibula is more complicated. Only a triangular head with two lateral semi-plastic profiled knobs and a fragment of the bow with triangular cross-section have been preserved from this fibula (Fig. 2: 2). The silver fibula from a collection at Marhát hill in the cadastral area of the village of Moravany nad Váhom, resp. Hubina, has identically shaped head with one tip and two lateral knobs.

According to M. Jakubčinová, it is probably a fibula of the Bratei type, but features typical of this type are absent for such classification. She compares it with older finds of similar fibulae from Nové Zámky and Slovenské Pravno as well as the more recent find from Bojná (*Jakubčinová* 2008, 58, fig. 1: 17). The

bronze fibulae from Nové Zámky and Slovenské Pravno have – according to the illustrations published by K. Pieta (1987, fig. 6) – similar triangular heads, but with circular, not plastic profiled knobs. Unlike the undecorated flat foot of the fibula from Marhát, there are four lateral circular projections on their elongated feet terminated with semi-circular bases. According to I. O. Gavrituchin, they would belong to the variant of the Middle Danube series of the Bratei-Brigetio type (Gavrituchin 2000, 284, fig. 6: 29). The bronze fibula from the collections in Bojná has a semi-circular headplate with two flat lateral and one tip projections, a short and low arc of the bow and a long undecorated pentangular foot with a central ridge and slightly inwards cut edges (Pieta 2008, 468, fig. 6: 2). K. Pieta classifies it to the Bratei type fibulae as well (*Pieta* 2007, 175–179, fig. 3: 2); however, this exemplar lacks elements typical of this type of fibulae, too. Some variants have similar semi-circular heads, e.g. from the sites of Roman and Nichiteni in Romania, but their other features are typical of the Bratei type (Gavrituchin 2000, 310, fig. 6: 53, 61; Harhoiu 1997, pl. LXXVI: A6, B1). In our opinion, the fibula from Bojná is an imitation of metal-plate fibulae with semi-circular headplates, which is suggested not only by the shape of its head but also the form of its foot. Luxurious exemplars, such as the silver fibula with a triangular head from a grave in Untersiebenbrunne might have been a model of the silver fibula from Marhát too, but the shape of its foot resembles also the metalplate fibula with semi-circular head from the same hoard (Tejral 2011, 189, 190, fig. 146: 3, 4). Therefore, in our opinion, it is probably a specific simplified hybrid variant.

The fibula from Veres-Patak in Hungary, which was published by J. Bemmann (2008, 147, 148, fig. 3: 2), has a triangular head with three profiled knobs almost identical with the finds from Cífer-Pác. However, this fibula has a completely different straight foot decorated with twelve transverse grooves. Therefore, J. Bemman compares it mainly with exemplars with similarly shaped, although partly differently decorated, feet, like the ones known from the sites of Krefeld-Gelep (Reichmann 1999, 137, fig. 6), Drösing (Stuppner 1989, fig. 1410) and from Belgrade (Kovačević 1960, pl. VI: 23, upper left; 1962, 117, fig. 3). He identified this considerably heterogeneous group as Drösing/Beograd and dated it to stage D2. The fibula from Drösing and the pair of fibulae with similarly grooved feet, but different heads, from Erdő-Kevesd were classified by J. Tejtral in the Niederflorstadt type and dated them together with the fibula from Belgrade to the transitional stage D2/D3, i.e. shortly before the middle and third quarter of the 5th c. (Tejral 2007, 92,

fig. 21: 2, 3, 16). The latest find of such fibula with a triangular head with three plastic buttons and a straight transversally grooved foot comes from the collections in Jevíčko in the region of Malá Haná (*Droberjar/Knápek/Jarůšková* 2019, 123, fig. 14: 1; *Jílek/Vích* 2019, 109, 110, fig. 2: 3).

Part of the bow with the foot is absent from the fibula from Cífer-Pác and only a fragment of its damaged head has been preserved. Thus, it is difficult to say whether it could have had the design of the Marhát fibula or the shape identical with the Veres-Patak fibula. Nevertheless, it can be obviously dated to the third quarter of the 5th c., similarly to the first Bratei type fibula.

The last find from the group, the buckle prong with beaked tip and straightly cut rear has a typical shape which could classify it clearly to the Great Migration period, however, its simple design does not allow its more exact dating. It probably belongs to the same period as the fragments of both fibulae.

OTHER EVIDENCE OF SETTLEMENT IN CÍFER-PÁC FROM THE GREAT MIGRATION PERIOD

In the studied area with a Germanic residence, two settlement features from the period after its extinction were uncovered at the site of Nad mlynom on the right bank of the Gidra stream (Fig. 1: 1). One of them was a sunken hut interrupting furrow foundation of one of the longitudinal structures of the residence as well as stakeholes of the palisade enclosing its area. The second one is a storage pit. According to fragments of pottery vessels from their backfills, they can be dated to the initial Great Migration period-the end of the 4th and first third of the 5th c., when the farmstead was abandoned and its structures were in ruins (*Varsik/Kolník* 2009; 2013, 87–89, fig. 13–15).

During rescue excavations on the eastern bank of the Gidra stream, Záhumenice site, mentioned in the introduction, another settlement feature from the Great Migration period was uncovered (Fig. 1: 3). It was a deep storage pit whose backfill contained fragments of wheel-made and hand-made ceramic vessels and Roman bricks, a double-sided three-layer bone comb and a gilded silver fibula with three plastic knobs on a semicircular head and a rhomboidal foot terminated with a base shaped like a stylized animal head; the fibula was decorated

with carved notches (*Cheben/Ruttkay* 1995, 68, fig. 43: 1–4; 1997). Together with a pair of similar fibulae from a grave in Sikenica-Veľký Pesek, it belongs to the first fibulae of this type in the Danubian territory which are dated around the middle 5th c. (*Pieta* 2002, 240, fig. 1: 3, 4; *Tejral* 1997, 350, fig. 28: 8, 9, 12; 2008, 258, fig. 5: 1, 2) and the uncovered settlement feature probably comes from the same period.

In 2020, a rescue excavation was carried out in Cífer-Pác, in the area of the south-eastern edge of the village, where part of an inhumation burial ground from the Great Migration period (Fig. 1: 5) was uncovered. Ten rather poorly equipped graves, which were mainly disturbed by contemporary robberies,4 have been studied so far. In one of the graves, a bronze fibula with a triangular head and a rhomboidal foot decorated with simple deep carved notches of the Prša-Levice type was discovered. These fibulae are also dated to the period around the middle or the second third of the 5th c. (Tejral 1997, 349, fig. 29: 22; 2002, 318, fig. 2: 8, 9; 2008, 258, fig. 5: 9, 6), so this burial ground probably belongs to the settlement from the same period which has been only documented by the above mentioned sporadical finds so far.

CONCLUSION

The analysis of the group of collected finds – two fragments of fibulae with triangular heads and a buckle prong – complements the previous very rare evidence of continuous settlement in the area of the Gidra stream basin in the territory of today's village of Cífer-Pác also in the Great Migration period. In comparison with the previous very intense Germanic settlement in the Late and Final Roman period, when there was the local elite's residence with important commercial area built, a significant decline, drain and pauperization of the population occurred in the first stages of the Great Migration period. The population's remains might have used the suitable conditions in the area of the previously deforested and cultivated landscape until the second third of the 5th c. Together with the nearby small burial ground in Čataj probably from the same or a little younger period (Zábojník 1997) and several collected finds from Bohdanovce nad Trnavou (Kolník/Mitáš 2012, 53, fig. 5: 9, 12), they complement the mosaic of settlement in this region of the Trnavská tabul'a plate in the Great Migration period.

We wish to express our gratitude to our colleague Mgr. Bohuslav Šebesta from Archeologická Agentúra, s.r.o. company, which carries out rescue excavations.

BIBLIOGRAPHY

- Bârzu 1986 L. Bârzu: Monumente germanice descoperite la Bratei, jud. Sibiu. Studii și Cercetări de Istorie Veche și Arheologie 37, 1986, 89–111.
- Bemmann 2008 J. Bemmann: Mitteldeutschland im 5. Jahrhundert Eine Zwischenstation auf dem Weg der Langobarden in den mittleren Donauraum? In: J. Bemmann/M. Schmauder (Hrsg.): Kulturwandel in Mitteleuropa. Langobarden, Awaren, Slaven. Akten der Internationalen Tagung in Bonn vom 25. bis 28. Februar 2008. Kolloquien zur Vor- und Frühgeschichte 11. Bonn 2008, 145–228.
- Beninger 1930 E. Beninger: Prähistorische, germanische und mittelalterliche Funde von Carnuntum und Umgebung. Materialien zur Urgeschichte Österreichs 4. Wien 1930.
- Bierbrauer 1989 V. Bierbrauer: Bronzene Bügelfibeln des 5. Jahrhunderts aus Südosteuropa. *Jahresschrift für Mitteldeutsche Vorgeschichte* 72, 1989, 141–160. DOI: https://doi.org/10.11588/jsmv.1989.0.50542
- *Charalambieva 1991* A. Charalambieva: Fibuli ot V v. ot Severoistočna Balgarija. *Archeologia* 42/1, 1991, 33–38.
- Cheben/Ruttkay 1995 I. Cheben/M. Ruttkay: Záchranné výskumy v Cíferi-Páci a v Čataji. AVANS 1993, 1995, 67–69
- Cheben/Ruttkay 1997 I. Cheben/M. Ruttkay: Objekt aus der Völkerwanderungszeit in Cífer-Pác. In: *Tejral/Friesinger/ Kazanski* 1997, 89–98.
- Cheben/Ruttkay 2010 I. Cheben/M. Ruttkay: Römische Militärausrüstungsgegenstände aus dem germanischen Grubenhaus in Cífer. Slovenská archeológia 58, 2010, 309–336.
- Cheben/Ruttkay/Ruttkayová 2012 I. Cheben/M. Ruttkay/ J. Ruttkayová: Zahlbené chaty z doby laténskej v Cíferi. In: G. Březinová/V. Varsik (eds.): Archeológia na prahu histórie. K životnému jubileu Karola Pietu. Archaeologica Slovaca Monographiae. Communicationes 15. Nitra 2012, 289–298.
- Dautova-Ruševljan 1980–1981 V. Dautova-Ruševljan: Ein germanisches Grab auf dem Fundort Vranja bei Hrtkovci in Syrmien. *Archaeologia Iugoslavica* 20–21, 1980–1981, 146–153.
- *Droberjar/Knápek/Jarůšková* 2019 E. Droberjar/R. Knápek/ Z. Jarůšková: The importance of finds from the Migration Period in Malá Haná (Moravia). *Přehled výzkumů* 60/1, 2019, 109–141.
- Fusek 2006 G. Fusek: Výklenkové hroby na včasnostredovekom pohrebisku v Cíferi, časti Pác. Študijné zvesti AÚ SAV 39, 2006, 27–54.
- Gavrituchin 2000 I. O. Gavrituchin: Final tradicij kul'tur rimskogo vremeni v Vostočnom Prikarpafe. In: M. Mączyńska/T. Grabarczyk (Hrsg.): Die spätrömische Kaiserzeit und die frühe Völkerwanderugszeit in Mittel- und Osteuropa. Berichte der Internationalen Tagung veranstaltet vom Archäologischen Institut der Universität Łódź 9.–11. November 1996. Łódż 2000, 261–324.
- Hammer 1998 P. Hammer: Verfahrenstechnische Untersuchungen. In: H.-U. Voß/P. Hammer/J. Lutz: Römische und germanische Bunt- und Edelmetallfunde im Vergleich. Archäometallurgische Untersuchungen ausgehend von elbgermanischen Körpergräbern. Bericht der Römisch-Germanischen Kommission 79, 1998, 179–199.
- Haralambieva 1990 A. Haralambieva: Archäologische Spuren der Goten südlich der unteren Donau aus dem 5. Jh. n. Chr. Archaeologia Austriaca 74, 1990, 79–84.

- Harhoiu 1997 R. Harhoiu: *Die frühe Völkerwanderungszeit* in Rumänien. Archaeologia Romanica 1. Bukarest 1997. *Jakubčinová* 2008 – M. Jakubčinová: Ojedinelé nálezy z vrchu Marhát. *Študijné Zvesti AÚ SAV* 44, 2008, 51–63.
- Jílek/Vích 2019 J. Jílek/D. Vích: The Migration Period in the Region of Malá Haná Augmented. In: J. Melnerová Šuteková/M. Bača/P. Pavúk (eds.): Salve, Edvarde! A toast to the Jubilee of Professor E. Krekovič. Studia Archaeologica et Mediaevalia XII. Bratislava 2019, 107–115.
- Kiss 1981 A. Kiss: Funde aus dem 5.–6. Jh. im Gebiet von Brigetio. Folia Archaeologica 32, 1981, 191–210.
- Kolník 1991 T. Kolník: Cífer v praveku a v ranej dejinnej dobe. In: L. Bernadič (zost.): Cífer. Vlastivedná monografia. Bratislava 1991, 12–28.
- Kolník/Mitáš 2012 T. Kolník/V. Mitáš: Archeologické nálezy k osídleniu Bohdanoviec nad Trnavou a niekoľko poznámok k činnosti detektoristov. Študijné Zvesti AÚ SAV 51, 2012, 35–74.
- Kolníková/Rajtár 2020 E. Kolníková/J. Rajtár: Mince Vindelikov z Cífera-Pácu a z ďalších laténskych lokalít na Slovensku. In: I. Čižmář/H. Čižmářová/A. Humpolová (eds.): Jantarová stezka v proměnách času. Brno 2020, 579–588.
- Komoróczy et al. 2020 B. Komoróczy/J. Rajtár/M. Vlach/C.-M. Hüssen: A companion to the archaeological sources of Roman military interventions into the Germanic territory north of the Danube during the Marcomannic Wars. In: M. Erdrich/B. Komoróczy/P. Madejski/M. Vlach (eds.): Marcomannic Wars and Antonine Plague. Selected essays on two disasters that shook the Roman Worl Die Markomannenkriege und die Antoninische Pest. Ausgewählte Essays zu zwei Desastern, die das Römische Reich erschütterten. Spisy Archeologického ústavu AV ČR Brno 61 Lubelskie materiały archeologiczne 17. Brno Lublin 2020, 173–254.
- Kovačević 1960 J. Kovačević: Arheologija i istorija varvarske kolonizacije južnoslovenskih oblasti od IV do početka VII veka. Novi Sad 1960.
- Kovačević 1962 J. Kovačević: Srpsko Podunavlje. In: D. Dimitrijević/J. Kovačević/Z. Vinski: Seoba naroda arheološki nalazi jugoslovenskog Podunavlja. Zemun 1962.
- Mitáš/Rajtár/Tirpák 2020 V. Mitáš/J. Rajtár/J. Tirpák: Nález bronzovej dýky z Cífera-Pácu, okres Trnava. In: A. Kozubová/E. Makarová/M. Neumann (eds.): Ultra velum temporis. Venované Jozefovi Bátorovi k 70. narodeninám. Slovenská archeológia – Supplementum 1. Nitra 2020, 409–415.
 - DOI: https://doi.org/10.31577/slovarch.2020.suppl.1.34
- Pieta 1987 K. Pieta: Die Slowakei im 5. Jahrhundert. In: W. Menghin/T. Springer/E.Wamers (Hrsg.): Germanen, Hunnen und Awaren. Schätze der Völkerwanderungszeit. Ausstellungskatalog. Nürnberg 1987, 385–417.
- Pieta 2002 K. Pieta: Neue Erkenntnisse zum Grab von Sikenica-Veľký Pesek. In: J. Tejral (Hrsg.): Probleme der frühen Merowingerzeit im Mitteldonauraum. Spisy Archeologického ústavu AV ČR Brno 19. Brno 2002, 237–245.
- Pieta 2007 K. Pieta: Hradiská Bojná II a Bojná III. Významné sídlo z doby sťahovania národov a opevnenia z 9. storočia. In: K. Pieta/A. Ruttkay/M. Ruttkay (eds.): Bojná. Hospodárske a politické centrum Nitrianskeho kniežatstva. Archaeologica Slovaca Monographiae. Studia 9. Nitra 2007, 173–190.

- Pieta 2008 K. Pieta: Höhensiedlungen der Völkerwanderungszeit im nördlichen Karpatenbecken. In: V. Bierbrauer/H. Steuer (Hrsg.): Höhensiedlungen zwischen Antike und Mittelalter von den Ardennen bis zur Adria. Ergänzugsbände zum Reallexikon der Germanischen Altertumskunde 58. Berlin New York 2008, 457–480.
- Rajtár 2013 J. Rajtár: Rímske poľné tábory v Cíferi. *AVANS* 2009, 2013, 166–170.
- Reichmann 1999 Ch. Reichmann: Germanen im spätantiken Gelduba (Krefeld-Gelep). In: Th. Fischer/G. Precht/ J. Tejral (Hrsg.): Germannen beiderseits des spätantiken Limes. Spisy Archeologického ústavu AV ČR Brno 14. Köln – Brno 1999, 129–144.
- Riederer 1998 J. Riederer: Ergebnisse der Atomabsorptionsspektralanalyse zur Materialauswahl in der Antike. In: H.-U. Voß/P. Hammer/J. Lutz: Römische und germanische Bunt- und Edelmetallfunde im Vergleich. Archäometallurgische Untersuchungen ausgehend von elbgermanischen Körpergräbern. Bericht der Römisch-Germanischen Kommission 79, 1998, 200–203.
- Stuppner 1989 A. Stuppner: KG Drösing, VB Gänserndorf. Fundberichte aus Österreich 28, 1989, 259.
- Szameit 1997 E. Szameit: Ein Völkerwanderungszeitliches Werkzeugdepot mit Kleinfunden aus Niederösterreich. Ein Vorbericht. In: Tejral/Friesinger/Kazanski 1997, 233–248.
- Tejral 1974 J. Tejral: Völkerwanderungszeitliches Gräberfeld bei Vyškov (Mähren). Studie Archeologického ústavu ČSAV v Brně II/2. Praha 1974.
- Tejral 1997 J. Tejral: Neue Aspekte der frühvölkerwanderungszeitlichen Chronologie im Mitteldonauraum. In: Tejral/Friesinger/Kazanski 1997, 321–392.
- Tejral 2007 J. Tejral: Das Hunnenreich und die Identitätsfragen der barbarischen"gentes" im Mitteldonauraum aus der Sicht der Archäologie. In: J. Tejral (ed.): Barbaren im Wandel. Beiträge zur Kultur- und Identitätsbildung in der Völkerwanderungszeit. Spisy Archeologického ústavu AV ČR Brno 26. Brno 2007, 55–119.
- Tejral 2008 J. Tejral: Ein Abriss der frühmerowingerzeitlichen Entwicklung im mittleren Donauraum bis

- zum Anfang des 6. Jahrhunderts. In: J. Bemmann/M. Schmauder (Hrsg.): Kulturwandel in Mitteleuropa. Langobarden Awaren Slaven. Akten der Internationalen Tagung in Bonn vom 25. bis 28. Februar 2008. Kolloquien zur Vor- und Frühgeschichte 11. Bonn 2008, 249–283.
- Tejral 2011 J. Tejral: Einheimische und Fremde. Das norddanubische Gebiet zur Zeit der Völkerwanderung. Spisy Archeologického ústavu AV ČR Brno 33. Brno 2011.
- Tejral 2015 J. Tejral: Zum Problem der Feinschmiedeproduktion im Mitteldonauraum während des 5. Jahrhunderts nach Chr. Památky archeologické 106, 2015, 291–362.
- Tejral/Friesinger/Kazanski 1997 J. Tejral/H. Friesinger/ M. Kazanski (Hrsg.): Neue Beiträge zur Erforschung der Spätantike im mittleren Donauraum. Spisy Archeologického ústavu AV ČR Brno 8. Brno 1997.
- Varsik 2019 V. Varsik: Fragment rímskeho skladacieho stolíka z Cífera-Pácu. In: J. Melnerová Šuteková/M. Bača/ P. Pavúk (eds.): Salve, Edvarde! A toast to the Jubilee of Professor E. Krekovič. Studia Archaeologica et Medievalia. Tomus XII. Bratislava 2019, 223–228.
- Varsik/Kolník 2009 V. Varsik/T. Kolník: Objekty zo začiatočnej fázy doby sťahovania národov v Cíferi-Páci. Zborník SNM 103. Archeológia 19, 2009, 257–270.
- Varsik/Kolník 2013 V. Varsik/T. Kolník: Neue Erkenntnisse zur spätantiken quadischen Elitenresidenz. In: M. Hardt/O. Heinrich-Tamáska (Hrsg.): Macht des Goldes, Gold der Macht. Herrschafts- und Jenseitspräsentation zwischen Antike und Frühmittelalter im mittleren Donauraum. Forschungen zu Spätantike und Mittelalter Band 2. Akten des 23. Internationalen Symposiums der Grundproblemeder frühgeschichtlichen Entwicklung im mittleren Donauraum. Tengelic, 16.–19. 11. 2011. Weinstadt 2013, 71–90.
- Zábojník 1997 J. Zábojník: Das völkerwanderungszeitliche Gräberfeld von Čataj. In: Tejral/Friesinger/Kazanski 1997, 77–85.
- Zábojník 2008 J. Zábojník: K problematike priestorového vzťahu medzi pohrebiskom a sídliskovým areálom v období avarského kaganátu na južnom Slovensku. Slovenská archeológia 56, 2008, 269–292.

Manuscript accepted 3. 6. 2021

Translated by Viera Tejbusová

PhDr. Ján Rajtár, CSc. Archeologický ústav SAV Akademická 2 SK – 949 21 Nitra jan.rajtar@savba.sk doc. PhDr. Jozef Zábojník, CSc. Archeologický ústav SAV Akademická 2 SK – 949 21 Nitra jozef.zabojnik@savba.sk