

# NEW GLASS FINDS FROM TRANSDANUBIA. NOTES ABOUT MIDDLE LA TÈNE GLASS JEWELLERY FROM THE RÁBA AND MARCAL RIVER VALLEYS\*

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**REZUMAT:** Începând cu 2005, Universitățile din Marburg, Heidelberg și Jena din Germania și Muzeul Xántus János (azi Muzeul de artă și istorie Rómer Flóris) din Győr au desfășurat un proiect de colaborare arheologică finanțat de Deutsche Forschungsgemeinschaft (DFG). În cadrul proiectului au fost derulate cercetări interdisciplinare concentrate pe Kisalföld (Mica câmpie maghiară) cu scopul de a obține informații arheologice și palinologice despre schimbările culturale de la începutul mileniului întâi în teritoriul deserta boiorum (Pannonia). Cercetările au scos la iveală urme de locuire datând din a doua epocă a fierului (La Tène timpuriu și mijlociu), inclusiv mai multe elemente de costum din sticlă (două brățări și un inel). În pofida numărului redus, aceste piese contribuie la cronologia siturilor și înțelegerea contactelor stabilite de comunitățile celei de-a doua epoci a fierului în vestul Transdanubiei, o regiune în care se cunosc foarte puține despre obiectele de sticlă de tip La Tène.

**CUVINTE-CHEIE:** a doua epocă a fierului; La Tène; deserta boiorum; Transdanubia; podoabe din sticlă.

**ABSTRACT:** In 2005, the Universities of Marburg, Heidelberg and Jena along with the Xántus János Museum (today Rómer Flóris Museum of Art and History) began a collaborative archaeological project with the financial support of the Deutsche Forschungsgemeinschaft (DFG). The project applied multidisciplinary methods focused on the Little Hungarian Plain, in order to obtain archaeological and palynological data about the cultural changes occurring at the beginning of the first millennium in the territory of deserta Boiorum (Pannonia). The surveys conducted revealed, amongst other, traces of Late Iron Age (Early and Middle La Tène) habitation which included glass objects representing costume elements (two bracelets and a finger-ring). Despite being only a few, the glass finds contribute to the chronology of the sites and the understanding of the contacts established by the Late Iron Age communities from Western Transdanubia, an area where very little is known about La Tène glass finds.

**KEYWORDS:** Late Iron Age; La Tène; deserta boiorum; Transdanubia; glass jewellery.

Beginning with 2005, specialists in archaeology, geophysics and palynology worked together in a German-Hungarian interdisciplinary effort focused on the Little Hungarian Plain (Kisalföld), financed through the DFG project 'Archäologische und palynologische Untersuchungen zum Kulturwandel am Beginn des 1. Jahrtausends n.Chr. in der deserta boiorum (Pannonien)' (ID 151635363; project directors: Prof. Dr F. Teichner<sup>1</sup>, Philipps-Universität Marburg, and Prof. Dr Th. Meier, Ruprecht-Karls-Universität Heidelberg). The collaboration included the Philipps-University in Marburg, the Ruprecht-Karls-University in Heidelberg, the Friedrich-Schiller-University in Jena and the János-Xántus Museum

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(today Rómer Flóris Museum of Art and History) in Győr. Through a combination of archaeological, field and geophysical methods conducted in the area of the Roman town Mursella the research revealed, amongst other, traces of Late Iron Age habitation (Early and Middle La Tène) at three sites, Bodonhely, Árpás – Megág-dűlő and Móríchida<sup>2</sup> (Fig. 1).

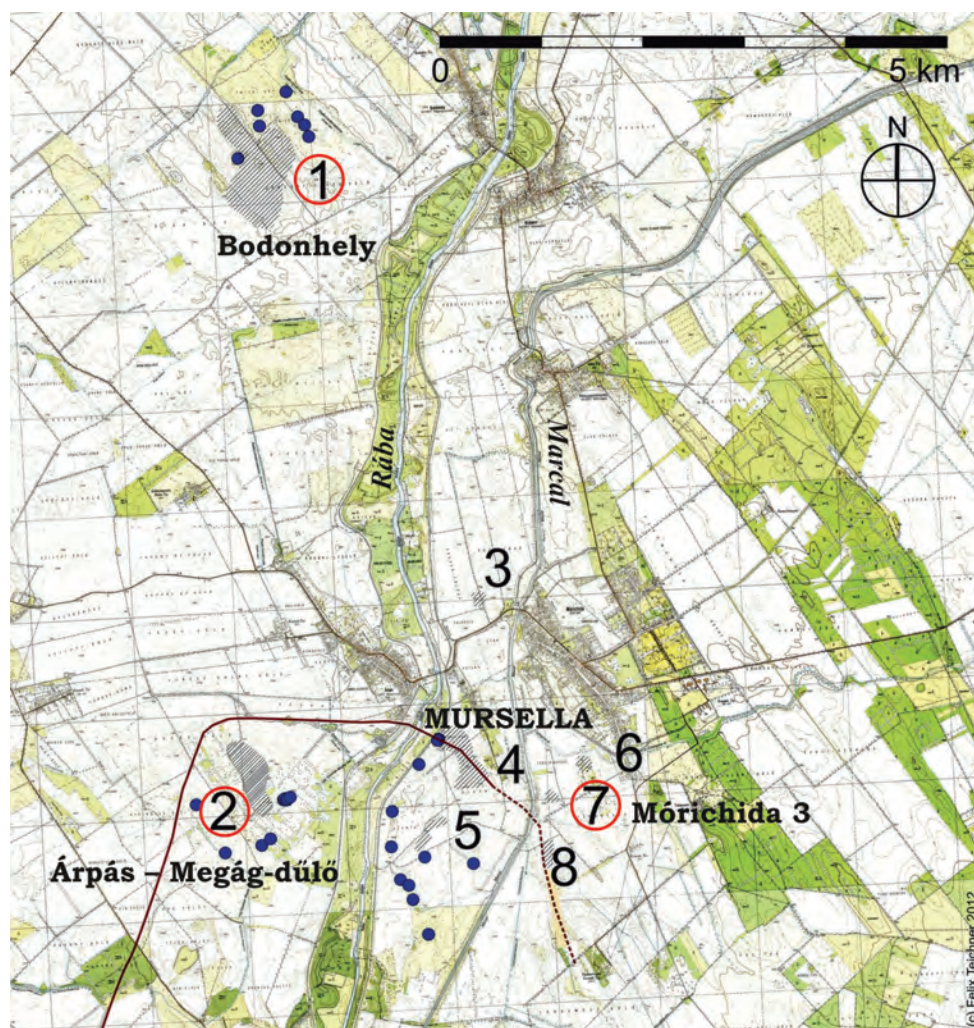


Fig. 1. Map illustrating traces of pre-Roman habitation in the area of Mursella (marked by hatching) – sites with Late Iron age finds are encircled; published in Teichner 2015, Abb. 2.

Bodonhely, Árpás – Megág-dűlő (right bank of Rába) and Móríchida (right bank of Marcal) are located in relative proximity, occupying the upper valleys of Rába and Marcal rivers, south from their confluence just before Győr. Geographically, the area belongs to the Little Hungarian Plain, in Western Transdanubia, a region historically well-connected with Lower Austria and south-western Slovakia. The distribution of La Tène discoveries indicates a significant occupation of the Little Hungarian Plain during the Early and Middle La Tène. Several communities inhabited the Rába and Marcal river valleys with a particular concentration at Győr. Not far, a significant habitation was recorded at Ménfőcsanak (necropolis and settlement) (Fig. 2). A. Uzsoki published the inhumation necropolis from Ménfőcsanak in 1969 and later in more detail in the Corpus of finds from Western and Northern Transdanubia<sup>3</sup>. More recently, K. Tankó published the settlement site<sup>4</sup>. Unfortunately, the Corpus of Celtic finds from

<sup>2</sup> Biró *et alii* 2006; Teichner 2014; Teichner 2015. The objects collected during the research are stored in the Rómer Flóris Museum of Art and History from Győr.

<sup>3</sup> Uzsoki 1987.

<sup>4</sup> Tankó 2010.



Hungary did not include much information about the other sites, yet in the past decade a series of publications discussed the nearby Early and Middle La Tène habitation at Sopron-Krautacker<sup>5</sup>. The chronology of Ménfőcsanak and Sopron-Krautacker connects them with the early Celtic settlement in the area (LT B1) and its continuation in the Middle La Tène (at Sopron-Krautacker, a smaller settlement exists still during the LT D1). These two sites revealed significant similarities with the La Tène settlements around Mursella as well as with Lower Austria, South-Western Slovakia and the Little Hungarian Plain in general.

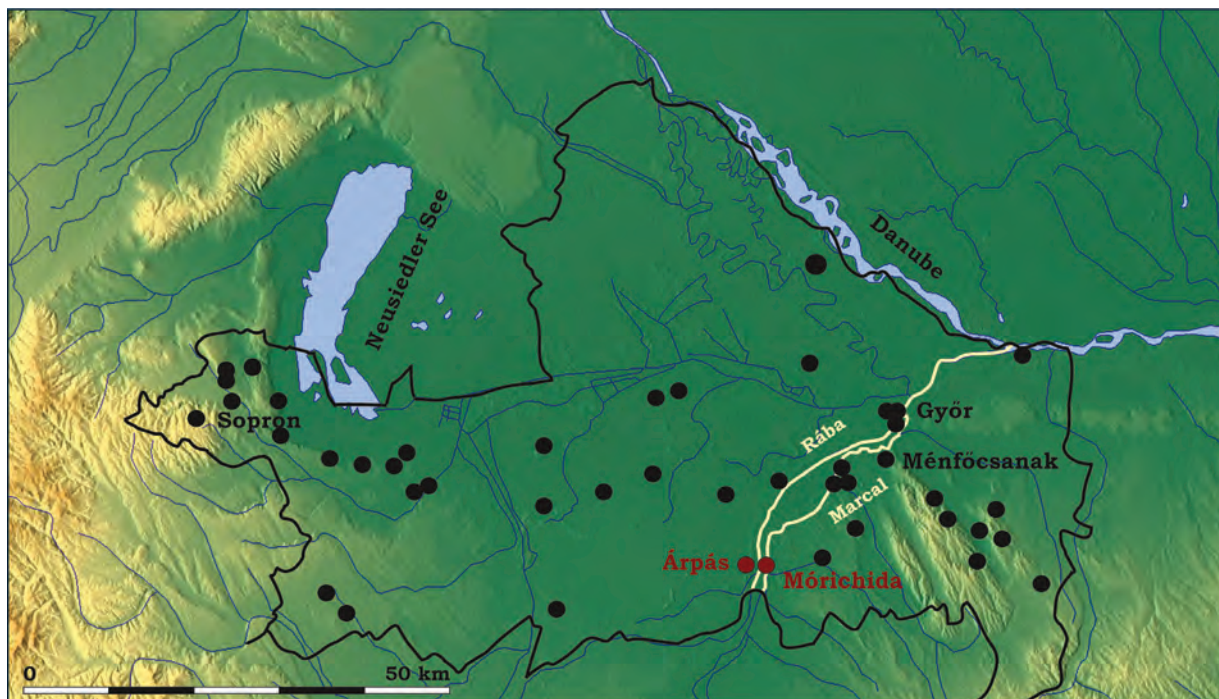


Fig. 2. Map illustrating LT B-C find sites in the Győr-Sopron district (Komitat). Redrawn after Uzsoki 1969, Abb. 1.

The Late Iron Age sites from Árpás and nearby Mórchida have been signalled since the first half of the last century. In 1942, I. Hunyady presented several finds from these sites in her synthesis about the Celts in the Carpathian Basin<sup>6</sup>. Later, A. Uzsoki described the finds schematically in his paper about the LT B-C finds in the Győr-Sopron district. His sources were limited by the absence of archaeological research of a more systematic character. Only a destroyed inhumation discovered in 1959 at Árpás provided a better-outlined context<sup>7</sup>.

The project that started in 2005 produced new strong evidence of a La Tène habitation at Bodonhely, archaeological excavations carried out in 2011 in the settlement area confirming the permanence of the site. The excavations exposed the halves of two rectangular sunken-houses with one post hole detected on the short side (Obj. 14; Obj. 19). Many contemporaneous examples from the surrounding area strongly indicate that a second symmetric post hole existed on the opposite side. Rectangular sunken-houses with two symmetric post holes on the short sides are a common construction type during the Early and Middle La Tène in the region<sup>8</sup>. Same house models are recorded at Sopron-Krautacker<sup>9</sup>

<sup>5</sup> For the structure of the habitation and habitation phases of the settlement see Zeiler 2011.

<sup>6</sup> Hunyady 1942, Taf. LXIV, 2, 9; LXVII, 12; LXVIII, 17; LXXXI, 4; LXXXIV, 5; LXXXVII, 4.

<sup>7</sup> Uzsoki 1969, p. 72, no. 23.

<sup>8</sup> Horváth 1987, 3. kép/1–2; 5. kép/3–5; 7. kép/1, 3–4; 11. kép/2- Zala county, Western Transdanubia; as well as in the Celtic settlements of south-western Slovakia: Březinová 2006; Pieta 2010, p. 95–96.

<sup>9</sup> Zeiler 2011, p. 383–384, Abb. 10/11.

(Abb. 10/1) and Ménfőcsanak<sup>10</sup>. Based on these contemporary parallels, we can reconstruct a similar site structure at Bodonhely.

The artefacts recovered from the sunken-houses are almost exclusively fragments of pottery vessels. The high proportion of graphite-tempered situlae, with or without combed decoration (Fig. 3), and S-shaped biconical bowls is striking<sup>11</sup>. Fewer objects belong to other categories of material, illustrating household activities (spindle-whorls, ceramic weights) and metalworking (ceramic crucibles). The material recovered from Obj. 14 and 19 mirrors the ceramic developments of the eastern La Tène pottery during the Early and Middle phases, with particularity in Lower Austria and south-western Slovakia<sup>12</sup>. The manifest preponderance of wheel-thrown pottery corroborated with the general classification of the pottery shapes places Bodonhely within the chronological framework of habitation from Sopron-Krautacker (a similar pottery set characterises the third horizon – LT B2/C1 until LT C2/D1)<sup>13</sup> and Ménfőcsanak (Lt B1-B2/C1)<sup>14</sup>.



Fig. 3. Obj. 19 – situla-shaped vessel with graphite content – published in Teichner 2015, Abb. 7.

Other finds from Bodonhely have been collected from the surface. The stray finds include, amongst others, one dark blue glass bracelet with four ribs, midribs beaded. The midribs are in high relief with well-individualized yet less standardised beads (Fig. 4). Th. E. Haevernick classified bracelets with four ribs – two beaded midribs – as a variant of type 13<sup>15</sup>. In Manching, R. Gebhard included blue bracelets of medium width with a vertical beaded midrib in a separate group (Reihe 4)<sup>16</sup>. Towards the east, N. Venclová (Bohemia) and M. Karwowski (Lower Austria) maintained the typology elaborated by Th. E. Haevernick, yet separated the 13th type into undecorated (13a) and decorated (13b)<sup>17</sup>. Current data indicates Bavaria, Bohemia and Moravia as the main distribution area. Lower Austrian and Slovakian finds<sup>18</sup> draw the eastern limit of this type<sup>19</sup>. Towards the west, type 13a bracelets reached mainly the Upper Rhine valley and less western Switzerland and south-eastern France<sup>20</sup> but are absent from the Lower Rhine region<sup>21</sup>. Based on the funerary contexts containing

such bracelets, both R. Gebhard and M. Karwowski placed the bracelets of the 13th type in the Middle

<sup>10</sup> Tánko 2010, p. 252, Fig. 4/A.

<sup>11</sup> Preliminary results were presented in Kantor 2013.

<sup>12</sup> An overview over the general distribution of certain La Tène types that are also found at Bodonhely and Árpás – Megágdúló, such as situla-shaped vessels with combed decoration, S-profile bowls and bottles, is available in Zeiler 2010.

<sup>13</sup> Zeiler 2011, p. 389–390, Abb. 11/3.

<sup>14</sup> Tánko 2010.

<sup>15</sup> Haevernick 1960, p. 60; see Taf. 11/13.28

<sup>16</sup> Gebhard 1989, p. 12.

<sup>17</sup> Venclová 1990, p. 127–128; Karwowski 2004, p. 30–32; Venclová 2016, p. 51–52 (Němčice), p. 84 (Staré Hradisko).

<sup>18</sup> Březinová 2018, p. 28, p. 86 – only the undecorated variant is mentioned, in 14 sites from Slovakia.

<sup>19</sup> Venclová 2016, 51–52; only a few originate from Poland: Karwowski 1997; the type is not listed amongst the finds from Hungary: Tanko 2006; Romania: Nemeti 2000; Croatia and Serbia: Dizdar 2006.

<sup>20</sup> Wagner 2006, p. 78–80, Karte 5.

<sup>21</sup> Roymans, Verniers 2010.

La Tène phase (LT C1b/C2)<sup>22</sup>. N. Venclová further separated the undecorated variants into high relief midrib with well-individualized berry-shaped beads, characterised by lack of uniformity, and low relief midrib of a more standard execution. She suggested an earlier occurrence of 13a bracelets during the transitional LT C1a/LT C1b, particularly the less standardised variant with berry-shaped beads, but recognised the peak popularity of the type during the LT C2<sup>23</sup>.

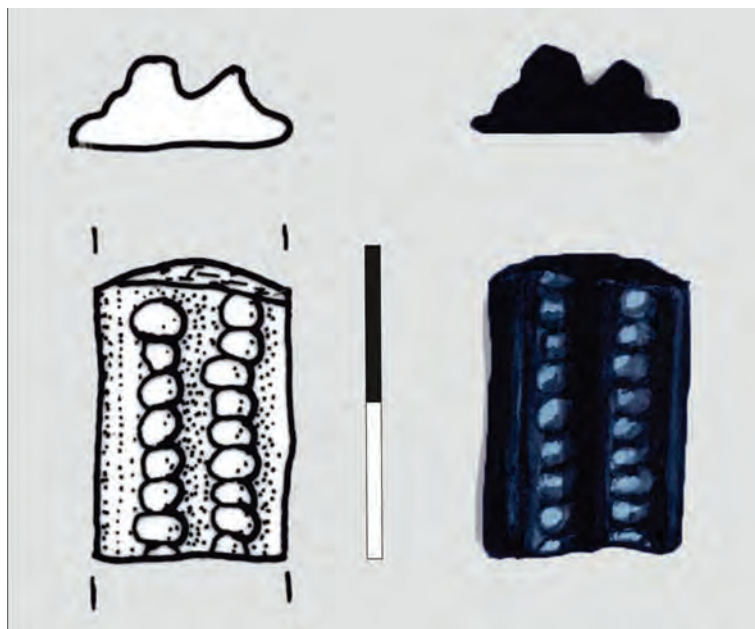


Fig. 4. Glass bracelet found at Bodonhely – stray find; dark blue; dimensions: 1.93 × 1.25 × 0.5 cm.

Unpublished – documentation kindly provided by Felix Teichner (Philipps-Universität Marburg). Coloured drawing by Dana Ștefan (MNIT, Cluj-Napoca) (colour is indicative).

A second bracelet was collected during the field surveys from Árpás – Megág-dűlő. The bracelet, also of a dark blue colour, has three ribs, with a higher thicker midrib decorated by a yellow wavy line (Fig. 5). The shape is easy to identify with a widespread type of La Tène glass bracelets. Th. E. Haevernick classified bracelets with three ribs – midrib decorated with a zigzag line – as type 6b<sup>24</sup>. At Manching, R. Gebhard separated decorated blue-coloured bracelets with three ribs (Reihe 11a) from brown items (Reihe 11b), but in essence the shape remains the same<sup>25</sup>. Later, N. Venclová observed the chronological and regional significance of the 8-shaped-loops-decoration (6b/1)<sup>26</sup> and separated it from the wavy/zigzag ornamentation (6b/2). Her classification has since been used to describe bracelets of this type<sup>27</sup>. The variant with wavy/zigzag ornamentation is generally widespread in Europe, from the Lower Rhine in the west<sup>28</sup> to Slovakia<sup>29</sup> in the east and Croatia and Serbia to the south-east<sup>30</sup>. Very few finds reached

<sup>22</sup> Gebhard 1989, p. 61, 71; Karwowski 2004, p. 69–73.

<sup>23</sup> Venclová 1990, p. 127–128; Venclová 2016, p. 51–52.

<sup>24</sup> Haevernick 1960, p. 49.

<sup>25</sup> Gebhard 1989, p. 13.

<sup>26</sup> About the importance of the 8-shaped-loops decoration/Schleifenverzierung, both signaling the early production of bracelets (LT C1a), before the large-scale phase of the developed Middle La Tène, and as an eastern La Tène fashion element, see more recently Karwowski 2006, p. 141–142, fig. 9; and Venclová 2016, p. 45–46, Fig. 31.

<sup>27</sup> Venclová 1990, p. 120–122 – sub-variant 2.

<sup>28</sup> Roymans, Verniers 2010, Tab. 1.

<sup>29</sup> Březinová 2018, 26, 85: type 6b bracelets are presented together, with the observation that the variant with 8-shaped loops was much more popular. Type 6b is present in the Upper Rhine region: Gebhard 1989, 13; Wagner 2006, 99, Karte 35; Moravia and Bohemia: Venclová 2010, p. 127–128; Venclová 2016, p. 47 (Němčice), p. 83 (Staré Hradisko); and Lower Austria: Karwowski 2004, p. 21–23.

<sup>30</sup> Dizdar 2006, p. 83–86.





Fig. 5. Glass bracelet found at Árpás – Megág-dűlő – stray find; dark blue; approximate diameter: 6.5 cm; dimensions: 1.75 x 1.12 x 0.5 cm. Unpublished – documentation kindly provided by Felix Teichner (Philipps-Universität Marburg). Coloured drawing by Dana Ștefan (MNIT, Cluj-Napoca) (colour is indicative).

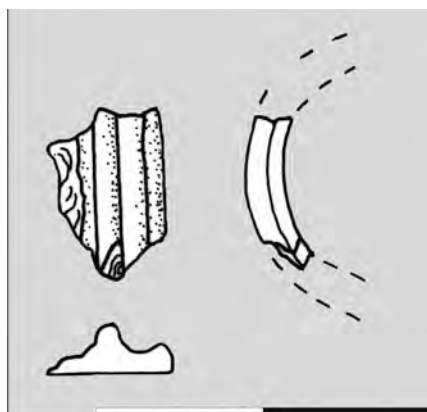


Fig. 6. Glass finger-ring found at Árpás – Megág-dűlő – stray find; cobalt blue; diameter: 1.8 cm; dimensions: 1.25 x 0.87 x 0.37 cm. Unpublished – documentation kindly provided by Felix Teichner (Philipps-Universität Marburg).

further east, in Eastern Hungary<sup>31</sup> and Poland<sup>32</sup>. The wavy/zigzag decoration has been recognised as a later element than the 6b/1 variant with 8-shaped loops (one of the earliest types of bracelets, LT C1a). 6b/2 bracelets appear first in funerary contexts from LT C1b (Dolne Trhoviste in south-western Slovakia and Vác-Kavicsbánya in eastern Hungary), but their use is attested also throughout LT C2, with isolated examples dated to LT D (Staré Hradisko)<sup>33</sup>.

The field survey at Árpás – Megág-dűlő also produced a translucent cobalt-blue glass finger-ring with three narrow, equal ribs, with a higher midrib. The left rib is damaged, opening the possibility of a slightly different reconstruction (Fig. 6). Only three other similar finds are known, all from Lower Austria (Karwowski Gruppe 27). However, compared to our find, they are all characterised by a thicker midrib (Fig. 7). They have been dated in the last phase of the LT C1 (C1b) and LT C2, based on the general chronology of finger-rings and mainly open contexts<sup>34</sup>.



Fig. 7. Gruppe 27 finger-rings discovered in Lower Austria (published in Karwowski 2004) (below) and finger-ring found at Árpás – Megág-dűlő (above).

<sup>31</sup> Tankó 2006, Fig. 4: one bracelet was found in LT C1 grave no. 11 from Vác-Kavicsbánya.

<sup>32</sup> Karwowski 1997.

<sup>33</sup> Venclová 1990; Karwowski 2004, p. 21–23; Venclová 2016, p. 83: one purple glass bracelet from Staré Hradisko was dated into LT D1 – based on the association observed between certain colours and bracelet types, N. Venclová places purple glass into the last phase of La Tène bracelet production.

<sup>34</sup> Karwowski 2004, p. 45, p. 78.

## CONCLUSIONS

During the Middle La Tène, glass jewellery became a current commodity. The large number of finds and find-sites verify the popularity they enjoyed in the La Tène areal. In this picture, the glass finds from Bodonhely and Árpás – Megág-dűlő occupy but an insignificant fraction compared to the large sets of glass jewellery concentrated in several sites of regional importance<sup>35</sup>. Still, they bring an essential contribution to the chronology of the La Tène habitation around Mursella (LT C1b-LT C2), which otherwise is known almost exclusively through ceramic artefacts otherwise used over a long period of time. Chronological importance aside, the glass finds mirror the multiple facets of the relationship established with contemporary communities from the regional context. Firstly, the glass jewellery from Bodonhely and Árpás – Megág-dűlő describes a specific way of constructing the costume, which funerary finds elsewhere suggest it was mainly, yet not exclusively, feminine<sup>36</sup>. The discovery of a finger-ring further connects these two sites with the eastern La Tène fashion, characterised by the regional distribution of certain bracelet types, especially in the initial phases of glass jewellery production (bracelet types 6b/a; 15), and the wear of finger-rings<sup>37</sup>.

Secondly, the presence of the finger-ring offers important clues about the exchange networks established with producing areas. In Lower Austria, Bohemia, Moravia and Slovakia, the vast amount of glass finds concentrate in oppida or open settlements of central importance. So far, we do not have direct information about the location of glass workshops, yet in several cases, traces of production (glass lumps, rejects) confirm secondary glass working. On other sites, glass working is suggested only by a very large number of bracelets and beads<sup>38</sup> (Fig. 8).

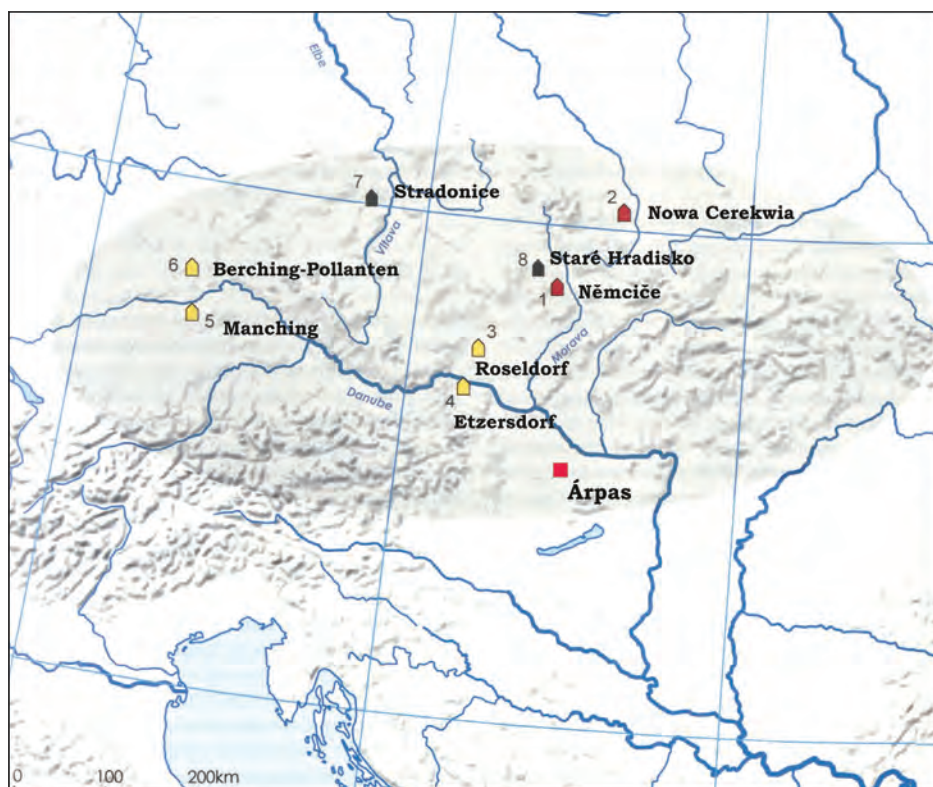


Fig. 8. Map of Late Iron age secondary glass workshops (after Venclová 2016, Fig. 96) and location of the site Árpás. Red – LT C1b-C2, yellow – LT C1b-D, black – LT D.

<sup>35</sup> Karwowski 2006, p. 133–136, Fig. 2, 4; Roymans *et alii* 2014; Venclová 2016, p. 100, Fig. 86.

<sup>36</sup> Venclová 2016, p. 114–116.

<sup>37</sup> Karwowski 2006.

<sup>38</sup> Roymans *et alii* 2014; Venclová 2016, p. 114–116, fig. 96.



The production, as well as the exact functionality of finger-rings, is more problematic. The mapping of finger-rings shows clusters around sites producing bracelets, whose shape finger-rings often imitate, with a particular concentration in Lower Austria. Corroborating the typological resemblance between the find from Árpás – Megág-dűlő and Karwowski Group 27 finger-rings with their geographical distribution (Fig. 9), an origin in Lower Austria is likely<sup>39</sup>. The most apparent access route for the glass finger-ring is the Danube, which flowed by the workshops at Etzersdorf and Roseldorf. The bracelets could have followed the same path, but another possible source was the workshop operating during the LT C1b-C2 at Němciče, situated on the Morava valley, an important affluent of the Danube<sup>40</sup>.

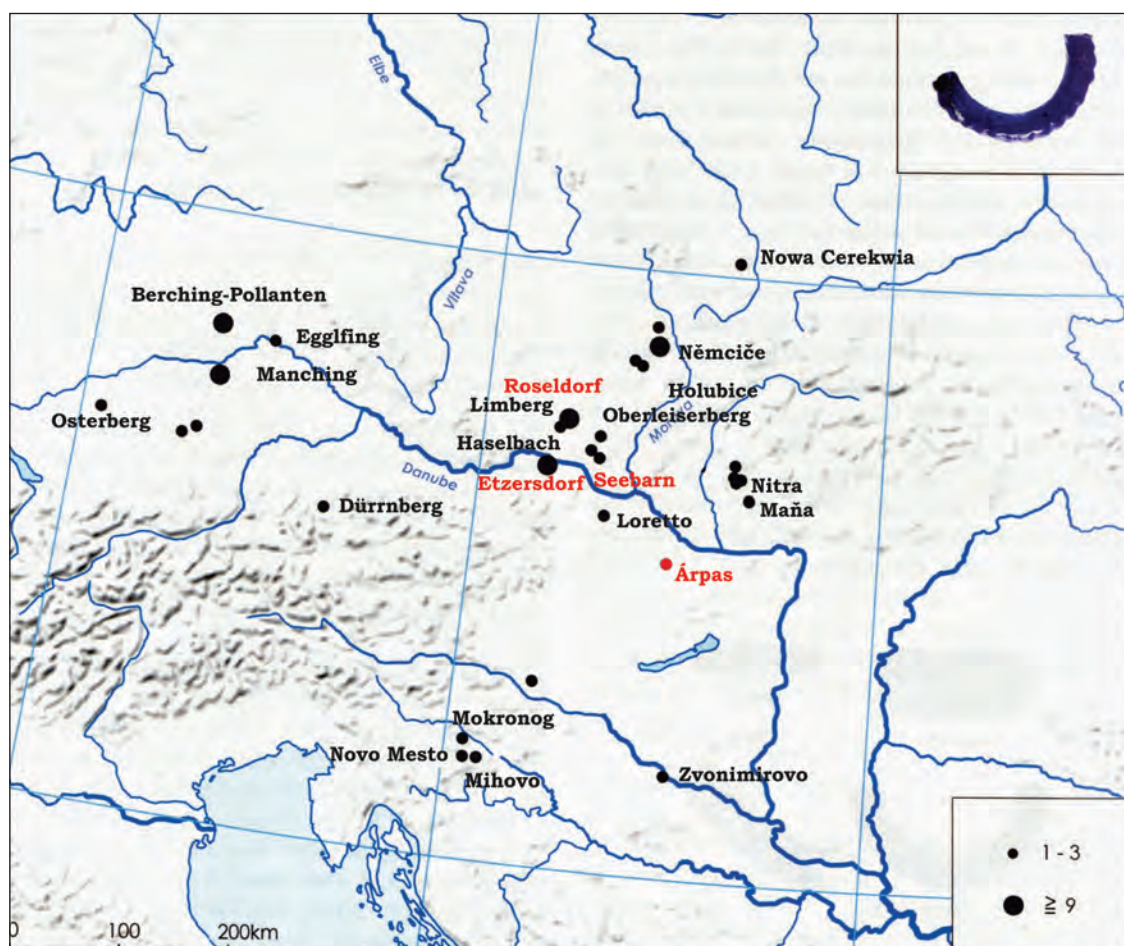


Fig. 9 Map of Late Iron age glass finger-rings (after Venclová 2016, Fig. 39). Karwowski Gruppe 27 is marked in red.

## BIBLIOGRAPHY

- |                   |   |
|-------------------|---|
| Biró et alii 2006 | Sz. Biró, A. Molnár, Ch. Salat. F. Teichner, <i>Geofizikai kutatások Mursella terület [Geophysical investigations on the territory of Mursella]</i> , in: <i>Régészeti kutatások Magyarországon [Archaeological Investigations in Hungary]</i> , 2006 (2007), p. 67–78. |
| Březinová 2006    | G. Březinová, <i>Sídliská a sídliskové nálezy z laténskej doby na juhozápadnom Slovensku</i> , in: <i>Študijné zvesti Archeologického ústavu Slovenskej akadémie vied</i> , 40, 2006, p. 9–50.  |
| Březinová 2018    | G. Březinová, <i>Šperk zo skla a sapropelitu u Keltov na Slovensku [Glass and sapropelite jewels of the Celts in Slovakia]</i> , <i>Archaeologica Slovaca Monographiae. Studia</i> 30, Nitra 2018.  |
| Dizdar 2006       | M. Dizdar, <i>Nalazi staklenih narukvica latenske kulture u Podravini [Glasarmringfunde der Latènekultur in der Podravina]</i> , in: <i>Prilozi Instituta za arheologiju u Zagrebu</i> , 23, 2006, p. 67–128.   |

<sup>39</sup> Karwowski 2006, p. 136–137, p. 143–144, Fig. 9; Venclová 2016, p. 58, Fig. 39.

<sup>40</sup> Venclová 2016; Březinová 2018, suspected the origin of type 13a bracelets from Slovakia at this site.



- Gebhard 1989 R. Gebhard, *Der Glasschmuck aus dem Oppidum von Manching*. Ausgrabungen in Manching 11, Stuttgart 1989.
- Haevernick 1960 Th. E. Haevernick, *Die Glasarmringe und Ringperlen der Mittel- und Spätlatènezeit auf dem europäischen Festland*, Bonn 1960.
- Horváth 1987 L. Horváth, *Késővaskori ház-és településtípusok Dél-Zálaban [Späteisenzeitliche Haus- und Siedlungstypen auf dem südlichen Teil des Komitatus Zala]*, in: *Zalai Múzeum* 1, 1987, p. 59–80.
- Hunyady 1942 O. Hunyady, *Die Kelten im Karpatenbecken*. Dissertationes Pannonicae 2, 18, Budapest.
- Kantor 2013 F. Kantor, *Die Grubenhäuser von Bodonhely / Ér-toi-rét (Westungarn)*. Neue Forschungen zum latenezeitlichen Siedlungsgefüge in der kleinen ungarischen Tiefebene im Rahmen des DFG-Projekts „Archäologische und palynologische Untersuchungen zum Kulturwandel am Beginn des 1. Jahrtausends n. Chr. in der deserta boiorum (Pannonien)“, poster presented at the 26. Sitzung der AG Eisenzeit, October 2nd–6th 2013, held at Nidda – Bad Salzhausen (Wetteraukreis/Hessen) (online resource available at [https://www.researchgate.net/publication/263088664\\_Poster\\_zur\\_26ten\\_Sitzung\\_der\\_AG\\_Eisenzeit\\_Die\\_Grubenhauser\\_von\\_Bodonhely\\_Er-toi-ret\\_Westungarn](https://www.researchgate.net/publication/263088664_Poster_zur_26ten_Sitzung_der_AG_Eisenzeit_Die_Grubenhauser_von_Bodonhely_Er-toi-ret_Westungarn) (last accessed on 07.05.2019).
- Karwowski 1997 M. Karwowski, *Keltische Glasfunde im Polnischen Gebiet*, in: *Przegląd Archeologiczny* 45, 1997, p. 33–71.
- Karwowski 2004 M. Karwowski, *Latènezeitlicher Glasringschmuck aus Ostösterreich*. Mitteilungen der Prähistorischen Kommission der Österreichischen Akademie der Wissenschaften 55, Wien 2004.
- Németi 2000 J. Németi, *Celtic glass Bracelets and pearls discovered in the north- west of Romania*, in: C. Gaiu, A. Rustoiu (eds.), *Les Celtes et les Thraco-Daces du l'Est du Bassin des Carpates. Les actes du colloque national qui a eu lieu a Bistrița le 16–17 octobre 1998*, Cluj- Napoca 2000, p. 166–174.
- Pieta 2010 K. Pieta, *Die keltische Besiedlung der Slowakei: jüngere Latènezeit*, Nitra 2010.
- Roymans, Verniers 2010 N. Roymans, L. Verniers, *Glass La Tène bracelets in the Lower Rhine region: typology, chronology and social interpretation*, in: *Germania* 88/1, 2010 (2013), p. 195–219.
- Roymans et alii 2014 N. Roymans, H. Huisman, J. van der Laan, B. van Os, *La Tène Glass Armrings in Europe. Interregional Connectivity and Local Identity Construction*, in: *Archäologisches Korrespondenzblatt* 44/2, 2014, p. 215–228.
- Tankó 2006 K. Tankó, *Celtic Glass Bracelets in East-Hungary*, in: V. Sârbu, D. L. Vaida (eds.), *Thracians and Celts. Proceedings of the International Colloquium from Bistrița (18–20 mai 2006)*, Cluj- Napoca, p. 253–263.
- Tankó 2010 K. Tankó, *Late Iron Age Settlement in the vicinity of Ménfőcsanak (Road no. 83 and Bevásárlóközpont)*, in: L. Borhy (ed.), *Studia Celtica Classica et Romana Nicolae Szabó Septuagesimo Dedicata*, Budapest, 2010, p. 249–260.
- Teichner 2012 F. Teichner, *A római tájkultúra hosszútávú hatásának kérdése a marcal és a rába vidékén*, in: *Arrabona* 50/2, 2012, p. 7–36.
- Teichner 2015 F. Teichner, *Zur Nachhaltigkeit römischer Raumordnung in Pannonien am Beispiel einer Siedlungskammer an Marcal und Raab (Mursella)*, in: U. Lohner-Urban, P. Scherrer (Hrsg.), *Der obere Donauraum 50 v. bis 50 n. Chr.*, Berlin 2015, p. 313–335.
- Uzsoki 1969 A. Uzsoki, *Die Siedlungsgeschichte der La Tène B-C Periode des Komitats Győr-Sopron*. in: *A Móra Ferenc Múzeum Évkönyve* 2, 1969, p. 69–82.
- Uzsoki 1987 A. Uzsoki, *Ménfőcsanak*, in: L. Horváth, M.H. Kelemen, A. Uzsoki, E. Vadász (eds.), *Corpus of Celtic Finds in Hungary I. Transdanubia 1*, Budapest, 1987, p. 13–62.
- Venclová 1990 N. Venclová, *Prehistoric glass in Bohemia*, Praha 1990.
- Venclová 2016 N. Venclová, *Němciče and Staré Hradisko. Iron Age glass and glass-working in Central Europe*, Praha 2016.
- Wagner 2006 H. Wagner, *Glasschmuck der Mittel- und Spätlatènezeit am Oberrhein und den angrenzenden Gebieten*. Ausgrabungen und Forschungen 1, Remshalden, Greiner 2006.
- Zeiler 2010 M. Zeiler, *Untersuchungen zur jüngerlatènezeitlichen Keramikchronologie im Ostlatèneraum, Rahden/Westfalen* 2010.
- Zeiler 2011 M. Zeiler, *Die Siedlung von Sopron-Krautacker (Westungarn) in der jüngeren Latènezeit*, in: *Archäologisches Korrespondenzblatt* 41/3, 2011, p. 375–394.