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TRACES OF AN IRON AGE ARMED CONFLICT
New Topographical Results from the Research into Verebce-bérc at Dédestapolcsány I.

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Beginning in the Iron Age we are familiar with impressive signs of the culture of armaments and the warrior ideology coming to the forefront in the archeological relics from prehistoric Hungary. However, despite a great deal of indirect evidence that indicates the continuous threat of war, we have almost no information related to actual acts of combat. This is why there is such great significance to this new discovery, which has allowed us to sketch out a Middle Iron Age armed conflict below the defensive works of one of the most important fortified towns of the Bükk Mountains in northeastern Hungary.

THE HISTORY OF RESEARCH AT THE SITE

Previously in the literature this settlement on the hilltop of Dédestapolcsány-Verebce-bérc was counted as one of the hill forts of the Late Bronze Age Kyjatice culture. With its area of 123 hectares it is one of northeastern Hungary's most extensive prehistoric archeological sites. It stretches along a mountain ridge bounded by steep sides that runs north-south for about 2 km on the northern edge of the Bükk Mountains, and its altitude reaches, or in places even exceeds, 600 meters.

The archeological site, which can be identified from designations on maps from as early as the end of the 18th century, was first mentioned in an 1827 manuscript by Antal Fodor. It was included in the professional archeological literature through the work of Tibor Kemenczei[1] and its detailed topographical cataloguing is thanks to Gyula Nováki and Edit D. Matúz.[2]

In the middle of the decade of the 2000s the site became a focus of the activities of illegal metal hunters.[3] In 2004, Tamás Pusztai and Magdolna B. Hellebrandt took notice of the continuous intrusions, observing lumps of iron, socketed iron axe heads and other prehistoric finds that were worthless to the treasure hunters and therefore left at the site in large piles. They also performed minor research using metal detectors and identified a burial mound(?) that had been torn apart.[4] In 2006/2007, within the framework of Zoltán Czajlik's hill fort research program, aerial photographs were taken of the site (*Fig. 1*) and field walks were performed.[5]

1 Kemenczei, Tibor: A Kyjatice kultúra Észak-Magyarországon / Die Kyjatice Kultur in Nordungarn. *A Herman Ottó Múzeum Évkönyve* 9 (1970), 17–78, in particular 28.

2 Nováki, Gyula: Késő bronzkori földvár Dédestapolcsány-Verebce-bércen / Spätbronzezeitliche Erdburg am Dédestapolcsány-Verebce-bérc. *A Herman Ottó Múzeum Évkönyve* 25–26 (1988), 81–90; D. Matúz, Edit – Nováki, Gyula: *Spätbronzezeitliche, früheisenzeitliche Erdwälle in Nordungarn. Inventaria Praehistorica Hungariae* X (Budapest: Magyar Nemzeti Múzeum, 2002), 10, Abb. 12.

3 In addition to local researchers (Péter Bíró, József Regős), professionals from several institutions such as the Bükk National Park, the Herman Ottó Museum in Miskolc, the Institute of Archeological Sciences at the Eötvös Loránd University's Faculty of Humanities and the Hungarian National Museum – National Heritage Preservation Center (legal successor of the Field Service for Cultural Heritage) became aware of the activities of the illegal treasure hunters.

4 Hellebrandt, Magdolna: Mályinka-Dédestapolcsány-Verepce-vár és Miskolc-Kőlyuk I. barlang vasleletei / The iron finds from Mályinka-Dédestapolcsány-Verepce-vár and the Miskolc-Kőlyuk I. cave. *A Herman Ottó Múzeum Évkönyve* 46 (2007), 5–38.

5 Czajlik, Zoltán – Bödőcs, András – Ďurkovič, Éva – Rupnik, László – Winkler, Móni: Légirégészeti kutatások Magyarországon 2007-ben (Rövid beszámoló az ELTE Régészettudományi Intézetének Térinformatikai Kutatólaboratóriumában végzett munkáról) / Aerial archaeological investigations in Hungary in 2007 (A short report of the activity of the 3D Research Laboratory of the ELTE Archaeological Institute). *Régészeti Kutatások Magyarországon – Archaeological Investigations in Hungary*, 2007 (Budapest: KÖH–MNM, 2008), 121–144.

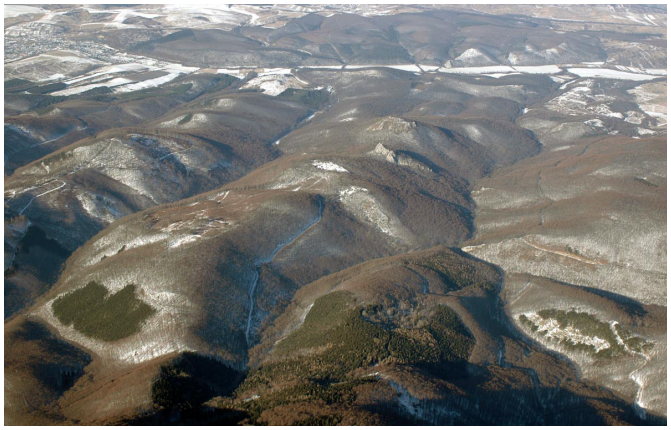

Fig. 1: Dédestapolcsány-Verebce-bérc. The archeological site from the southeast (aerial photograph: Zoltán Czajlik, 25 January 2006)

Furthermore, in 2008 Gábor V. Szabó excavated four Scythian period graves in connection with his Late Bronze Age depot research project,[6] which Márton Tóth Farkas published.[7]

In 2010 the Field Service for Cultural Heritage made a 0.5 meter resolution digital model of the terrain generated on the basis of an aerial laser survey of the entire area of the site. This highly precise method provided an extraordinary opportunity for a detailed survey of the archeological site complex on the basis of relief anomalies as well as by the localization of the archeological phenomena and finds. During the course of the Dédes survey, ALS (also known as LiDAR) technology was employed for the first time in Hungary with the goal of surveying and documenting from scientific and heritage preservation aspects an archeological site complex endangered by natural processes of erosion and metal-hunting relic thieves.[8]

Following this, in July of 2011 the Institute of Archeological Science at the Eötvös Loránd University's Faculty of Humanities and the Hungarian National Museum – National Heritage Protection Centre launched a joint research and heritage preservation program.[9] The program aimed at the clarification of the age, internal organization and extent of the prehistoric settlement on the peak, the full investigation of the Iron Age cemetery identified in 2008, and a detailed knowledge of the prehistoric topographical conditions in the immediate area. In our two-part study we first deal with the most surprising result of the research, the Scythian arrowheads found at the so-called Iron Gate fortification that protects the settlement from the south.

THE ATTACK AGAINST THE IRON GATE

The finds indicating the past military action were uncovered during the course of studying the system of fortifications protecting the southern end of the hilltop settlement. The prehistoric system of fortifications in this section was fashioned so that its line ran along the steep southern edge of Verebce-bérc that rises here. Below the defensive line created in this manner they also dug a deep ditch, which was strengthened by a smaller rampart and ditch (*Fig. 2*). The reason why they placed this compound, concentrated system of fortifications right here was

Fig. 2: The area investigated with the defensive ditch in the foreground (photograph: Gábor V. Szabó, July 2011)

[6] For this see: V. Szabó, Gábor: Késő bronzkori kincsek nyomában / In Search of Late Bronze Age Treasures. *Magyar Régészet* 2012 tél / *Hungarian Archeology* 2012 Winter.

[7] Tóth Farkas, Márton: Korai szkítakori sírok Dédestapolcsány-Verebce-tető lelőhelyen / Early Scythian Age Graves at the Site of Dédestapolcsány-Verebce-tető (NE Hungary). *A Herman Ottó Múzeum Évkönyve* 51 (2012), 63–91.

[8] The aerial laser scanning was performed within the framework of the TÉKA – Landmark Cadastral Register Program (2009–2011), and the survey and the model of the terrain were made by the ODD Information Science, Management Technology, Commercial and Service Kft.

[9] The research in 2011 was coordinated by Zoltán Czajlik and László Reményi, and it was supported by the National Cultural Fund and the Municipal Government of the Town of Nagyvisnyó. In addition to the authors, Szabolcs Czifra, Zoltán Fullár, András Füzesi, Melinda Koller and Nándor Nagy (Hungarian National Museum-National Heritage Preservation Center), as well as Kristóf Fülöp, Kata Groma, András Jáky, Mariann Novák, Gábor Tarbay, Márton Tóth Farkas and Gábor Váczi (graduate and PhD students of the Institute of Archeological Sciences, the Eötvös Loránd University, Budapest) participated in the field work, and István Bacskai, András Bödőcs and Balázs Holl contributed as experts.

Fig. 3: The bronze arrowheads found at the site (photograph: Károly Kozma)

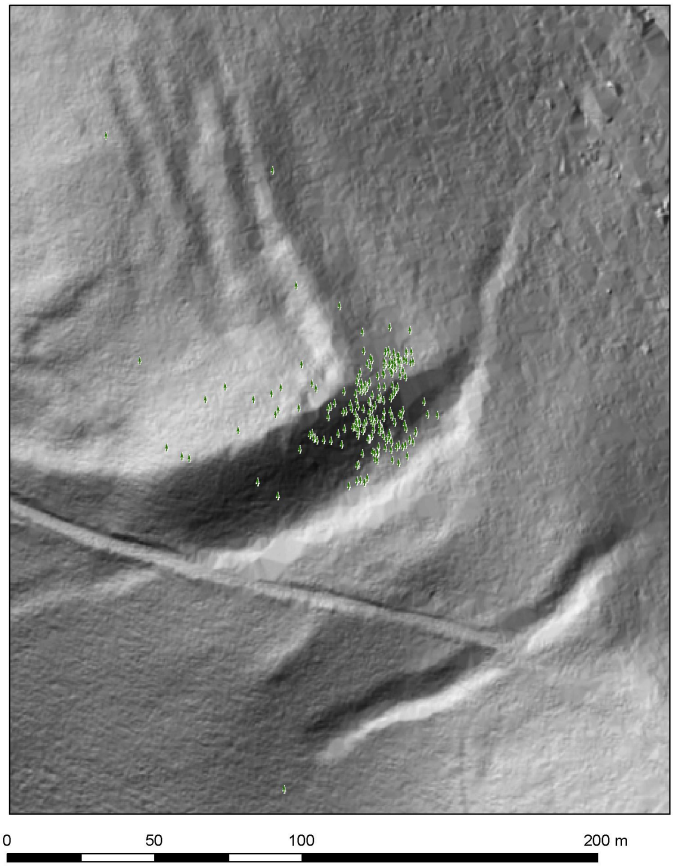

Fig. 4: The distribution of the arrowheads at the section of the ramparts that was attacked (map: Balázs Holl)

Fig. 5: The position of the arrowheads during excavation (photograph: Gábor V. Szabó)

because this was where one of the important roads led into to the settlement, along an exceptionally narrow section of the ridge protecting the peak. The double system of walls made the fortified settlement easily defensible along this section, which was of crucial strategic importance.

The first evidence of the former attackers was a characteristic Scythian period bronze arrowhead, which was found in the steep southern side of Verebce-bérc. Not much later, further similar pieces came to light a few meters from this arrowhead, which motivated us to investigate this section systematically, step-by-step, as opposed to the normal loose sequence of probes. In the end we spent three days on the thorough investigation of this section of the fortifications, as a result of which we collected 234 arrowheads from a well delineated, relatively small area (*Fig. 3*). In the interest of finding every arrowhead concealed here we also removed a 15–30 cm deep layer of fallen leaves from the area we were studying. We recorded the coordinates of the arrowheads, which were found at a depth of 5–25 cm, with a geodesic GPS. The majority of the arrowheads – more than 200 of them – were concentrated on a 35–40 meter long section on the exterior side of the section of ramparts protecting the settlement (*Fig. 4–5*).

Following a thorough study of this section, which was characterized by an intensive distribution of finds, we expanded our investigations to the neighboring sections of the ramparts and the portion of the settlement next to the defenses, as well as to the area of the outer rampart and ditch, but in these areas we only rarely found more arrowheads. The one found furthest from the nucleus of the concentration was at a distance of 60 meters, in the section of the settlement behind the defenses.

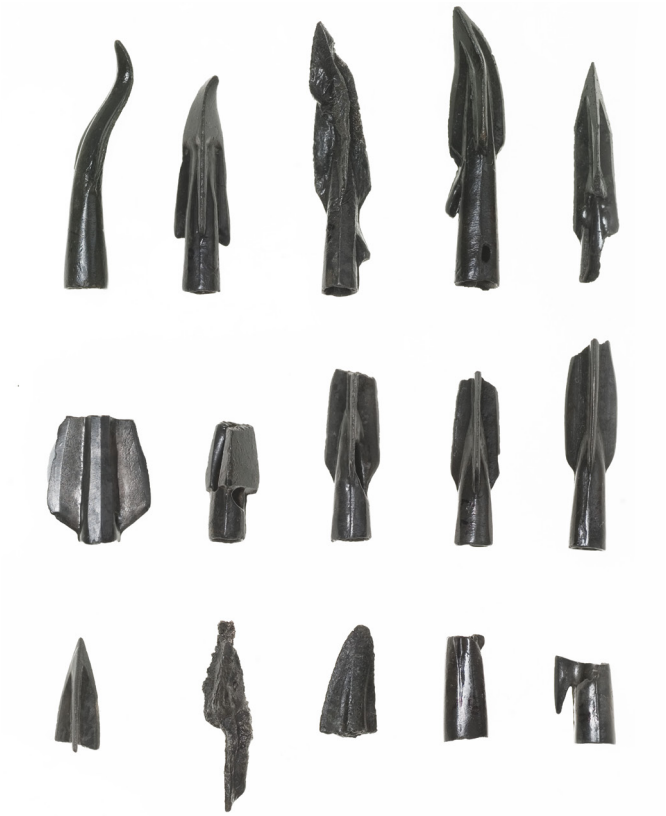

Fig. 6: A selection of the damaged arrowheads found at the site (photograph: Károly Kozma)

Fig. 7: A selected group of presumed sling shot that was collected from the southeastern rampart (photograph: Gábor V. Szabó, July 2011)

THE POSSIBLE COURSE OF THE ATTACK

The concentration of the arrowheads clearly indicates that the southeastern corner of the settlement was attacked. According to our theory a tower or bastion may have stood above the top of the rampart here and the task of the archers was to capture this or keep the defenders occupied. The distribution of the arrowheads that flew beyond the target at the corner of the fortification suggests that the archers were in two groups, firing from different angles.

The position of the attackers could not have been by chance, either; this area was probably the section of the defensive system surrounding the settlement that was the easiest to approach. Everywhere else there may have been steep slopes leading to the ramparts. Although here the pass leading to the former entryway narrows for a short section, the earthworks defending it could be reached on a gentle slope. Optimal conditions for the attackers may also have been created by the fact that they may have been able to take up positions on the hillside towards the Verebce Flats, and from there they could have fired upon the defenders from above or at least from the same level.

A significant portion of the arrowheads that were fired were damaged or broken, which may indicate that they struck a hard surface with great force (*Fig. 6*). It may be presumed that a structure constructed of wood or from a combined wood/stone technique may have stood here at the meeting point of the southern and western edges of the fortifications, and that the projectiles hit this surface. They may have bounced off this or stuck into it, and as the structure fell into ruin, erosion brought them down to the slope below the ramparts and into the ditch.

The battle strategy of the defenders of the ramparts is probably indicated by the round, on the average fist-sized chunks of andesite, limestone and flint that are strewn about in great numbers on the edge of the section of ramparts that was attacked (*Fig. 7*). These types of stone are completely foreign to the clay shale and sandstone that makes up the area, and they could only have been brought here from several kilometers

away. The smaller pieces of stone piled up along the rampart and on its inner side may possibly have been used as sling shot, and the larger ones may have been stones for catapults.[10] We found no trace of arrows shot by the defenders even though we carefully investigated the areas outside the defenses that we presume were the positions of the attackers.

Fig. 8: A selection of arrowheads found at the site (photograph: Károly Kozma)

THE PRESUMED HISTORICAL BACKGROUND TO THE ATTACK

The arrowheads shot at the fortified settlement at Dédestapolcsány bear the characteristic stylistic marks of early Scythian arrowheads known from several locations in the Carpathian Basin. Amongst the arrowheads that we found there are three basic forms that were used in the weaponry of the communities living on the Eurasian steppe for the special composite reflex bow that appeared and spread during the course of the 9th–8th century B.C.: long-socketed double-edged, long-socketed trilobe, internal-socketed trilobe types. The closest relatives of the various types of arrowheads used in the Dédestapolcsány attack (*Fig. 8*) come from the second half of the 7th century B.C., from early Scythian period warrior grave complexes in Transylvania and Hungarian archeological sites[11] that unfortunately for the most part have no precise context.

The best parallel to the types of arrowheads represented and the conditions of their discovery comes from a well-publicized western Slovakian site, Smolenice-Molpír, which has been analyzed in detail by several researchers in recent years[12] (*Fig. 9*). The settlement excavated there was inhabited during the course of the 7th century B.C., and its finds are characteristic of the Hallstatt culture. Its destruction was preceded by an assault, during which several hundred arrows with bronze arrowheads similar to those at Dédestapolcsány were shot at the settlement, which was protected by massive walls and fortified gates. Similar to

[10] Magdolna B. Hellebrandt also assessed the stone materials in a similar way. Hellebrandt, Magdolna: Mályinka-Dédestapolcsány-Verepce-vár és Miskolc-Kőlyuk I. barlang vasleletei / The iron finds from Mályinka-Dédestapolcsány-Verepce-vár and the Miskolc-Kőlyuk I. cave. *A Herman Ottó Múzeum Évkönyve* 46 (2007) 30–31. The projectiles excavated at the Late Bronze Age fortified settlement of Sântana provide an example in this area of the prehistoric use of projectiles that could have been fired from catapult-like instruments or slings. Gogâltan, F. – Sava, V.: War and Warriors during the Late Bronze Age within the Lower Mureş Valley. Ziridava. *Studia Achaelogia* 26/1 (2012), 69, Fig. 8.

[11] Hellmuth, Anja: *Untersuchungen zu den sogenannten skythischen Pfeilspitzen aus der befestigen Höhensiedlung von Smolenice-Molpír*. Universitätsforschungen zur prähistorischen Archäologie Bd. 128 (Bonn: Verlag Dr. Rudolf Habelt GmbH, 2006), Taf. 24–31, 34; Kemenczei, Tibor: Pfeilspitzen von Früh-Skythentyp aus Ostungarn. *Folia Archaeologica* 42 (1994), 79–99.

[12] Parzinger, Hermann – Stegmann-Rajtár, Susanne: Smolenice-Molpír und der Beginn der skythischen Sachkultur in der Südwestslowakei. *Prähistorische Zeitschrift* 63 (1988), 162–178; Dušek, Mikulaš – Dušek, Sigrid: *Smolenice-Molpír. Befestiger Fürstensitz der Hallstattzeit. II*. Materiala Archaeologica Slovaca (Nitra: Archeologický ústav Slovenskej akadémie vied, 1995); Hellmuth, Anja: *Untersuchungen zu den sogenannten skythischen Pfeilspitzen aus der befestigen Höhensiedlung von Smolenice-Molpír*. Universitätsforschungen zur prähistorischen Archäologie Bd. 128. (Bonn: Verlag Dr. Rudolf Habelt GmbH, 2006); Müller, Sebastian: *Smolenice-Molpír, Sered' und Ratkovce*. Studien zu Siedlungen der frühen Eisenzeit in der Südwestslowakei, Universitätsforschungen zur prähistorischen Archäologie, Bd. 220. (Bonn: Verlag Dr. Rudolf Habelt GmbH, 2012).

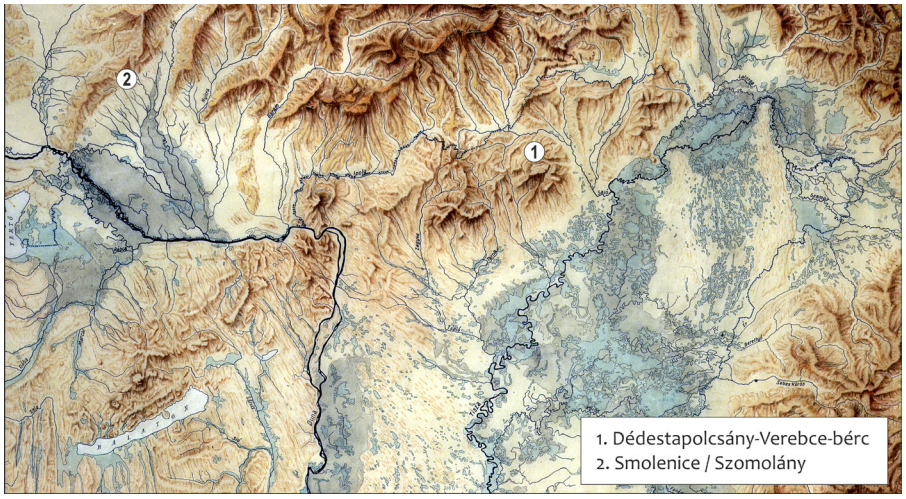

Fig. 9: The geographical position of Dédestapolcsány-Verebce-bérc and Smolenice-Molpír relative to one another. (Compiled by Gábor Váczi with the use of the map prepared in 1938 by the Hydrographical Institute of the Hungarian Royal Ministry of Agriculture from the work entitled: "A Kárpát Medence vízborította és árvízjárta területei, az ármentesítő és lecsapolási munkálatok megkezdése előtt" ["The Areas of the Carpathian Basin Covered by Water or on Flood Plains Prior to the Flood Prevention and Drainage Projects"])

our observations, in the case of the Smolenice-Molpír fortification the attackers fired upon the prominent points: the two fortified gates and the strategically important defile of the walls at the southern corner.[13]

In the case of the Smolenice-Molpír settlement, this attack also brought about its end. This is indicated by the evidence of burning that can be observed throughout the site and the excavated remains of human bones scattered along the walls and in some of the burned-down houses. Without further excavations on the fortified settlement at Dédestapolcsány we do not know whether the attack on the entrance section was successful or whether the aggressors were able to capture the entire settlement.

The assault at Dédestapolcsány and the one that took place at the same time at Smolenice-Molpír presumably fit into a greater, interconnected series of historical events. Towards the end of the 7th century B.C. several fortified settlements in the northern and western parts of the Carpathian Basin as well as the eastern part of Central Europe were destroyed by attacks. The attacks, as the examples of the arrowheads at Dédestapolcsány and Smolenice-Molpír also show, can be connected to groups whose members employed a type of weapon, a composite reflex bow that was developed and spread in the eastern steppe region during the course of the 9th–8th century B.C. According to Anja Helmuth, who studied the twenty different types of arrowheads amongst the 373 shot at the Smolenice-Molpír fort, their stylistic marks indicate that the people who used them may have arrived from the Mureș Valley region in Transylvania or from the northern Pontic forest steppe regions lying to the east of the Carpathians, or they may in some manner have been in contact with the communities belonging to the Scythian cultural circle from there.[14] A detailed analysis of the types of the Dédestapolcsány arrowheads has not yet occurred, but the preliminary examinations show that they are quite comparable to the set of arrowheads from Smolenice-Molpír from both typological and chronological aspects.

It is not yet clear precisely what the story is behind the series of events indicated by the assaults on these fortified settlements. According to an earlier conception the tensions between the local communities came to a crisis point at this time. However, on the basis of the cases at Smolenice-Molpír and Dédestapolcsány, it cannot be eliminated that in the northern and western regions of the Carpathian Basin at the second half of the 7th century B.C. well-organized, highly mobile, warlike communities arriving from further afield appeared who were willing to attack even major fortifications.

[13] Hellmuth, Anja: Smolenice-Molpír im Licht skythischer Angriffe auf die hallstattzeitlichen Siedlungen nördlich und südlich der mährischen Pforte. *Slovenská Archeológia* 54/2 (2006), 195, Abb. 6.

[14] Ibid.; Hellmuth, Anja: *Bogenschützen des Pontischen Raumes in der Älteren Eisenzeit. Typologische Gliederung, Verbreitung und Chronologie der skythischen Pfeilspitzen*. Universitätsforschungen zur prähistorischen Archäologie Bd. 177. (Bonn: Verlag Dr. Rudolf Habelt GmbH, 2010), 362–365.

Recommended Literature

Hellmuth, Anja
Untersuchungen zu den sogenannten skythischen Pfeilspitzen aus der befestigen Höhensiedlung von Smolenice-Molpír. Universitätsforschungen zur prähistorischen Archäologie Bd. 128. Bonn: Verlag Dr. Rudolf Habelt GmbH, 2006.

Hellmuth, Anja
Bogenschützen des Pontischen Raumes in der Älteren Eisenzeit. Typologische Gliederung, Verbreitung und Chronologie der skythischen Pfeilspitzen. Universitätsforschungen zur prähistorischen Archäologie Bd. 177. Bonn: Verlag Dr. Rudolf Habelt GmbH, 2010.

Kemenczei, Tibor
Studien zu den Denkmälern skytisch geprägter Alföld Gruppe. Inventeria Praehistorica Hungarica 12. Budapest: Magyar Nemzeti Múzeum, 2009.