Early Iron Age in Central Bosnia – an overview and research perspectives

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Abstract: This paper discusses the state of the research and general interpretation models of the Early Iron Age period in Central Bosnia. The Mid-Bosnian Schist Mountains and the surrounding river valleys of Vrbas, Lašva, and Bosna together with their tributaries characterise the landscape of this region. In terms of evidence from the Early Iron Age period (800–500 BC), the majority comes from the long-term excavations in the hillfort site Pod near Bugojno. The preliminary reports point to well-organised, long lasting and densely built up hillfort settlement with rectangular houses of similar size. Based on the numerous iron slag finds from recently discovered settlements of Čolaci and Zenepići, it can be inferred that some of the sites in Central Bosnia were intensively involved in the metal processing activity. Mortuary practices of the Early Iron Age communities are largely unknown since thus far, not a single intact burial was properly documented.

Key words: Central Bosnia, Early Iron Age, settlement, graves, chronology

1. Introduction

The region of Central Bosnia is situated between two far more prominent cultural complexes located to the east (Glasinac) and the west (Jajodes), and has rarely been the focus of the Early Iron Age research in South-eastern Europe. The lack of rich burials and long-used cemeteries has made this area rather an unattractive spot during the first flourishing period of archaeology in Bosnia and Herzegovina between 1878 and 1914 (during the time of Austrian rule), when some of the outstanding Early Iron Age finds were first uncovered.3

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3. Highlighted among the early discoveries should be the graves with warrior equipment and imported prestigious bronzes from Glasinac area (Benac / Čović 1957), a graveyard and pile dwelling settlement in Donja Dolina (Truhelka 1904), pile dwellings in Ripač (Radimský 1897) and the temple structure Gorica in western Herzegovina (Truhelka 1902).


First of all, however, issues of terminology, geography, and chronology need to be addressed briefly. It was not until the Dayton Agreement, which was signed in 1995, that Central Bosnia appeared as a political and official administration unit (Central Bosnia Canton). The new political canton, however, has not included some of the territories, which are traditionally regarded as “Central Bosnia” in archaeological terms, most notably the Basins of the Bosna River between Sarajevo and Zenica together with smaller side valleys of the tributaries Fojnička Rijeka or Trstionica. In addition to this section of the Bosna River, the region of Central Bosnia also includes the entire Lašva valley, upper Vrbas valley as well as the area between them, dominated by Mid-Bosnian Schist Mountains with the Vranica mountain range,4 which is the most dominant one (Figure 1).
The basic knowledge about the Early Iron Age in Central Bosnia in terms of characteristic pottery repertoire was established first with the excavations of the hillfort sites Pod⁶ and Kopilo⁶ between 1960 and 1990, accompanied by smaller investigations in Alihodže⁷ and Hadžići near Višoko.⁸ Recent investigations in Čolaci near Donji Vakuf confirmed that this hillfort also existed throughout the Early Iron Age.⁹ The same applies to the site at Zenepići near Novi Travnik, briefly presented in this paper. Most of the metal finds come from destroyed graves in Grbavica,¹⁰ Nević Polje,¹¹ Semizovac,¹² Gračanica,¹³ and Košćani.¹⁴

The reference point for the Late Bronze and the Early Iron Age chronology of Central Bosnia is the stratigraphic sequence of the hillfort Pod, with level Pod C representing a new settlement stage at the beginning of the Early Iron Age.¹⁵ The level Pod C corresponds to “Schicht III” from the trench excavated in 1963 at the site.¹⁶ Even though the connection with the previous stage (Pod B) is more than obvious, the level Pod C witnessed an introduction of a number of new pottery shapes and ornaments. Based on some specific jewellery and weapon types, Pod C can be correlated with Hallstatt C1 phase in terms of Central European chronology (ca. 800–650 BC).¹⁷ Destroyed graves from Semizovac and Gračanica with grave goods such as a two-loop fibula with triangular foot¹⁸ and bronze pins with small head and neck torsion are most probably from the same period.¹⁹

The anchor of the next chronological stage of Early Iron Age is the following stratum D1 in Pod (Pod D1²⁰ or “Schicht II”²¹). This layer includes a black, burnt settlement horizon and newly-erected objects.²² Based on metal finds (two bow fibulae with Boeotian shield plate), the Pod D1 stratum corresponds with stage Ha C2 – Ha D1 of Central European chronology (mid-7th to early 6th century BC).²³ The pottery spectrum shows a clear break, with very few forms and ornaments related to the older settlement horizons.²⁴ Fibulae with Boeotian shield plate, one of the most popular Early Iron Age jewellery forms in the entire Southeastern Europe,²⁵ also occur among the

finds from the disturbed graves from Nević Polje and Grbavica in the Lašva valley.

Characteristic for the time between the late 6th and the late 5th century BC (Ha D2/3) are settlement layers labelled as Pod D2–D3, which are equivalent to "Schicht I" from the trench excavated in 1963.27 The pottery reveals a clear resemblance with "Schicht II", with a limited number of new types and decorations.28 One of the new characteristic forms are jugs with spout and small spherical kantharoi, both found also at the site of Zenepići indicating contemporary occupation with Pod D2–D3 (Figure 8). Metal finds belonging to this period of Pod's occupation suggest a wide communication network in which the settlement participated, including the central Balkans (e.g., double pins with Omega-shape head), Glasinac (e.g., fibulae with crest bowl), Northern Italy and the Southeastern Alps (e.g., two or three knobbed fibulae) and the Mediterranean (e.g., imported bronze vessels).29 Dated to this period are also some of the burials from Gračanica with fibulae of type Arareva Gomila, a specific jewellery form of the late 6th and 5th centuries BC in the area of the central Balkans (Figure 9, 1–5).29 A same dating can also be assumed for a bronze helmet of the so-called Illyrian type (Variant IIIa) from Putičevo near Travnik, found in an uncertain archaeological context.30

2. Settlements

Topography and structure

Major cultural change in Central Bosnia that induced the emergence of new settlements took place in the advanced stages of the Late Bronze Age (Ha A2 – Ha B1), spanning the late 12th and the 11th centuries BC.32 The most noticeable archaeological manifestations of the new development are the appearance of pottery with incised geometric ornaments on a massive scale and the foundation of new hillfort settlements.33 Apart from foundation layers of new hillforts (such as at Pod), the distinct decorated pottery occurs also in the contemporary layers of the already existing settlements, like Varvara, located in the neighbouring valley of the river Rama (Figure 1).34

It seems that the erection of the fortifications at Pod was a part of a new settlement concept from the very beginning of construction.35 However, it was in the Early Iron Age (Pod C phase) that both the wall and the dich were significantly extended.36 Furthermore, it is interesting that the massive, semi-circular wall around the plateau in Varvara dates to the last phase of the Late Bronze Age settlement (Varvara C3 phase) corresponding to the time when new decorated pottery appeared.37

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26 Čović 1987, 480.
27 Gavranović 2011, 27.
28 Ibid., Tab. 63–73.
29 Čović 1987, 500.
30 Teržan 1987, 19; Vasić 1999, 96.
31 Teržan 1995; Blečić Kavur / Pravidur 2012, Fig. 7.
32 Čović 1983, 437; Gavranović 2012, 103.
33 Čović 1986, 57; Gavranović 2011, 249.
34 Čović 1978, 1983a, 390.
36 Čović 1986, 60.
37 Čović 1983a, 395.
With the current state of investigation, it is more than speculative to make any kind of statements regarding the settlement density or population dynamics during the Early Iron Age in central Bosnia. The last systematic survey revealed around 120 hillforts with finds suggesting an Early Iron Age or a Late Bronze / Early Iron Age occupation. It is clear that some of the excavated sites like Kopilo near Zenica started to be occupied later than Pod, but for the majority of sites there is still no clear diachronic indication that would enable assessment in terms of settlement intensity at different stages of the Late Bronze and Early Iron Age. Furthermore, recent investigations in Čolaci and Tarabovac as well as some smaller surveys have indicated that the number of known sites is certainly not definite. In addition, open flatland settlements were registered in several locations, but these have not been investigated.

In terms of their topographic positions, the hillforts are located on prominent, elevated spots over the river valley (Figure 3). Yet, the distance from the lowland and accessibility seems to differ significantly. While Pod, Gorica, and Zenepići are situated on low terraces just above the river valleys, Čolaci, Kopilo, and Vrh Negraje stand on high, difficult to access plateaus with steep slopes, which control a large part of the river valley (Figure 3). The chronology, function, and social organization of the different sites and the choice of their position is hard to estimate. Both Kopilo und Čolaci (on high plateaus) appear to have begun 150–200 years after the establishment of Pod (positioned on a low terrace), but there are also sites contemporary with the first horizons at Pod (e.g., Vrh Negraje near Zenica), which are placed on extremely high ground in the local landscape (Figure 3). Conspicuous is also the fact that the size of the known hillforts tends to vary between 5000 m² and 7000 m² with no major size difference between the higher and the lower positioned sites.

The long-term excavations at Pod provided valuable information about the interior structure of the hillfort. Since no other contemporary sites

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38 Pravidur 2015, 9.
39 Ibid.
40 Small scale excavations were conducted by one of the authors, Ajla Sejfuli from the Museum in Travnik, which are unpublished.
41 In the area of Zenepići near Novi Travnik and Gradac near Travnik conducted in 2016 by the authors.
42 Čović 1987, 510.
43 Gavranović 2011, 19; Bujak 2012.
44 Čović 1987, 506.
have been investigated in more detail, it is uncertain if the configuration of Pod represents a special case or a regular settlement pattern. One should also keep in mind the well-preserved stratigraphy of Pod with cultural layers that are almost 3 m deep, starting in the Late Bronze Age and ending during the last phase of the late 3rd century BC. Thus, the fortified plateau (5500 m²) was continuously occupied throughout the period of at least 700 years.

The published plans of the excavated areas demonstrate dense and regular arrangement of rectangular houses (5–7 x 8–12 m) with narrow lanes between. Because of the war in Bosnia and Herzegovina (1991–1995) and the death of the principal investigator B. Čović (1995), the sequence and the duration of individual settlement horizons are still not definitely clear. However, the general settlement organisation with two diagonal lanes dividing the area in four sectors can be determined. Three successive horizons from the north-western part of the site, dating to 650–500 BC, have been published. The plans show several houses (ca. 7 x 12 m) of the same W-E orientation with a gradual enlargement of an open space at the crossing of the two main diagonal lanes. In 1987, the mid-horizon was published again, now including a more detailed drawing but without accompanying legend of the different features (e.g., floors, oven, fireplaces and stone pavements). In 1995, B. Teržan published a section of a horizon from the Late Bronze Age with attached legend. Rectangular clay house floors (ca. 6 x 10 m), elevated benches along longitudinal walls, U-shaped oven structures (with cupolae), smaller fireplaces, and stone pavement between the houses can be recognized. However, the orientation of objects is clearly not uniform just as in the case of the previously published Early Iron Age horizons. Beside the specification that the plan published by B. Teržan represents a part of the settlement on the eastern half of the plateau dating to around 1000 BC, no further information is available so far. The rectangular houses have been described as blockhouses or log cabins that were placed on a stone base (without vertical posts) and had earthen floor. Judging by the large amounts of burned daub with wooden imprints often decorated with geometrical ornaments on the frontal side, some kind of wattle and daub construction was applied inside the houses (e.g., on the separating walls or on the interior side of the wooden beams).

One of the crucial developments during the Early Iron Age at Pod is represented by the so-called “burnt horizon”, a black layer documented in most parts of the plateau, stratigraphically dividing phases Pod C and Pod D (Figure 2). The black burnt layer can be dated to the end of 7th century BC due to several diagnostic bronze finds (fibulae with Boeotian shield plate) and three radiocarbon dates. Even though the settlement continued to exist, this catastrophic event clearly left its mark on the material culture, as it was followed by a significant change in pottery shapes and decoration. A structure on the western part of the plateau, described as a settlement temple, was also destroyed by the fire. Although it had the same rectangular construction as the other houses, this structure (5 x 6 m) stands out due to the lack of regular inventory (such as ovens and pottery sets) and the occurrence of extraordinary clay columns (of 1–1.5 m preserved height) with stylized human faces (perhaps representing masks). Altogether, twelve columns, including one with a solar disc ending, were found inside the structure (Figure 4). All of them had incised hatched ornaments on the front, probably symbolizing garments, and wooden imprints on the back, indicating attachments on some wattle-like construction positioned most probably along the back wall (Figure 4). Another peculiarity of this structure is the elevated platform (ca. 40 cm above the regular floor) with a circular stone fireplace located in the back. Unfortunately, this

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43 The site was also occupied in the Chalcolithic period and the Early Bronze Age (see Ćović 1991, 10). There is a hiatus of at least 500 years between the abandonment of the Early Bronze Age site and the onset of the Late Bronze Age occupation.

44 Ćović (1987; 1991), the principal investigator of the project, repeatedly used the term “settlement horizon” in his publication without providing a clear definition and, above all, not mentioning the criteria for separating one horizon from another (e.g., by house floors, debris change). According to Ćović, the layer Pod C included two and layer Pod D ten successive horizons.

45 Ćović 1987.

46 Ibid. 508.

47 Ćović 1995a, 348.

48 Ibid. 505.

49 Ibid. 494.

50 Ibid. 518.
exceptional building with a unique material manifestation of Early Iron Age religious beliefs of the western Balkans is still unpublished. All provided information comes from preliminary reports. Similarly, the objects associated with the “burnt horizon” as well as the structures built on the debris of burnt horizon remain unpublished.

Finds

Finds from Pod are crucial for the evaluation of characteristic Early Iron Age ceramic repertoire in Central Bosnia, as it is the only site with documented stratigraphic sequence. A relatively small selection of previously published finds from the layers Pod C and Pod D in the form of preliminary reports\(^53\) was extended in 2010 by the processing of the material from the 1963 excavations.\(^54\)

The juxtaposition of the typical pottery shapes from late Pod B level (“Schicht IV”– Ha B3) and new layer Pod C (“Schicht III”– Ha C1) reveals clear continuity of forms and decoration (Figure 5). Typical of both phases are wide bowls with inverted, thickened and often decorated rims (Figure 5a, 1–3), vessels with wide funneled rims decorated on the inside (Figure 5a, 4–5), half-spherical cups with high handles and small vessels with S-profile (Figure 5a, 7, 10). New diagnostic forms of the Early Iron Age are bowls, cups, and kantharoi with biconical body (Figure 5b, 3), as well as shallow cups/ladle (Figure 5b, 13) and smaller jugs (Figure 5b, 12). The most frequent ornaments from the Late Bronze Age such as rows of incised crescents or rows of angle shaped stitches still exist in the following period, although mostly on the pottery forms that continue from the older settlement phases (e.g. bowls with faceted rims). Decoration motifs characteristic of the first Early Iron Age layer are a row of triangles with one vertical line in the middle, long, extended rhombuses and triangles, Maltese cross-shaped symbols, and rows of stamped or incised triangles. The metal finds from this settlement period include a pin with torsion on the neck and an iron spearhead, both forms well-known from Early Iron Age contexts in the surrounding regions.\(^55\)

Based on parallels in pottery shapes and stylistic comparison of decoration, contemporary occupation with Pod C (“Schicht III”) can be assumed at the site Gorica, located on a low terrace just some 800 m southeast of Pod (Figure 3)\(^56\) and at the hillfort of Čolaci near Donji Vakuf, approximately 12 km downstream on the Vrbas


\(^{54}\) Gavranović 2011, Tab. 49–73. The finds from the 1963 excavations were recorded in the National Museum in Sarajevo in 2006. The boxes in the depot, however, contained only diagnostic sherds (rims, bottoms, and decorated fragments of each stratigraphic feature). The preselection was undertaken by principal investigator B. Čović.

\(^{55}\) Vasić 2003, 97.

\(^{56}\) Čremošnik 1951.
River (Figure 3). In the neighbouring Lašva valley, the corresponding material was thus far confirmed only at Alihodže. In the section of Bosna River between Sarajevo and Zenica, indicative ceramic finds of the Early Iron Age are found at hillforts of Debelo Brdo, Semizovac, Hadžići near Visoko, and Kopilo near Zenica. Outside of Central Bosnia, some of the distinctive ornament types and shapes from Pod C (“Schicht III”) also appear at sites located in the middle course of the rivers Vrbaš and Bosna and at the site of Korita in Duvno field in the south-western Bosnia. Although several authors repeatedly quoted that pottery from Central Bosnia – and from Pod especially – “influenced” the adjacent territories, the nature of relationships between the sites in the region is still largely unexplained.

A clear shift in the pottery spectrum can be observed in the next chronological stage at Pod (Pod D1 – Ha C2 / Ha D1), represented through finds from the “burnt horizon” and the follow-

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83 Pravidur 2015.
84 Gavranović 2011, Tab. 11.
85 Fiala 1897.
86 Korošec 1942.
87 Perić 1987.
88 Gavranović 2011, Tab. 7.
A number of ceramic forms and decoration styles that existed in the Late Bronze Age horizons until the beginning of the Early Iron Age disappeared at this time, with only a few elements pointing to connections with previous stages. In Pod D1 (“Schicht II”), bowls with faceted and thickened rims, cups with short rims, and S-profile as well as half-spherical cups vanished. Even more drastic is the transformation, or rather a reduction, of decorative elements. Rows of crescents, several variations of hatched triangles, angle stitch rows, vertical zigzag lines, and all types of incised arch motifs disappeared in this period, too. Dominant ornaments of the second Early Iron Age layer in Pod are rows of simple oval stitches, often between two lines, and loose bundles of vertical straight lines (Figure 6, 1–2. 10–11), whereas more complex incised motifs (e.g., opposing rows of hatched triangles) occur only sporadically. Representative for this phase are flat flutes or wider rills, which are, judging by the material sample excavated in 1963, used mainly for the decoration of semi-spherical bowls (Figure 7, 3). Typical ceramic spectrum of this stage also includes biconical bowls, semi-spherical and calotte-shaped bowls, smaller vessels with cylindrical necks and biconical lower bodies, kantharoi and beakers with longer cylindrical or slightly funnel-shaped necks and spherical lower bodies, bigger jugs with high handles, amphorae with wide rims and cylindrical necks (Figure 6). Chronological connection between level Pod D1 (“Schicht II”) and other regions of the Central and Western Balkans is based on the presence of fibulae with Boeotian shield plate (Figure 6, 13), pointing to a date of the late 7th to early 6th century BC. Analogous ceramic finds can be found mostly at hillforts that were occupied in the preceding periods like Debelo Brdo, Semizovac or Al-ihodže. However, they all lack clear context. The youngest layer of the hillfort Kopilo is also parallel with the stage Pod D1 and probably the settlement in Varvara as well, which seem to have been occupied again during this period (ca. 650–550 BC).

The final stage of the Early Iron Age comprises phases Pod D2 and D3, while the youngest settlement traces (Pod D4) date to the La Tène period. In the profile section from 1963, this stratigraphic sequence was summarized as “Schicht I,” comprising several different eroded layers with no clear distinction between them (Figure 2). The pottery repertoire is similar to the previous layer, and includes semi-spherical and biconical bowls, often decorated with a two

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rows of lentil shaped stitches below the rim and along the vessel kink shallow cups/ladles, vessels with curved S-profile and kantharoi with spherical or biconical lower bodies (Figure 7). One of the very few forms that continued from the older strata of occupation are small three-handle vessels (Figure 7, 13) that had first appeared already in the Late Bronze Age (early stage of Pod B – “Schicht V”).73 Newly introduced in “Schicht I” are jugs with spout and shallow bowls with rims with plastic decoration and one-handled perforated cylindrical pedestals (Figure 7, 4.7). Most of the decorations are made of incised lines and stitches with very few complex ornaments (hatched triangles or two inverted triangles sand glass). Plastic decoration, most notably different finger impressions, is more frequently used in comparison to older layers74 (Figure 7. 10–11).

Thanks to a number of diagnostic jewellery types (as outlined above), this Pod D2/D3 can be correlated with the late 6th and the 5th century BC.75 Imported finds of a Mediterranean provenance, such as painted wheel-made pottery and pieces of bronze vessels, corroborate this dating and indicate the integration of Pod into the extensive exchange network between the Adriatic Sea, Southern Europe and the western Balkans.76 An outcome of these international relationships can be seen in the form of a semi-spherical, locally made bowl with incised inscription, identified as an imitation of Etruscan or Umbrian letters.77

Based on stray finds, the hillforts Debelo Brdo78 and Čolaci79 still existed throughout the 6th and the 5th centuries BC. The published pottery from these two sites shows clear similarities with the finds from the corresponding layers at

73 Gavranović 2011, 77.
74 Ibid. 110.
75 Čović 1987, 500, Tab. 53.
76 Čović 1983a.
77 Šalabalić 1965, 12.
78 Fiala 1893; Fiala 1897; Čović 1965.
79 Pravidur 2015, Fig. 9.
Pod (D2/D3). Hence, the intensive connectivity between the hillforts of Central Bosnia appears to continue unabated also in the developed Early Iron Age.

Analogous pottery of the late 6th and the 5th centuries BC has also been recently found in the site Zenepići, located in the small side valley of Lašva basin near Novi Travnik (Figure 3). The area is densely forested, but the ramparts and two circular terraces around the small plateau (30 x 40 m) are still recognizable. The site yielded abundant iron slag, distributed all over the surface. Since no other than Iron Age pottery and diagnostic finds from earlier periods have been found there, one can assume that the iron slag is also of the same age. Among collected finds from Zenepići are also well-known forms from the latest Early Iron Age layer in Pod (D2/D3).

1. A small three-handled vessel with a spherical lower part and a slightly concave neck. The lower part is decorated with incised slanted ladder motifs and unregularly dispersed lines (Figure 8, 1).

2. A small jug with a spout, a cylindrical neck, and a spherical lower part. The incised decoration is located on the upper half of the spherical lower part and consists of three lines of different motifs (branch-like ornaments, slanting lines, etc.).

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30 The pottery was found in 2014 during the construction of a forest road that leads to the plateau. The finds were submitted to the Museum in Travnik. The authors have visited the site in August 2016.

31 Ćović 1965, 55; 1987, Fig. 28; Tab. 52, 21; Gavranović 2011, Tab. 67, Tab. 72.
and a singular line accompanied by a row of lentil shaped stitches (Figure 8, 2).

3. A cup with a biconical body and a short cylindrical neck. The handle is placed between the body break and the rim and reaches over the rim in the middle part. The decoration (vertical incised lines with relatively big distances between them) spans between the neck and the body break (i.e., on the upper half of the biconical body) (Figure 8, 3).

4. A kantharos with a spherical lower part and a concave neck (Figure 8, 4). Two handles reaching above the rim spread between the rim and the body break. Both handles have a sharp break (kink). The handles are decorated with groups of diagonal incised lines. The decoration of the upper body of the kantharos includes dense vertical incised lines intermittent with columns of shorter slanted lines and rows of lentil stitches in the branch-like array (Figure 8, 4).

The hillfort Zenepići represents the fourth site in Central Bosnia – together with Pod, Čolaci and Debelo Brdo – with clear evidence for occupation in the final stages of Early Iron Age. Judging by certain characteristic metal finds (Early La Tène fibulae, fibulae of Certosa type, and double pins with Omega-shaped head), both Pod and Čolaci as well as Debelo Brdo existed continuously throughout most of the Late Iron Age, with the earliest finds dating to the 3rd century BC.

Subsistence and environment

While pottery and metal finds provide a basic understanding of material culture, any assessment of the socio-economic background of the Early Iron Age communities in Central Bosnia is, with the current research status, still difficult to make. The pollen record from the Prokoško Jezero in the Mid-Bosnian Schist Mountains is the first evidence of environmental changes in this region in last 18,000 years. A strong decrease of fir and pine trees and an increase of hazel and grasses are significant for the Early Iron Age. However, there is still no clear indication if any of these changes in forest composition (also including a continued decrease of elm and oriental hornbeam) can be linked to human activities in the river valleys surrounding the Mid-Bosnian Mountains.

Thanks to the arcaeozoological and archaeobotanical analyses of the remains from Pod, some basic information regarding subsistence, husbandry and hunting preferences can be mentioned here. The published archaeobotanical results point to storage of wild oat (Avena serilis) in several pits dating to the Early Iron Age, while common oat (Avena sativa) clearly prevails in the Late Iron Age layers. Identified in the Early Iron Age layers are also lentil (Lens culinaris), broad bean (Vicia Faba) and pea (Pisum Sativum).

Among analysed animal bones from the Late Bronze Age layers (Pod B), domestic animals (46% sheep/goat, 36% pig, 11% cattle, 1.5% horse, and 2.5% dog) clearly dominate comprising in total 98% of the sample, while game (2%) is represented by wild pig and dear.

In the Early Iron Age (Pod C and Pod D1), the ratio of game increased to 10% (40% dear, 20% bear, 20% doe, and 10% wild pig). The husbandry structure changed too, with a significant increase of cattle (20%) and a slight decline of sheep/goat (43%) and pig (34%).

In the youngest settlement stage (Pod D2–D4) the portion of game is again reduced to 5% of the total assemblage (of which 41% dear, 23% doe, 17% wild pig, 17% bear, 1% rabbit, 1% beaver, as well as lynx, marten, fox and wolf). Characteristic for the domestic animals is a significant increase of sheep/goat (56%) and decrease of pig (24%) bones in the assemblage, while the percentage of cattle (17%) remained more or less stable.

The finds of iron slag from Čolaci, Kopilo, Pod, Varvara, and Zenepići demonstrate metallurgical activities in each of these sites, with earliest finds dating to the 9th century BC. Often mentioned, but never fully published, is a vessel with limonite chunks from the late stage Pod B (9th century BC). Pointing to a prospection of

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82 Čović 1987, 504; Pravidur 2015, 22.
83 Dörfler 2013, 311.
84 Ibid. 327, profile section: LPAZ N.
the nearby iron ore sources in the Mid-Bosnian Schist Mountains. However, while the signs of the iron working are numerous, solid evidence documenting the reconstruction of chaîne opératoire including mining, smelting and processing is rare. The first trace element analyses of the slag and iron objects form the sites of Čolaci and Pod point to magnetite as the initial exploited ore and technological differences in the ore smelting process between these two sites. The sampled four slag pieces from Čolaci contained higher amount of iron oxide (FeO) when compared to the four slag samples from Pod, which could be an indication of a more advanced smelting technologies at Pod. Furthermore, the comparison between two iron objects from Čolaci (a knife and an undefined tool, probably a chisel) showed that both were likely produced at Pod. It is thus obvious that hillforts of Central Bosnia had strong mutual relationships in terms of iron metallurgy, but it is still hard to evaluate whether the iron production was oriented toward local needs or, as previously assumed, towards generating surplus for exchange. The geological and natural preconditions with abundant and well accessible ore deposits and dense forest (utilised for fuel) could point in favour production beyond average local needs, the tangible evidences are however still to deliver.

3. Burials

In contrast to the settlement activity, which was long-lasting, as settlements were occupied over several centuries, the cemeteries discovered to date are all short-termed and contain just a limited number of interred individuals. The discrepancy between the relatively small number of graves and the intensive settlement activity leaves the question of standard burial practices between the 8th and 5th centuries BC more or less open. Furthermore, none of the discovered graves represents an actual closed context with preserved human remains. Hence, at the current stage of research, it is difficult to make any general statements regarding burial rites or grave construction characteristic of the Early Iron Age in Central Bosnia.

The grave finds from the initial stage of the Early Iron Age (8th century BC) were unearthed in Klaonica near Travnik and Nević Polje on the banks of rivers Lašva, Gračanica (Figure 9), and Semizovac in the Bosna Basin between Sarajevo and Visoko and near Košćani in the upper Vrbas valley between Bugojno and Donji Vakuf. Bronze jewellery prevails among the finds, while weapons appear in Košćani (an iron spearhead) and Semizovac (a decorated bronze spearhead). Characteristic regional jewellery types of the 8th century BC are two loop bow fibulae with triangular foot (from Semizovac and Gračanica), bracelets with ends positioned one above the other (from Gračanica, Nević Polje, and Klaonica) and conical decorated belt buckles (from Gračanica and Klaonica). The pins with a small head and a neck torsion from Gračanica and Nević Polje corroborate the chronological cross-connection of the destroyed graves with layer Pod C (“Schicht III”), in which the same pin type occurs. Less chronologically significant are bronzes from graves, such as anklets, arm spirals, and bronze sheet diadems, which all appear already during the Late Bronze Age as parts of traditional, presumably female, funerary attire sets in central Bosnia and in adjacent regions.

The continuous occupation into the next stage of the Early Iron Age (the late 7th – early 6th century BC) can be assumed only for the burial place in Nević Polje. Characteristic for this period is a two-loop fibula with Boeotian shield plate, found in one of the disturbed burials. The same type of fibula is documented also in Grbavica near Vitez, some 3 km west from Nević Polje (Figure 9). Thus, in terms of chronology both burials can be linked with settlement stage Pod D1 (burnt horizon in “Schicht II”). According to the initial reports, the finds from Grbavica near Vitez, some 3 km west from Nević Polje (Figure 9)
ca (a fibula, twisted torques, an arm spiral, two bracelets, and a small spiral) originated from a tumulus containing cremations. Later studies, however, labelled these finds as coming from a flat inhumation grave. A further indication that ensemble from Grbavica (the fibula with a Boeotian shield plate, twisted torques, and two bracelets) could actually represent a funerary attire set is supported by an occurrence of the same combination in several graves of this period in necropolis of Donja Dolina on the Bosnian Bank of the Save River. However, while the jewellery types from Grbavica and Nević Polje point to intra-regional connectivity the graves equipped with distinct warrior attributes (sets of iron weapons containing two spearheads, one or two knives and a sword) and imported bronze vessels, typical for Donja Dolina but also for the Glasinac area during this period, are entirely absent in central Bosnia. Various finds of Mediterranean provenance at Pod suggest, however, that the Iron Age communities in Central Bosnia were part of a contact network that imported objects to the western Balkans, but unlike at Glasinac or Donja Dolina these objects were not deposited in graves.

Stray finds from the site Gračanica, used as a burial place already in the initial stages of the Early Iron Age (Figure 9), are the only evidence from graves that chronologically correspond to the settlement stages Pod D2–D3 (“Schicht I”). Five fibulae of the Arareva Gomila type point

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107 Čović 1988, 199.
to the existence of earlier burials in Gračanica in particular, as they are one of the important chronological markers of the late 6th century BC in central and western Balkans. Assigned to same context are an iron spearhead and bronze sheet fragments (from a belt) with ornament in repoussé technique (Figure 9, 6).

In summary, it can be concluded that the Early Iron Age grave finds from Central Bosnia can be connected to no more than 10 or 15 individuals, who were interred during a period over 300 years, which is by far not a representative sample for any kind of general assessment. On the other hand, it is not probable that there still remain extensive undiscovered Early Iron Age cemeteries, especially considering the intensive archaeological surveys and increasing construction activities of the last 150 years. Thus, the difference between the population prosperity signalled through continuity of settlements like Pod, with stable development of several centuries, and the absence of corresponding burial sites cannot be explained merely by poor state of research. One should take into consideration that burial practices might not be traceable by archaeological means.

4. Conclusion and outlook

The Early Iron Age developments in Central Bosnia, are undoubtedly rooted in the transformations that took place in the advanced phase of the Late Bronze Age. The sudden appearance of new specific types of pottery with no analogies to the older periods and the emergence of well-organised hillforts during the 12th and 11th centuries BC have led to the assumption that certain new population groups could have important part in the formation of the specific cultural phenomenon, commonly known as “Central Bosnian group of the Late Bronze and Early Iron Age”. However, the concept established in the 1980s and to a certain extent still applied today, that this archaeological manifestation was a “distinct, cultural-ethnic group with own specific material culture and territory” inevitably implies a biological and ethnic affinity between the Early Iron Age communities in central Bosnia, thus overriding “collective identity.” This statement, however, is not supported by any valid evidence. The insufficient data from burial practices and the general absence of Early Iron Age human remains make the theories about potential biological connectivity between individuals and communities appear highly speculative. A striking resemblance of material culture between different hillforts situated in the river valleys around the Mid-Bosnian Schist Mountains together with their topographical and structural similarities (e.g., location, fortification style, size) nevertheless indicate a high-level of mutual communication and exchange. In terms of classification, the abovementioned sites undoubtedly represent a specific archaeological group. Their common features, however, do not reveal much about the identity of Early Iron Age communities. The long-term use of same resources and adaption to similar natural and social environments could eventually lead several communities to merge into larger groups with a higher organisation level. Nevertheless, in case of the Late Bronze and Early Iron Age in central Bosnia, there are still no arguments that would support any kind of aggregation beyond the settlement level.

In case of central Bosnia, further striking is that the introduction and expansion of working of new metal – iron – did not significantly affect cultural development or caused major breaks in the settlement patterns. When compared to the adjacent regions of western Balkans where the transition between the Late Bronze and Early Iron Ages brought comprehensive changes in all archeologically traceable aspects, the modifications in central Bosnia seems to be marginal. The geographic isolation in terms of limited access to the valleys of Vrbas and Bosna from the north (Carpathian Basin) and the south (Adriatic coast) combined with favourable resources (especially fertile land, forest, and metal ores) are certainly conducive to uninterrupted development. However, the elaborated fortifications around settlements also confirm the existence or at least awareness of potential danger. At least

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111 Weiss-Krejci 2013.
112 Čović 1987.
114 Pravidur 2015.
115 Čović 1983, 434.
116 Teržan 1987; Pare 1998; Potrebica 2013.
at Pod, it is obvious that there was no hostile or violent event for 700 to 800 years. There is no indication that the fire that destroyed most of the settlement at the end of the 7th century BC (the “burnt horizon” dividing phases Pod C and Pod D) was caused by outside influence. This event definitely triggered certain changes in the lives of the inhabitants as visible in a major change of pottery repertoire; yet, there is also a clear uninterrupted settlement continuity. Despite the lack of direct evidence for external danger, the fortifications were constantly enlarged and optimized, most notably at the beginning of the Early Iron Age.

In contrast to the argument of geographical isolation is the evidence of metal finds, which clearly indicate that the Early Iron Age communities in central Bosnia were fully incorporated into the regional and inter-regional exchange networks. From the late 7th century BC, the objects of Mediterranean origin also started to appear more frequently at Pod, pointing to indirect or possibly also direct contact with the Adriatic coast, Central Italy and Northern Greece. However, in contrast to neighbouring Glasinac, or Central Europe, where the appearance of imports is regarded either as a consequence or cause of social differentiation and emergence of social and economic elite, signs of evident social stratification are thus far lacking in central Bosnia. Moreover, it is even more remarkable that there are no archaeological indications of socioeconomic elite either in settlements (indicated by functional separation of areas or the presence of exceptional objects) or by abundantly equipped graves, if one assumes intensive iron production and surplus. In order to elucidate the processes that led to this unique regional development, it is essential to increase first data (e.g., from archaeology, archaeometallurgy, archaeobiology, and geology) and then provide more exact results.

Na engleski jezik preveo Mario Gavranović

118 Čović 1987a; Babić 2002; Govedarica 2002.
119 Potrebica 2013.
120 Pare 1991.
osnivanja naselja Pod, dok je naselje Vrh Negraje, koje je smješteno na izrazito visokom terenu, paralelno s prvim horizontom naselja Pod. Najviše podataka pružila su sistematska iskopavanja naselja Pod s nje-govom bogatom stratigrafiom i slojevima koji su na nekim mjestima dozneli dubinu od 3 m na obuhvatajući period od kasnog brončanog doba do kraj 3. stoljeća pr. Kr. Utvrđeni dio naselja kontinuirano je bio naseljen najmanje 700 godina.

Pokretni arheološki nalazi

Zahvaljujući pokretnim nalazima pronađenim u toku istraživanja naselja Pod moguće je donedjele rekonstruirati keramički repertoar ranog željeznog doba centralne Bosne s obzirom na to da je to jedini poduzano dokumentovan materijal. Posude kasne faze Pod B sloja i novog Pod C sloja pokazuju konzistentnost forme i dekoracije. Za obje faze tipične su široke zdjale s izvrnutim i često ukrašenim obodima, posude sa široko izvršenim ukrašenim obodima, polouputaste zdjale s visokom rukom i male posude s profilom. U ranom željeznom dobu pojavljivaju se također i zdjele, posude i kantarosi s bikoničnim tijelom, ali i male plitke čaše. Od ukrasa na keramici ujedno su motivi polumjeseca raspoređeni u redove koji su na sljedeći i izražene forme, a koja je zabilježena prilikom istraživanja naselja Pod, Čolaci i Debelo Brdo, naselje u Zenepići donjem dijelom i konkvantim vratom. Zajedno s njima podržavaju se i mala zdjela s izljevkom izlaze koje su poznate i učestale forme: male posude sa bikoničnim tijelom, odnosno s bule i kantarosi s bikoničnim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila. U široko izvršenim ukrašenim obodima, posude sa bikoničkim tijelom, ali i male zdjele s visokom ručkom i male posude S profila.
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Visualizing Cultural Diversity
The typology of one-looped bow fibulae with asymmetrical and rectangular plates

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Abstract: The category of one-looped fibula type with asymmetrical plate has been discussed since the late 1980s, especially with regard to their connection with Greek “geometric” models. The aim of the paper is first to supplement the previous studies about the fibula type by re-examining the typological details and to propose several variants. The integration of one-looped bow fibulae with square/rectangular plate into the discussion as well as the spatial distribution of the proposed variants shall complete the study. The heterogeneity of the type and even the variants lead to chronological problems regarding the exact dating within the first horizon of the Early Iron Age (8th/7th century BCE). Therefore, the chronological position of the fibulae variants is discussed based on existing relative chronological systems taking into account the local contexts in which the fibulae in question occur.

Key words: Iron Age, fibulae, female attire, central balkan chronology, contacts

Research History – Between South and East

In 1987 D. Mitrevski and R. Vasić distinguished independently of each other a group of fibulae from the spectrum of Balkan one-looped bow fibulae with an asymmetrical plate due to their shape and time of origin. Since 1999 these are classified as fibula type “Radanje”, mainly distributed in the region of Valandovo/Gevgelija as well as the Bregalnica Valley. In general, the constructions of the fibulae are comparable, but at the same time, they differ from each other in the form of the plates, bows and decoration. The examples of the type show a great heterogeneity when compared to each other, which can be regarded as an expression of chronological depth.

Therefore, fibulae of the type “Radanje” are in general dated to an early phase of the Iron Age, between the 8th and 6th centuries BCE. Examples showing typological characteristics which are directly comparable to examples known from Central Greece have been generally dated earlier as later, local developments. Most of the examples are considered as products of local workshops situated in the Vardar and Bregalnica Valleys, where they occur in graves as part of the attire. However, the impulse for the design and style of the fibulae derives from Greek-geometric models known from Central Greece, whereby attention has already been drawn to the chronological hiatus between the appearance in Greece and the Balkans. In their studies of this particular fibula

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2 Mitrevski 1987.
3 Vasić 1987a.
4 Vasić 1999, 72-74; 1987a; R. Vasić nevertheless distinguished single examples and points to chronological differences within the fibula type.
5 Ibid. 73; Mitrevski 1987, 38; D. Mitrevski regards the early representatives as Greek imports and as evidence for the opening of the north to the south.
6 Vasić 1987a; Mitrevski 1987; in general fibulae known from Thessaly and Western Chalkidike are used as points of comparison, as are finds from Attic graves from the 9th century BCE.
7 Vasić 1987a, 41; see Pabst 2008 for the dating of especially the fibulae from Milći grave 31/35 to the 9th/8th century BCE and the implications for Balkan chronology.