

Traditions and Novelties in the Funerary Customs of the Eastern Adriatic Communities at Nadin and Kopila During the 2nd and 1st Centuries BC

Čelhar, Martina; Borzić, Igor

Source / Izvornik: **Between Global and Local. Adriatic Connectivity from Protohistory to the Roman Period. Proceedings of the Conference, Stari Grad, 28th-29th October 2022, 2024, 21, 167 - 186**

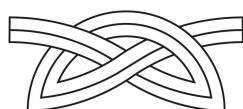
Conference paper / Rad u zborniku

Publication status / Verzija rada: **Published version / Objavljena verzija rada (izdavačev PDF)**

Permanent link / Trajna poveznica: <https://urn.nsk.hr/urn:nbn:hr:291:028236>

Rights / Prava: [Attribution 4.0 International](#)/[Imenovanje 4.0 međunarodna](#)

Download date / Datum preuzimanja: **2025-02-22**



INSTITUT ZA
ARHEOLOGIJU

Repository / Repozitorij:

[RIARH - Repository of the Institute of archaeology](#)



TRADITIONS AND NOVELTIES IN THE FUNERARY CUSTOMS OF THE EASTERN ADRIATIC COMMUNITIES AT NADIN AND KOPILA DURING THE 2ND AND 1ST CENTURIES BC

Original scientific paper

The implementation of two research projects, one at the Liburnian settlement and necropolis of Nadin (Department of Archaeology at the University of Zadar, Department of Anthropology at the University of Maine) and the other at the necropolis of the Kopila settlement on the island of Korčula (Department of Archaeology at the University of Zadar, Center for Culture Vela Luka, and the Museum of Ancient Glass in Zadar), enabled the parallel inspection and comparison of numerous aspects of life of the two communities which developed in separate regional frameworks, in times of increasingly intensive prehistoric “global” connections. To illustrate this, the focus was put on two multiple-burial tombs, Tomb 105 from Nadin and Tomb 4 from the Kopila necropolis, which had approximately the same duration during the 2nd and 1st centuries BC.

KEY WORDS: NADIN, KOPILA, DALMATIA, EASTERN ADRIATIC, LATE IRON AGE, BURIAL CUSTOMS

INTRODUCTION

The last two centuries BC were a period of highly emphasized dynamics of historical events and thus significant cultural perturbations (acculturation and transformation) that took place not only in the Adriatic but also in a much wider European area. In Dalmatia, however, they are still somewhat difficult to follow archaeologically, largely due to a lack of contextual information and research on the settlements and necropolises of the local indigenous communities. When searching for more finely defined chronological changes during the Late Iron Age, there is the problem of long-period successive burials within a single tomb, as they often disturb the original stratigraphic relationships within an archaeological complex. Another problem lies in the fact that

very few intact burials have been documented to date. This work presents the discoveries of two such tombs from two different cultural environments from the last two centuries BC. The intent is to demonstrate how two geographically separated Late Iron Age eastern Adriatic communities behaved in terms of grave ritual and material culture.

This study centers on the North Dalmatian Liburnian community from Nadin and the South Dalmatian Illyrian / Pleirean (?) community from Kopila on the island of Korčula (Fig. 1). Both sites have been the focus of scientific research, which produced data concerning their chronologies, spatial organization, economic strategies, and material and spiritual culture of the communities living in them (for Nadin: Batović, Chapman 1987a; 1987b; Chapman et al. 1996; Čelhar, Zaro





Fig. 1 – Geographical position of Nadin (above; photo: M. Grgurić) and Kopila (below; photo: M. Vuković) hillforts, base map: Google Earth (made by: I. Borzić)

2016; 2017; 2018; 2023a; 2023b; 2023c; Borzić et al. 2018; Zaro, Čelhar 2018; Zaro et al. 2020; Toyne et al. 2021; Knežić 2022; Čelhar et al. 2023; Knežić et al. 2023; for Kopila: Radić, Borzić 2017: 35–58; Borzić 2022).

As is often the case, the majority of work thus far has been done in the necropolises of these two hillfort settlements. At Nadin, the necropolis can be traced back to the Late Bronze Age and continues into Late Antiquity (Batović, Čondić 2005;

Kukoč 2005; 2006; 2009; Rajić Šikanjić 2006; Kukoč, Čelhar 2010; 2019; Anterić et al. 2011a; 2011b; Batović, Batović 2013; Čelhar, Kukoč 2014; Marijanović et al. 2014; Čelhar 2016; Loewen et al. 2021; Čelhar, Zaro 2023b; 2023c). Its Iron Age strata reflect a regular spatial organization divided into grave plots hitherto unknown in the Liburnian area (Fig. 2). This kind of thing has been recorded in a number of similar sites, but only later, with the arrival of the Romans. Another notable



Fig. 2 – Nadin, necropolis (photo: D. Vujević)

characteristic is the progressive monumentalization of individual burial units over time, especially in the last two centuries BC (Kukoč, Čelhar 2019).

In contrast to the case of Nadin, the archaeological material accidentally excavated and deposited in the Museum of Dubrovnik in the late 19th century gives only a hint of the existence of Kopila's Early Iron Age necropolis (Radić 2003).¹ On the other hand, its Late Iron Age necropolis (the late 4th–1st centuries BC) has been confirmed and partially excavated in recent years (Radić, Borzić 2017: 49–58; Borzić 2022) (Fig. 3). It is organized into two nuclei composed of a large number of interconnected and irregularly shaped oval grave plots with a monumentally built outer ring, a stone embankment, and a centrally positioned deep burial space. Its form and appearance is suggestive of direct traditional connections with Bronze Age stone mounds – but modified, that is, monumentalized (Radić, Borzić 2017: 49–55; Borzić 2022). Research has shown that such tombs, presumed to be family tombs, were used many times, generally speaking, from the end of the 4th to the end of the 1st century BC. The specificity of the

spatial organization and the monumentality of the performance of this necropolis make it a unique phenomenon thus far in the Adriatic. However, it is evident that very similar, although less monumental, phenomena have now been documented in the recently discovered Early and Late Iron Age necropolises in Zakotorac on the neighbouring Pelješac Peninsula (Perkić et al. 2021: 85, Fig. 2), and, for example, in Grebine in Mrljanovci near Ljubuški (Rašić 2022: 361–363). This suggests that we should expect to discover other more or less monumentally constructed necropolis areas, at least in the southern Adriatic.

GRAVE 105 FROM NADIN AND GRAVE 4 FROM KOPILA

As emphasized earlier, the intent of this work is to compare the funeral customs, and by extension the cultural affiliations, of two important Eastern Adriatic communities in specific moments of protohistory. For this purpose, we have



Fig. 3 – Kopila, necropolis (photo: M. Vuković)

¹ — For some of these finds, especially the complete Corinthian vessels from the end of the 7th and the first half of the 6th century, there is a possibility that they do not come from Kopila, but are part of the Cypriot collection which reached the museum at the same time.

singled out two tombs from these necropolises from approximately the same period, the 2nd and 1st century BC (Čelhar, Ugarković 2021: 312–314; Borzić 2022a: T. 1). Individual and more broadly dated types of jewellery and attire may cast some doubt on the chronological determination, like double pins of type IIIa in Kopila (according to Vasić 1982: 232–234, 236–238) or Certosa fibulae Ic and Id in the case of Nadin (Teržan 1976: 319–320, 382). However, the vast majority of grave finds and items can be dated to the last two centuries BC, like the predominance of grey glazed plain and relief pottery variants associated with the burial ritual. Also, we should emphasize the apparent absence of Gnathia pottery,² which was commonly present in the tombs of the 4th and

3rd centuries BC, both at Nadin (Batović, Batović 2013; Matković 2015; Čelhar et al. 2023) and at Kopila (cf. Radić et al. 2017; Borzić 2022b).

Although we are not able to determine more precisely the initial use of these tombs in the frame of the 2nd century BC, the historical context of their final period at Nadin is indicated by the appearance of early North Italic sigillata and thin-walled pottery from the last quarter of the 1st century BC, which are absent from the necropolis at Kopila.

The Nadin case is presented by Tomb 105, which was located on the southern edge of the necropolis (Fig. 4). Visually, it is characterized by a very regular rectangular shape (dimensions: 2,93 x 4,30 m), with sides built of vertically placed monumental stone blocks of varied roughness.



Fig. 4 – Nadin, Tomb 105 (photo: M. Grgurić)

2 — The allegation about the absence of Gnathia pottery in Tomb 105 is not refuted by the fact that its upper layer contained only three small sherds of south Italian Gnathia vessels from the 4th/3rd c. BC and two whole vessels made under its certain influence, a kantharoid skyphos with carelessly executed incised grooves and metopes, technically made much closer to 2nd c. BC Dalmatian grey glazed pottery than to the south Italian model, and a deep bowl, morphologically and decoratively simpler than its closest analogies from the Messapian workshops from the 4th c. BC. More about these vessels will be said in the ongoing integral publication about Tomb 105.

The aforementioned architectural concept of the Nadin necropolis originated in the Early Iron Age (approx. from the 7th century BC onwards), when similarly shaped and positioned blocks formed more or less regular rectangular enclosures around a single grave or occasionally several graves (2 or 4), most often constructed in the form of a stone cist (Kukoč, Čelhar 2019). Other tombs that were somewhat chronologically and architecturally analogous to Tomb 105, but often with a longer continuity of burials (from the 4th century BC onwards; cf. Batović, Batović 2013), were also recorded in at least 8 other cases in the Nadin necropolis, but all have been devastated by various subsequent activities since ancient times. Consequently, Tomb 105 represents the only intact unit of this type, not only within the framework of the Nadin necropolis, but also within broader Liburnia (cf. Gradina in Dragišić, tombs 20, 22, and 24: Brusić 2000a: 11; Miše 2017: 86, 96;³ Velika Mrdakovica: Brusić 2000b: 8–9; Brajković 2014: 8, 21; 2018: 37–41). Interestingly, the same construction technique, with fairly regular and monumental

stone blocks, was recorded for the corresponding Iron Age residential architecture in the Nadin settlement (Čelhar, Zaro 2016; 2023a; 2023b; 2023c) (Fig. 5) and at some contemporaneous sites, like Asseria (Fadić et al. 2018), Jerebinjak (Čelhar, Zaro 2023a: Fig. 4), and Lergova Gradina. The two excavated structures in Lergova Gradina contained material associated with the 2nd and 1st century BC, the chronological range which is further confirmed by two radiocarbon dates (Ilkić, Čelhar 2018).

On the other hand, the example from Kopila, specifically Tomb 4, is also located on the extreme southern edge of Nucleus 1 of the necropolis (Fig. 6). In terms of spatial design, it generally follows other Kopila tombs that persisted from the middle/end of the 4th century BC to the end of the necropolis in the middle of the 1st century BC. Nevertheless, it seems that the outer ring (measuring 3,40 x 4,70 m) is more rustic, having been constructed of regular/irregular monumental stone blocks. Also, the central burial placement (1,73 x 1,90 m) is very shallow, which can be traced to its peripheral position and/or later dating (Borzić 2022a: 97).



Fig. 5 – Nadin – Gradina, Late Iron Age residential architecture (photo: G. Zaro)

3 — It remains unclear how many of the 34 excavated tombs in 2001–2003 architecturally correspond to tombs 20, 22, and 24 from Dragišić or tomb 105 from Nadin. Miše (2017: 86) generally states that „some of them had preserved and regular side blocks“, while the monographic publication of metal and glass objects from the mentioned graves by Glogović (2014) makes no mention of grave architecture at all.



Fig. 6 – Kopila, Tomb 4 (photo: I. Borzić)

In both cases, analysis of the archaeological deposits indicated that the graves were used on multiple occasions. In the case of Kopila, Tomb 4 served as the burial site for a minimum of 32 individuals of both sexes (15 men, 8 women, and 9 inconclusive). All were adults with the exception of one male teenager.⁴ Given the excellent state of preservation, we were able to determine that the individuals were buried on their backs with the arms along the body. Women were placed with their heads toward the east and men with their heads toward the west. While pins and weapons (spearheads) were placed only with men, and fibulae and jewellery (earrings and necklaces of glass beads) only with women, pottery goods were placed with both (Fig. 7). Such a principle of "successive" opposite burial is nothing new in the South Dalmatian area because, along with some other tombs from Kopila (Borzić 2022a: 102), it has been recorded at the necropolis of Grebnice near Ukšić since the 7th century BC (Marijan 2001: 56, 123–130).

The Nadin case is much more complicated because anthropological analysis has identified the remains of a minimum of 228 individuals that include both sexes and all age groups.⁵ Unfortunately, with the exception of a few individuals placed in the crouched position in the lowest layers (Fig. 8), it is not possible to address the original position of most burials in the tomb due to the apparent secondary relocation of human remains toward the edges of the tomb architecture (to free up space for new inhumations).

Similarly, it is not possible to attribute certain items of attire or jewellery to a particular sex and/or age group. The fragmentation of osteological material is further attributed to the fact that at one point during the 1st century BC a fire was lit inside the tomb, possibly for symbolic (ritual) and/or practical (hygienic) reasons, which archaeologically manifested as a clearly visible layer with more or less burnt osteological and other archaeological material (Fig. 9).

⁴ — Although it was originally thought that 13 people were buried in the tomb (Radovčić 2017: 130–131), new analyses of teeth suggest a much larger number (Marić et al. 2022: 52–53).

⁵ — The minimum number of individuals is based on the presence of petrosal portions of temporal bones (228 left-side and 208 right-side petrous portions). The analyses were made by Kenneth C. Nystrom (SUNY New Paltz).



Fig. 7 – Kopila, Tomb 4 (photo: I. Borzić)



Fig. 8 – Nadin, Tomb 105, individual in crouched position (photo: M. Čelhar)



Fig. 9 – Nadin, Tomb 105, burnt layer (photo: M. Grgurić)

MATERIAL CULTURE

Pottery

We will try to compare visible manifestations of the grave ritual and the accompanying findings that answer questions about the cultural affiliation of and influences on the Nadin and Kopila communities in the last two centuries BC. In both cases, an extremely large amount of pottery can be seen at the level of the entire tomb. This phenomenon has been observed throughout the eastern Adriatic, most likely as a result of increasingly Greek-Hellenistic influences since the 5th/4th century BC (Miše 2017: 95–96). Almost as a rule, Graeco-Hellenistic forms of vessels intended for the presentation and drinking of liquid (wine) predominate among these types of deposits. Nevertheless, it is interesting to see how the observed communities demonstrate certain preferences in this regard.

Generally speaking, the ceramic assemblages in all the tombs from Kopila are typologically relatively uniform, with skyphos as the dominant form, followed by significantly smaller numbers of kantharoi, gutti, and unguentariae, with only

a few examples of olpes and oinochoes (Borzić 2017; 2022b). The position of vessels in tombs is mostly limited to the narrowest sides, adjacent to the heads or feet of the deceased. Tomb 4 follows this scenario, but its assemblage is even more uniform and more or less restricted to the appearance of only two or three types of vessels. The state of preservation of this tomb made it possible to determine that at least two consumption vessels were placed next to the head of each individual regardless of sex: a paired biconical or thorn kantharos and a gutus (Radić et al. 2017: 180–183) (Fig. 10).

On the other hand, it is difficult to draw more secure conclusions about the typology of ceramic items and their positions inside specific tombs at the Nadin Late Iron Age necropolis, since Tomb 105, as pointed out earlier, is currently the only intact tomb of its type in the entire area of Liburnia. Nevertheless, the displaced material from stratigraphically disturbed and devastated tombs (Batović, Batović 2013; Matković 2015) shows that it can still be representative. In contrast to the record at Kopila, pottery from Tomb 105 has a much wider typological repertoire, recorded over the entire area



Fig. 10 – Kopila, Tomb 4, pottery assemblage (photos: I. Borzić, P. Igljić; made by: M. Čelhar)

of the grave,⁶ with one dominant form. Apart from single or few unguentariae, biconical kantharoi, skyphoi, gutti, bowls, and about twenty relief bowls, the most represented forms (min. 120) are large vessels intended for the preparation/mixing of wine, specifically Hellenistic relief craters (Fig. 11). It is worth mentioning that a very similar type of vessel, the

North Italian sigillated relief chalice, continued to be placed in the Nadin tomb during the last quarter of the 1st century BC. It must be pointed out that Tomb 105 included vessels of the local Liburnian Iron Age tradition, which was not the case in the Kopilian necropolis, with the exception of isolated examples of local ceramics in the children's tombs 1 and 7.



Fig. 11 – Nadin, Tomb 105, pottery assemblages (photo: M. Grgurić; photo and drawing by: L. Bogdanić; made by: M. Čelhar)

⁶ — Despite the fact that pottery goods were recorded over the entire area of the tomb, it must be emphasized that the larger forms, the more completely preserved relief craters, were mostly located along the edges of the burial space. It is also difficult to conclude whether such a general dispersion of pottery goods is the result of intention or coincidence caused by multiple interventions in grave content during the times of its use.

The tomb assemblages from Nadin and Kopila also provide an opportunity to examine the pottery through the prism of their workshop origins. In this case, too, the Nadin material from Tomb 105 and from the entire necropolis dated to the last two centuries BC shows a spatially broader origin that stems all the way from the Aegean production region (Ephesian relief pottery) or from Italian workshops (black and grey glazed and later sigillata products) (for trends in ceramic material imports to Nadin from the Early Iron Age to late antiquity, see: Čelhar et al. 2023). Nevertheless, as expected, the products of the Eastern Adriatic Hellenistic workshops significantly predominate in the Nadin and Kopila cases.⁷ In the context of the latter, there are documented forms of plain grey and brown glazed pottery from neighbouring Issa or nearby Central Dalmatian workshops (Siculi?) (for further information, see: Miše, 2015: 58–59; Ugarković 2019: 100–105; Lipovac Vrkljan et al. 2018: 1), which either intensively exported a particular portion of their repertoire toward Liburnia (grey glazed plain and relief pottery)⁸ (for relief pottery, see: Brusić 1999; Čargo, Kamenjarin 2022) or, considering the considerable demand, somehow stimulated the local production of similar wares (Brusić 1999). In this sense, it is interesting to note that, despite the two consumer communities having at least roughly the same area of origin of the predominant ceramic items, there is a clear distinction between the preferred forms. In fact, among the material from Kopila, either from the necropolis or from the settlement, only one fragment of Hellenistic relief pottery has been recovered, but notably not of the Dalmatian type (Borzić 2022b). On the other hand, it is well-represented in the context of the necropolis at Nadin, as well as throughout Liburnia. To date, there is no clear explanation for these preferences, but the differences may relate to the manner of funeral feasts/rituals and/or a matter of fashion.

Finally, we should address the number of vessels within each tomb. The total of more than 200 relatively fragmented⁹ but generally whole vessels in Tomb 105 sounds truly imposing, but it is important to note that at least 228 individu-

als were buried in it. Therefore, despite the fact that it is not possible to know how many vessels may have been buried with each individual, the overall number of vessels is approximately equal to the overall number of individuals. In the case of Tomb 4 at Kopila, this relationship is somewhat different. The fact that kantharoi and gutti were recorded next to each head automatically makes the vessel-to-person ratio twice as high. It is difficult to say whether this is an established practice, especially since Kopila includes cases with ratios closer to 1:1, specifically within children's grave 1, in which at least 108 children of neonatal age were buried (Radovčić 2017: 127–128). Other comparisons can be made with the necropolis in Dragišić, where grave 31/2003 had the same ratio of 1:1. On the other hand, in graves 21/2002 and 30/2003, the vessel-to-person ratio is quite high, reaching 10:1 or more (Miše 2017: 95). Of course, we should bear in mind that the units in question are devastated, which can significantly affect the final results.

Weapons

The appearance of weapons in graves also reflects the grave ritual, that is, the rite of transition of the deceased from the world of the living to the world of the dead. As already pointed out, the appearance of weapons, especially spears, with male individuals in the entire Central and South Dalmatia was a regular occurrence since the Early Iron Age (Čović 1987: 454, 458; Marijan 2001: 51–53, 60–61, 70, 81, 94; Blečić Kavur, Miličević-Capek 2011: 52–65; Perkić et al. 2021: 93–94); the continuation of this tradition is later observed in all tombs with adults from Kopila. Tomb 3 of Nucleus 1 and Tomb 1 of Nucleus 2 (Radić 2017: 96–97; Radić et al. 2017: 172–173, cat. no. 3: 27; Borzić 2022: 102, Fig. 12) contained bronze helmets of the Illyrian type together with offensive weapons. Tomb 4 contained exclusively offensive weapons, such as spearheads with a tubular socket for the shaft and an elongated leaf-shaped head with a prominent midrib (Radić et al. 2017: 190–192, cat. no. 4: 40–46) (Fig. 12). Unfortunately, the state of preservation did not permit a determination of the total number of goods of this

7 — All other contemporaneous material from other Kopila tombs also belongs to the same workshop centres, so in addition to grey and brown glazed pottery, there are also late manifestations of Isseian Gnathia type and brown and red glazed Hellenistic pottery. See: Borzić 2017; 2022b.

8 — The highlighted information about a part of the inventory of the Dalmatian Hellenistic workshops is particularly emphasized because, as far as we know for now, the Iseian ergasterias did not export the simultaneously produced late manifestations of local ceramics of the Gnathia type to Liburnia (Matković 2015; Miše 2017; Govorčin, Borzić 2018).

9 — It is difficult to say with certainty whether the vessels were intentionally broken when they were placed in the tomb, or whether their fragmentation is the result of multiple interventions on its contents, which may be why there are also completely preserved specimens. A similar situation was recorded at Kopila, in contrast to other devastated Late Iron Age tombs, for example in the Nadin or Dragišić necropolises, where the completeness of the vessels is significantly lower than in the two mentioned examples (for Dragišić see: Miše 2017).



Fig. 12 – Kopila, Tomb 4, spears (photo: I. Borzić)

type in the grave, but the number of more complete and amorphous iron fragments and their arrangement in the tomb testify that it was most certainly a common good for every male deceased.

In contrast, tomb 105 from Nadin, as well as earlier Iron Age burial contexts from Northern Dalmatia, show that the Liburnians did not engage in this practice. It seems unlikely that they used no weapons at all. It is more likely that weapons were not an identity prerogative connected to the transition to the afterlife, or perhaps there was a practical reason for the Liburnian communities not to withdraw weapons from circulation. However, the potential symbolism of a male warrior may be represented by trapezoidal belt buckles with a central spear/arrow motif (Nadin type), since there were as many as 40 specimens in tomb 105 (Čelhar, Ugarković 2021). Few finds of offensive weapons of Roman typology (two javelin butts; cf. Šeparović 2003: T. 3: 3–4) were found at the very top of the tomb; their quantity in relation to the number of deceased does not change anything significant in this regard.

Attire

Attire and jewellery from Nadin and Kopila show similarities and differences in how items were worn (fashion affinities) and in what cultural circles met the need for them. For instance, belt buckles were not recorded in tomb 4 or elsewhere in the Kopila necropolis, yet, as mentioned previously, they are numerous in the Nadin grave inventory, where nearly every fourth individual seems to have owned one. It is assumed that they were primarily men's costume items (Čelhar, Ugarković 2021: 311, 316–317), especially given the large number of types with a central representation of a spear/arrow (Fig. 13) – a specific Liburnian feature, judging by the quantity and concentration of finds.

In the Kopila community, on the other hand, men's costumes, in addition to weapons, are marked with pins. The pins¹⁰ from Tomb 4 (Radić et al. 2017: 184–187, cat. no. 4: 17–22) (Fig. 14) occur in large numbers throughout the territory of the western, central, and southern Balkans, as well as the central and south-eastern Adriatic coast, and are part of the long-period traditional indigenous costume (Vasić 1982: 232–234, 236–238; Blečić Kavur, Miličević-Capek 2011: 40, Perkić et al. 2021: 96). They are a common costume item in the Kopila community and are also found in other burial complexes in the necropolis (Radić et al. 2017: 168–169, cat. no. 3: 13 Borzić 2022a: 99, note 24, 102, note 32, Fig. 11c). The Gostilje (Vele Ledine) necropolis, with predominantly single burials, confirms the characteristic role of pins in men's clothing. Although pins are sometimes associated with women's clothing (Basler 1969: 12, 24–25, T. II: 10: 6–8), they predominantly accompany male burials as different variants of double pins (Basler 1969: 12, 14, 19–21, 24–25, 28–31, 39–43, T. II: 9: 1, VI: 27: 4, 6, VII: 28: 10, VIII: 34: 7, IX: 35: 3, 36: 6, XXI: 105: 5, XXIII: 120: 5, XXV: 126: 8; for the Budva necropolis see: Marković 2012, 25, T.11: 5.1–3). Conversely, in Liburnia, and thus also in Nadin, pins do not represent such a characteristic and recognizable part of the costume/attire during the Late Iron Age. Fewer than 10 silver, bronze, and bone pins, hairpins, and sewing needles of heterogeneous types and variants were found in tomb 105, mostly in the context of the second half of the 1st century BC.

¹⁰ — The IIIa group of double pins, after the typology of Rastko Vasić (1982: 232–234, 236–238), or so-called omega pins, and pins with hammered and rolled-up heads or so-called Schlauffennadeln pins after the typology of Kilian-Dirlmeier (1984: 281–283, T. 112: 4872–4893, T. 113: 4894–4903).



Fig. 13 – Nadin, belt buckle of the Nadin type (photo: I. Čondić)



Fig. 14 – Kopila, Tomb 4, double pins of type IIIa (photo: P. Igljić)

In the Liburnian region, the costume items that stand out in terms of quantity and variety are the fibulae. An impressive number of over 700 specimens has been documented in tomb 105. Strictly statistically speaking, it is slightly more than 3 fibulae per deceased. Given the smaller number of deceased in grave 4 in Kopila and the association of fibulae exclusively with women's attire, the finds numbering over 10 fibulae are also not negligible, although it is still a much smaller ratio (approximately one fibula per individual) when compared to the Nadin burial context. A greater number of fibulae could indicate a different style of clothing, and potentially multi-layered garments; however, such a repertoire may simply represent funeral arrangements where most or all of the possessions of the deceased are attached to clothing. Given the impossibility of associating each fibula with a particular costume, any further discussion on the topic would only be speculation.

Typologically, and thus in terms of the production centres and cultural milieus from which they come, the differences between the two areas are distinct and unambiguous. The only types of fibulae documented in both tombs correspond to the north Italic and north Adriatic types (Almgren 65 (Demetz 1999: 27–38, Lists I–II, T. 1–6, Maps 1–5) and Picugi types (Guštin 1987: 51–53, Fig. 12; 1991: 38–39; Blečić Kavur 2015: 217, 219, Fig. 78),¹¹ associated with the end of the 2nd and 1st centuries BC, which corresponds with new cultural circumstances and an increasingly pronounced Roman presence in the area. Taking into consideration the geographical position and other historical circumstances, it is not surprising that this influence was more pronounced in Liburnia. This is also confirmed by the greater typological diversity and quantity of the Italic types of fibulae recovered from Nadin (for example, Nova Vas, different variants of the Nauheim fibula, Gorica, the Alesia fibulae, etc.; see in general: Demetz 1999). Of course, this is also partly due to the shorter use of grave 4 in Kopila, so some types detected at Nadin should not be expected here (like the differ-

¹¹ — Jezerine-type fibulae (Demetz 1999: 99–105, liste XVI, T. 25–26, karte 29–31) are the only other common type that appears in both necropolises; in the case of Kopila, they are not in tomb 4, presented here, but in tomb 3 (see: Radić et al. 2017: 168, cat. no. 3: 11).

ent early Aucissa types/variants that are extremely well represented in grave 105, or some eastern Alpine types such as Almgren 18, Idrija, Almgren 2, Tierkopf etc.; Feugère 1985; Demetz 1999).

Quantitatively, the most convincingly represented types in both tombs belong to the so-called fibulae of the middle La Tène construction, accepted through indirect influences from the La Tène cultural milieu. However, the variants that appear do not coincide, but point to local/regional peculiarities and connections with different cultural areas: Nadin communities are primarily connected with the upper Adriatic, Iapodian, and the south-eastern Alpine territories,¹² while the closest analogues for Kopila fibulae can mostly be found in neighbouring areas, especially Bosnia and Herzegovina.¹³

Interestingly, different variants of lancelet fibulae (IA and III after Popović 1994) were discovered in grave 105 in Nadin (Čelhar, Ugarković 2021: 310). Their origin and distribution are related primarily to the western and

central Balkans but can be found in a wider region depending on the variant. The Nadin find represents the westernmost point of their distribution. The Hellenistic centres of the central and southern part of the eastern Adriatic and indigenous centres in the hinterland, especially Herzegovina, where they are found in greater quantity, delineate the most probable distribution networks through which these fibulae reached the Nadin community. However, this type has not been recorded on the Kopila necropolis, including tomb 4.

Tomb 105 from Nadin is characterized by the presence of a large number of fibulae (about 40 specimens) typical for Liburnian costumes: the regional, youngest variants of fibulae of the Certosa type (Certosa Ic and Id; Teržan 1976: 319–320, 382, Fig. 20.) and the Liburnian plate fibula (Batović 1958; 1974: 192–205) (Fig. 15). A majority of them are made of silver; the frequent use of silver in the Late Iron Age is usually explained as a consequence of the widespread expansion of Hellenistic fashion. Silver is

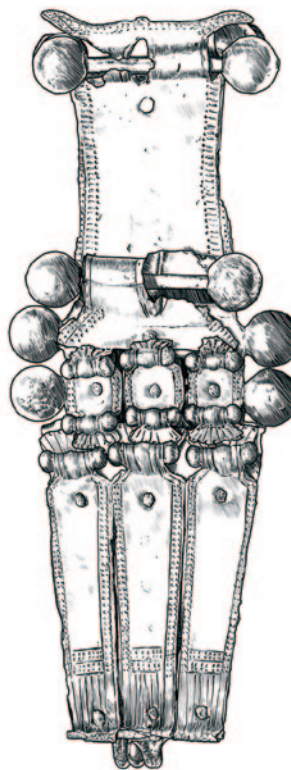


Fig. 15 – Nadin, Tomb 105, Liburnian plate fibula (photo: M. Grgurić; drawing: I. Čondić)

12 — Apart from the Picugi type fibulae, which are the most numerous, this context is particularly marked by the Beletov Vrt type fibulae (Božič 1998: 149, 152, Abb. 14, 20, Liste 6; Dizdar, Božič: 2010, 153–156, 158, T.1: 1–2; Drnić, Tonc 2014: 185–190, 205–206, T. 1); their local variant is supposed to have developed in local Iapodian (Drnić, Tonc 2014, 188–190, Map 1) and maybe even Liburnian workshops, considering the large number found in Nadin. Although fibulae of the Beletov Vrt type are also mentioned in the inventory of tombs 3 and 4 in Kopila (Radić 2017: 87; Radić et al. 2017: cat. no. 3: 9–10, 4: 10–12; Borzić 2022a: 97), it is a question of wrong determination, just like the identically determined find from Narona (Manenica 2017: 345, Fig. 1). So far, this type of fibula has not been documented further south than the Liburnian area.

13 — For example, for fibulae with the figure-of-eight decoration on the foot see: Marić 2017: 92–98, Map 10.

also widely used in South Dalmatia, as evidenced by finds from the Kopila necropolis, including the previously mentioned fibulae with the figure-of-eight decoration on the foot from grave 4 (Radić et al. 2017: 182, cat. no. 4: 8a–d).

Jewellery

The general expansion of the dominant and luxurious Hellenistic cultural creativity in this period is especially evident in jewellery. The basic trends and stylistic tendencies are visible on the jewellery from both tombs, in both imported and regionally adapted and processed jewellery items, which is especially noticeable for the production of silver earrings. However, the types of earrings in the observed tombs do not match, with the Nadin tomb showing a significant typological heterogeneity, including some earrings that are considered characteristic of Liburnian decorative or artistic creations (the horseshoe-shaped and boat-shaped earrings, for example; see: Batović 1960: 403–409; 1974: 209–215, 229).

A general characteristic of the Late Iron Age in the wider area is the more pronounced presence of necklaces made of glass beads in grave contexts, especially with respect to jewellery made of amber, which was dominant in earlier periods. In contrast to all tombs investigated on Kopila thus far, tomb 4 is characterized by the absence of amber finds. Tomb 4 is also the only one that does not contain older burials from the late 4th and 3rd centuries BC (cf. Borzić 2022a: T. 1). Amber finds are also extremely poorly represented in tomb 105 in Nadin, with only a few specimens, some of which were probably part of other jewellery items (earrings?). Of course, it should be taken into account that a fire was lit in the tomb at one point, which could

have affected the preservation of amber objects.

On the other hand, hundreds of glass beads were recorded in both tombs. Small monochrome glass beads of different shapes and colours occur in large quantities in both tombs; due to their wide distribution, it is difficult to determine their chronology and provenance. The provenance of most other glass beads can be associated with the eastern Mediterranean, although for some types, especially the eye beads (Fig. 16), there is a possibility that their production, apparently originating in the eastern Mediterranean, had expanded over time to several regions of Europe (Eterović Borzić 2017; Eterović Borzić, Borzić 2022). Despite the partial overlap of widely distributed types of glass beads, there are differences in the typological repertoire of observed tombs, probably suggesting different routes and trade networks by which these goods arrived in these areas and/or fashion preferences.

The glass repertoire of Nadin is also characterized by a small number of beads whose production is related to the La Tène, Celtic world (ring beads of the types 23 and 23a after the typology of Haevernick (1960: 69–71; see also: Venclova 1990: 140–141). Their appearance distinguishes the Nadin community not only from the Kopila community, but also from other eastern Adriatic communities, given that such material has not been recorded in that area so far. Their presence, as well as the presence of some belts (an astragal belt segment and a bronze belt characterised by profiled rod-shaped segments; see: Filipović, Mladenović 2017: 164–168; Dizdar 2018: 20–22) characteristic of the La Tène world and hitherto unknown in the eastern Adriatic, confirms the more pronounced (in)direct orientation and connection of the Nadin or North Dal-



Fig. 16 – Selection of glass eye beads from Nadin, Tomb 105 (left; photo: M. Čelhar), and Kopila, Tomb 4 (right; photo: P. Igljić)

matian area with the northern Italian and southeastern Alpine production and distribution centres.

Apart from the previously mentioned items, jewellery included various finger rings made of bronze or iron (also silver, in the case of Nadin), sometimes with a glass gem. Items such as bracelets, pendants, and many others were found in grave 105, but not in grave 4, although they are known from other graves at the Kopila necropolis. Although important, decoratively interesting, and indisputably elements of a more luxurious costume, it is unclear how standard or indispensable they were, especially in comparison with some previously mentioned items like fibulae and belts in the Liburnian case, or fibulae, pins, and weapons in the case of Kopila. If we look, for example, at the bracelets in grave 105, of which more than 20 specimens were found (although it is difficult to determine the exact number due to their fragmentation), as many as 8 pieces of the same type¹⁴ were found together, intertwined right next to the edge of the tomb (Fig. 17). It is thus conceivable that they were worn together, that is, by a single individual (presumably a female).

Considering the above, and in relation to the number of individuals in the tomb, it does not seem as though they were an overly common jewellery item.

CONCLUDING REMARKS

Details of grave customs and archaeological material recorded in the two tombs presented here allow us to draw some conclusions related to the associated communities of Nadin and Kopila. Firstly, it is clear that both communities exhibited a degree of continuity with their own earlier traditions during the last two centuries BC. This is seen in grave architecture, which was present with its basic concept in Nadin from the 7th century BC and in Kopila at least from the middle of the 4th century BC. It is also apparent in the burial practice, including "successive" opposite burials in the case of Kopila and individuals in the lowest/oldest layers placed in the crouched position in the case of Nadin. Also, it is interesting to note that the spatial-organizational plans of the necropolises appear to be



Fig. 17 – Nadin, Tomb 105, bracelets (photo: M. Čelhar)

¹⁴ — In the mentioned case, we are talking about ornamented bronze band bracelets with separated ends, the closest analogues of which are known precisely from Nadin, from the neighboring so-called Hellenistic grave 1 (Batović, Batović 2013: 24, T.XXII: 87–88).

unique in their narrower and wider cultural circles. Cultural continuity based on local tradition is also noticeable in some details of the grave ritual. Among these is the presence of weapons in the graves in Kopila and their absence in the Nadin graves, which is an already recognized trait of the South Adriatic or Liburnian Iron Age cultural circle. It is no less important to emphasize the appearance and continuity of some characteristic regional forms of attire, as well as their role in it.

Considering the currents of history and civilization, it should be expected that Hellenistic and Roman cultural creativity and quality would have a greater and greater effect on all aspects of life of these two communities. Among other things, this can be seen in the grave ritual observed here and the inventory related to it, indicating that Nadin and Kopila were familiar with and involved in the affairs of the wider world; over time, this led to an ever greater similarity between them. The above can be supported by a few details mentioned earlier, such as the introduction of new motifs and techniques and the more intensive use of silver in the manufacture of jewellery and clothing items. On the other hand, a notable thing would last throughout the Late Iron Age: the initial appearance and use of significant quantities of pottery as part of the burial ritual, now clearly and recognizably structured, and primarily oriented toward the Greek-Hellenistic symposiastic character. The participation of both communities in the same contemporary regional trade framework can be seen in the pottery inventory, dominated by the products of the Dalmatian Hellenistic workshops, whose production during the last two centuries BC was focused on grey-glazed ware. Yet the reasons for distinct preferences for certain forms, as evidenced by the burial ritual of both communities, remain unclear.

Although there is no difference in the origin of ceramics, there are clearly differences among other material items in the observed tombs, especially jewellery and clothing items. The Nadin community is primarily oriented towards the Iapodian area of *Caput Adriae* and its hinterland, while the Kopila community, as expected, shows stronger ties with the western and central Balkans. However, by the 1st century BC, even these differences diminish, which is likely a result of the increasingly influential Roman presence along the entire eastern Adriatic coast. This is particularly evident for the associated characteristic elements of costume and jewellery, whose distribution covers a much wider area, including the territories of both communities observed here. It seems logical that this process was more noticeable in the case of Nadin. As a representative of the Liburnian historical trajectory, Nadin must have had a much closer and more intense connection with the Roman element than the South

Adriatic community at Kopila, which apparently met its end in a conflict with Romans during the conquests of 35–33 BC (App., Ill. 16). This can also be seen from the fact that, from the middle of the 1st century BC, the Italic ceramic and metal material in Nadin becomes even more diverse and dominant, suggesting the complete integration of the eastern Adriatic into the Roman world. But apart from material culture, it is interesting to note that both local communities were gradually infiltrated by aspects of Roman spiritual culture like, for example, the gradual acceptance of the cremation rite. This is recorded at Nadin in the upper layer of Tomb 105, which had a large amount of fragmented bones, some unburnt and some with different degrees of burning. In case of Kopila, a typical Roman cremation burial in an urn dated to the middle of the 1st century BC was recorded at the top of Tomb 7 (Borzić 2022a: 97–99; Eterović Borzić, Borzić 2022).

In general, the presented features of grave ritual and the grave inventories of two contemporaneous tombs of relatively distant communities in the north and south of Dalmatia vividly show the fluidity of their cultural and ethnological features, which are certainly dependent on the historical circumstances in which they developed. Many of the elements presented here support the conclusion that both tombs are representative examples of their cultural spheres during the 2nd and 1st centuries BC, but there is certainly space for even deeper insights into the lives of both communities and their relationships to local traditions and external influences.

ACKNOWLEDGEMENTS

This paper was co-financed by the Croatian Science Foundation within the project *Transforming the Adriatic cosmos: insularity, connection and formation of glocal identities of pre-Roman Dalmatia* (AdriaCos, UIP-2020-02-2419). This paper was supported by the project Transformation of identities through the past (TIPS), funded by the European Union – NextGenerationEU.

MARTINA ČELHAR
IGOR BORZIĆ
 Department of archaeology
 University of Zadar
 Obala kralja P. Krešimira IV/2
 HR-23000 Zadar
 celhar.martina@gmail.com
 igorborzic@gmail.com

BIBLIOGRAPHY

- Anterić, I., Bašić, Ž., Anđelinović, Š.** 2011a, Nadin – rezultati antropološke analize liburnske populacije / Nadin – results of the anthropological analysis of the Liburnian population, *Asseria*, Vol. 9, 75–112.
- Anterić, I., Bašić, Ž., Škorić, E., Anđelinović, Š.** 2011b, Nadin flat necropolis, *Histria antiqua*, Vol. 20, 145–154.
- Basler, Đ.** 1969, Nekropola na Velim ledinama u Gostilju (Donja Zeta), *Glasnik Zemaljskog muzeja Nova Serija*, Vol. XXIV, 5–107.
- Batović, A., Batović, Š.** 2013, *Helenistički grobovi iz Nadina u okviru V. (zadnje) faze liburnske kulture, Građa za povijest Liburna, IV.–I. st. pr. Kr.*, Posebna izdanja 2, Zadar, Arheološki muzej Zadar.
- Batović, Š.** 1958, Plattenfibeln aus Kroatien (Hrvatska), *Germania*, Vol. 36, 361–372.
- Batović, Š.** 1960, Predmeti osebujnih oblika s područja Liburna, *Radovi IJAZ*, Vol. VI–VII, 393–421.
- Batović, Š.** 1974, Ostava iz Jagodnje Gornje u okviru zadnje faze liburnske kulture, *Diadora*, Vol. 7, 159–234.
- Batović, Š., Chapman, J.** 1987a, Istraživanje Gradine u Nadinu, *Obavijesti Hrvatskog arheološkog društva*, Vol. XIX(2), 28–32.
- Batović, Š., Chapman, J.** 1987b, Nadin/Gradina, Naselje od starijeg željeznog doba do 17. st., *Arheološki pregled*, Vol. 27 (1986), 72–74.
- Batović, Š., Čondić, N.** 2005, Istraživanja arheoloških nalazišta na trasi autoceste Biljane – Nadin – Rašević, *Obavijesti Hrvatskog arheološkog društva*, Vol. XXXVII(3), 74–91.
- Blečić Kavur, M.** 2015, *Povezanost perspektive*, Koper – Mali Lošinj, 2015.
- Blečić Kavur, M., Miličević-Capek, I.** 2011, Ohorizontu ratničkih grobova 5. stoljeća pr. Kr. na prostoru istočne obale Jadrana i njezina zaleđa: primjer novog nalaza iz Vranjeva sela kod Neuma, *Prilozi Instituta za arheologiju u Zagrebu*, Vol. 28, 31–94.
- Borzić, I.** 2017, Keramički nalazi / Pottery finds, in: *Grad mrtvih nad poljem života. Nekropola gradinskog naselja Kopila na otoku Korčuli / The City of the Dead Above the Field of Life. Necropolis of Kopila Hillfort on the Island of Korčula*, Fadić I., Eterović Borzić A. (eds.), Muzej antičkog stakla u Zadru, Zadar, 61–83.
- Borzić, I.** 2022a, Aktualnosti s istraživanja željeznodobne nekropole Kopila na otoku Korčuli, in: *Hvarski arhipelag i arheologija dalmatinskih otoka: Od dinamične prošlosti do kulturnog turizma*, Visković E., Ugarković M., Tončinić D. (eds.), Izdanja Hrvatskog arheološkog društva, Vol. 34 (2019), 93–107.
- Borzić, I.** 2022b, Hellenistic Pottery from Kopila Hillfort's Necropolis, in: *IARPotHP International Association for research on pottery of the Hellenistic period e. V., Exploring the Neighborhood. The Role of Ceramics in Understanding Place in the Hellenistic World*, Kamenjarin I., Ugarković M. (eds.), Phoibos, Wien, 363–376.
- Borzić, I., Čelhar M., Zaro, G., Glavaš, V.** 2018, New finds of Crikvenica 1-type amphorae in the area of southern Liburnia, in: *Pottery Production, Landscape and Economy of Roman Dalmatia. Interdisciplinary approaches*, Lipovac Vrkljan G., Konestra A. (eds.), Archaeopress Roman Archaeology 47, Oxford, Archaeopress, 50–56.
- Božić, D.** 1998, Neues über die Kontakte längs der Bernsteinstraße während der Spätlatènezeit / O stikih vzdolž jantarske ceste v poznolatskem obdobju, *Arheološki vestnik*, Vol. 49, 141–156.
- Brajković, T.** 2014, *Velika Mrdakovica: rezultati najnovijih arheoloških istraživanja (2011.–2013.) / Velika Mrdakovica: results of the latest archaeological research (2011–2013)*, Pučko otvoreno učilište Vodice, Grad Vodice.
- Brajković, T.** 2018, Ritual ukopa na nekropoli Velike Mrdakovice / Burial Rituals at the Necropolis of Velika Mrdakovica, *Miscellanea Hadriatica et Mediterranea*, Vol. 5, 31–63.
- Brusić, Z.** 1999, *Hellenistic and Roman Relief Pottery in Liburnia*, BAR International Series 817, Oxford.
- Brusić, Z.** 2000a, Nekropola Gradine kod Dragišića, *Radovi Filozofskog fakulteta u Zadru*, Vol. 38, 1–15.
- Brusić, Z.** 2000b, *Arauzona. Velika Mrdakovica: liburnski grad i nekropola*, katalog izložbe, Županijski muzej Šibenik, Šibenik
- Chapman, J., Shiel, R., Batović, Š.** 1996, *The Changing Face of Dalmatia: Archaeological and Ecological Studies in a Mediterranean Landscape*, London, Leicester University Press.
- Čelhar, M.** 2016, Nadin – Gradina, nekropola, *Hrvatski arheološki godišnjak*, Vol. 12 (2015), 545–547.
- Čelhar, M., Kukoč, S.** 2014, Stakleni privjesak u obliku ljudske glave iz Nadina. Prilog poznavanju importa u kulturi Liburna, *Prilozi Instituta za arheologiju u Zagrebu*, Vol. 31, 89–100.
- Čelhar, M., Ugarković, M.** 2021, Pojasne kopče tipa Nadin / Belt Buckles of the Nadin Type, *Archaeologica Adriatica*, Vol. 15, 293–339.
- Čelhar, M., Zaro, G.** 2016, Nadin – Gradina, *Hrvatski arheološki godišnjak*, Vol. 12 (2015), 543–545.
- Čelhar, M., Zaro, G.** 2017, Nadin – Gradina, *Hrvatski arheološki godišnjak*, Vol. 13 (2016), 586–588.
- Čelhar, M., Zaro, G.** 2018, Nadin – Gradina, *Hrvatski arheološki godišnjak*, Vol. 14 (2017), 591–592.
- Čelhar, M., Zaro, G.** 2023a, Nadin – Gradina. Razvoj grada. *Archaeologia Adriatica*, Vol. 17 (in press).
- Čelhar, M., Zaro, G.** 2023b, Nadin – Gradina, *Hrvatski arheološki godišnjak*, Vol. 15 (2018) (in press).
- Čelhar, M., Zaro, G.** 2023c, Nadin – Gradina, *Hrvatski arheološki godišnjak*, Vol. 16 (2019) (in press).
- Čelhar, M., Borzić, I., Zaro, G.** 2023, Pottery as an Indicator of Trade Dynamics and Cultural Contacts in the Eastern Adriatic, in: *Sessions 4–5, Single Contributions, Archaeology and Economy in the Ancient World – Proceedings of the 19th International Congress of Classical Archaeology*, Bentz M., Heinzelmann M. (eds.), Heidelberg, Propylaeum, 301–315.
- Čović, B.** 1987, Srednjodalmatinska grupa, in: *Praistorija jugoslavenskih zemalja. V: Željezno doba*, Benac A. (ed.), Akademija nauka i umjetnosti Bosne i Hercegovine, Centar za balkanološka ispitivanja, Sarajevo, 442–480.
- Demetz, S.** 1999, *Fibeln der Spätlatène- und frühen römischen Kaiserzeit in den Alpenländern, Frühgeschichtliche und Provinzialrömische Archäologie Materialien und Forschungen 4*, Rahden – Westf.
- Dizdar, M.** 2018, Reflections about some specific finds of the female costume in the South-eastern Carpathian Basin – Can we recognize female mobility in the Middle La Tène?, in: *Iron Age Connectivity in the Carpathian Basin. Proceedings of the International Colloquium from Târgu Mureș 13–15 October 2017*, Berecki S. (ed.), Bibliotheca Musei Marisiensis, Series Archaeologica XVI, Mega Publishing House, Cluj – Napoca, 15–38.

- Dizdar, M., Božić, D.** 2010, O nekim oblicima fibula s kasnolatenskog naselja Virovitica – Kiškoriya sjever / On some shapes of fibulae from the Late La Tène settlement of Virovitica – Kiškoriya sjever, *Prilozi Instituta za arheologiju u Zagrebu*, Vol. 27, 145–160.
- Drnić, I., Tonc, A.** 2014, Krasnolatenske i ranocarske fibule s japodskog prostora, *Prilozi Instituta za arheologiju u Zagrebu*, Vol. 31, 181–214.
- Eterović Borzić, A.** 2017, Stakleni nalazi, in: *Grad mrtvih nad poljem života. Nekropola gradinskog naselja Kopila na otoku Korčuli / The City of the Dead Above the Field of Life. Necropolis of Kopila Hillfort on the Island of Korčula*, Fadić I., Eterović Borzić A. (eds.), Muzej antičkog stakla u Zadru, Zadar, 99–116.
- Eterović Borzić, A., Borzić, I.** 2022, Glass finds from Tomb 7 from the Late Iron Age necropolis of the Kopila hillfort on the island of Korčula, in: *Roman Pottery and Glass Manufactures: Production and Trade in the Adriatic Region and Beyond, Proceedings of the 4th International Archaeological Colloquium (Crikvenica, 8–9 November 2017)*, Lipovac Vrkljan G., Konestra A., Eterović Borzić A. (eds.), Archaeopress Roman Archaeology 94, Oxford, 344–353.
- Fadić, I., Eterović Borzić, A., Štefanac, B.** 2018, Lokalitet: Asseria, *Hrvatski arheološki godišnjak*, Vol. 14 (2017), 577–580.
- Feugère, M.** 1985, *Les fibules en Gaule méridionale de la conquête à la fin du Ve s. ap. J.-C.*, Revue Archéologique de Narbonnaise, Supplément 12, Paris.
- Filipović, V., Mladenović, O.** 2017, Prilog proučavanju članaka astragalnih pojaseva sa teritorije centralne i jugoistočne Evrope / Contribution to the Study of Astragal Belt Segments from the Territory of Central and Southeastern Europe, *Prilozi Instituta za arheologiju u Zagrebu*, Vol. 34, 143–183.
- Glogović, D.** 2014, *The Fifth Phase of the Iron Age of Liburnia and the Cemetery of the Hillfort of Dragišić*, BAR International Series 2689, Oxford.
- Govorčin, P., Borzić, I.** 2018, Prilog poznavanju helenističke keramike iz Liburnske Aserije / A contribution to the study of Hellenistic pottery from Liburnian Asseria, *Asseria*, Vol. 14, 29–66.
- Guštin M.** 1987, La Tene fibulae from Istria, *Archaeologia Iugoslavica*, Vol. 24, 43–56.
- Guštin M.** 1991, *Posočje in der jüngerer Eisenzeit / Posočje v mlajši železni dobi*, Katalogi in monografije 27, Narodni muzej Ljubljana, Ljubljana.
- Haevernick T. E.** 1960, *Die Glasarmringe und Ringperlen der Mittel- und Spätlatènezeit*, Rudolf Habelt Verlag, Bonn.
- Ilkić, M., Čelhar, M.** 2018, Lergova gradina, *Hrvatski arheološki godišnjak*, Vol. 14 (2017), 617–620.
- Kilian-Dirlmeier, I.** 1984, *Nadeln der frühhelladischen bis archaischen Zeit von Peloponnes*, Prähistorische Bronzefunde, Abteilung XIII, Band 8, C. H. Beck, München.
- Knežić, D.** 2022, Arheobotanička analiza slojeva liburnskog naselja u Nadinu, *Unpublished master thesis*, Sveučilište u Zadru, Zadar.
- Knežić, D., Šoštarić, R., Čelhar, M.** 2023, Arheobotanička analiza „liburnske“ keramike s lokaliteta Nadin – Gradina, *Prilozi Instituta za arheologiju u Zagrebu*, Vol. 40(2), (in press).
- Kukoč, S.** 2005, Nadin – humak 13, *Hrvatski arheološki godišnjak*, Vol. 1 (2004), 192–194.
- Kukoč, S.** 2006, Nadin – nekropola na SZ padini Gradine, *Hrvatski arheološki godišnjak*, Vol. 2 (2005), 307–309.
- Kukoč, S.** 2009, Nadin – liburnski kult mrtvih, istraživanja 2004. –2006., 2009. god. / Nadin – Liburnian Cult of the Dead, Research Campaigns 2004–2006, 2009, *Asseria*, Vol. 7, 11–80.
- Kukoč, S., Batović, Š.** 2005, Istraživanje grobnog humka iz željeznog doba u Nadinu, *Obavijesti Hrvatskog arheološkog društva*, Vol. XXXVII(1), 58–63.
- Kukoč, S., Batović, Š.** 2006, Iskapanje nekropole na sjeverozapadnoj padini Gradine u Nadinu, *Obavijesti Hrvatskog arheološkog društva*, Vol. XXXVIII(2), 65–72.
- Kukoč, S., Čelhar, M.** 2010, Iskapanje nekropole na sjeverozapadnoj padini Gradine u Nadinu godine 2009, *Obavijesti Hrvatskog arheološkog društva*, Vol. XLII(1), 34–42.
- Kukoč, S., Čelhar, M.** 2019, Nadin (Nedinum): prostorna koncepcija nekropole kod Liburna / Nadin (Nedinum): spatial concept of the Liburnian necropolis, *Vjesnik za arheologiju i historiju dalmatinsku*, Vol. 112, 9–31.
- Lipovac Vrkljan, I., Konestra A., Ugarković, M.** 2018, Eastern Adriatic Hellenistic and Roman Pottery and Ceramics Production Sites, in: *Pottery Production. Landscape and Economy of Roman Dalmatia. Interdisciplinary approaches*, Lipovac Vrkljan G., Konestra A. (eds.), Archaeopress Roman Archaeology 47, Oxford, 1–6.
- Loewen, T., Nystrom, K. C., Čelhar, M.** 2021, Bioarchaeological analysis of skeletal remains from Nadin necropolis / Bioarheološka analiza osteološkog materijala s nekropole u Nadinu, *Archaeologica Adriatica*, Vol. 15, 259–291.
- Manenica, H.** 2017, Metalni nalazi, in: *Forum Naronitanum*, Topić M., Glučina T., Marin E. (eds.), Katalogi i monografije 2, Arheološki muzej Narona, 344–365.
- Marić, A.** 2017, Late Certosa and La Tène Fibulae from Bosnia and Herzegovina, *Unpublished PhD thesis*, Postgraduate School ZRC SAZU, Ljubljana.
- Marić, M., Radić, D., Dumančić, J., Vodanović, M., Birimiša, M., Radović, D., Brkić, H.** 2022, Teeth macroabrasion for determination of dental age and diet in the Illyrian population from the Kopila necropolis on the island of Korčula, Croatia, *Homo: internationale Zeitschrift für die vergleichende Forschung am Menschen*. 73.10.1127/homo/2022/1645.
- Marijan, B.** 2001, Željezno doba na južnojadranskom području (Istočna Hercegovina, Južna Dalmacija), *Vjesnik za arheologiju i historiju dalmatinsku*, Vol. 93 (2000), 7–221.
- Marijanović, B., Čelhar, M., Vujević, D.** 2014, Nadin – nekropola, *Hrvatski arheološki godišnjak*, Vol. 10 (2013), 468–470.
- Marković, Č.** 2012, *Antička Budva. Nekropole: istraživanja 1980–1981*, Matica Crnogorska, Podgorica.
- Matković, M.** 2015, Helenistička keramika iz nekropole u Nadinu, *Unpublished master thesis*, Sveučilište u Zadru, Zadar.
- Miše, M.** 2015, *Gnathia and Related Hellenistic Ware on the East Adriatic Coast*, Archaeopress Archaeology, Oxford.

- Miše, M.** 2017, The Hellenistic Ware from Indigenous Necropolis at Gradina Dragišić near Šibenik, Croatia, in: *Illyrica Antiqua in Honorem Duje Rendić-Miočević, Proceedings of the international conference, Šibenik 12th–15th September 2013*, Demicheli D. (ed.), Faculty of Humanities and Social Sciences, University of Zagreb, Zagreb, 83–104.
- Perkić, D., Dizdar, M., Potrebica, H.** 2021, Grob s položaja Gomile u Zakotorcu na Pelješcu / A grave at the Gomile site in Zakotorac on Pelješac, *Annales Instituti Archaeologici*, Vol. XVII, 82–103.
- Popović, P.** 1994, Lanzenfibeln des Westbalkans und der Donauiederung, *Balkanica*, Vol. XXV(1), 53–71.
- Radić, D.** 2003, Kopila, in: *Blato do kraja 18. stoljeća, sv. 1*, Šeparović T. (ed.), Općina Blato, Blato, 63–88.
- Radić, D.** 2017, Metalni nalazi, in: *Grad mrtvih nad poljem života, Nekropola gradinskog naselja Kopila na otoku Korčuli / The City of the Dead Above the Field of Life, Necropolis of Kopila Hillfort on the Island of Korčula*, Fadić I., Eterović Borzić A. (eds.), Muzej antičkog stakla u Zadru, Zadar, 85–98.
- Radić, D., Borzić, I.** 2017, Gradinsko naselje Kopila / Kopila hillfort, in: *Grad mrtvih nad poljem života, Nekropola gradinskog naselja Kopila na otoku Korčuli / The City of the Dead Above the Field of Life, Necropolis of Kopila Hillfort on the Island of Korčula*, Fadić I., Eterović Borzić A. (eds.), Muzej antičkog stakla u Zadru, Zadar, 35–61.
- Radić, D., Borzić, I., Eterović Borzić, A.** 2017, Katalog / Catalogue, in: *Grad mrtvih nad poljem života, Nekropola gradinskog naselja Kopila na otoku Korčuli / The City of the Dead Above the Field of Life, Necropolis of Kopila Hillfort on the Island of Korčula*, Fadić I., Eterović Borzić A. (eds.), Muzej antičkog stakla u Zadru, Zadar, 148–203.
- Radovčić, D.** 2017, Antropološka analiza / Anthropological Analysis, in: *Grad mrtvih nad poljem života, Nekropola gradinskog naselja Kopila na otoku Korčuli / The City of the Dead Above the Field of Life, Necropolis of Kopila Hillfort on the Island of Korčula*, Fadić I., Eterović Borzić A. (eds.), Muzej antičkog stakla u Zadru, Zadar, 125–137.
- Rajić Šikanjić, P.** 2006, Analysis of Human Skeletal Remains from Nadin Iron Age Burial Mound *Collegium Antropologicum*, Vol. 30(4), 795–799.
- Rašić, M.** 2022, Rimsko nalazište na Gračinama kod Ljubuškog: istraživanja 1977.–1980., *Unpublished PhD thesis*, Sveučilište u Zadru, Zadar.
- Šeparović, T.** 2003, Metalni nalazi, in: *Tilurium I, Istraživanja 1997.–2001. / Tilurium I, Forschungen 1997.–2001.*, Sanader M. (ed.), Golden marketing, Zagreb, 219–256.
- Teržan, B.** 1976, Certoška fibula / Die Certosafibeln, *Arheološki Vestnik*, Vol. 27, 317–536.
- Toyne, J. M., Čelhar, M., Nystrom, K. C.** 2021, Liburnian lunches: New stable isotope data for the Iron Age community of Nadin – Gradina, Croatia, *International Journal of Osteoarchaeology*, Vol. 32(3), 241–257.
- Ugarković, M.** 2019, *Geometrija smrti: isejski pogrebni obredi, identiteti i kulturna interakcija, Antička nekropola na Vlaškoj njivi, na otoku Visu*, Vol. I/1, Katalozi i monografije Arheološkog muzeja u Splitu 6, Arheološki muzej u Splitu, Institut za arheologiju u Zagrebu, Split – Zagreb.
- Vasić, R.** 1982, Ein Beitrag zu den Doppelnadeln in Balkanraum, *Prähistorische Zeitschrift*, Vol. 57(2), 220–257.
- Venclova, N.** 1990, *Prehistoric glass in Bohemia*, Praha.
- Zaro, G., Čelhar M.** 2018, Landscape as legacy in northern Dalmatia, in: *Landscape in Southeastern Europe*, Mirošević L., Zaro G., Katić M., Birt D. (eds.), Lit Verlag GmbH & Co. KG Wien, Zurich, 49–67.
- Zaro, G., Gusar, K., Čelhar, M.** 2020, On the Edge of Empires: Exploring an Ottoman Legacy on the Venetian Frontier, *Journal of Field Archaeology*, Vol. 45(3), 188–208.

