

# From Coinage to Connectivity: Some Notes on Greek-Illyrian Coins from Senj (Northern Adriatic)

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*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, 153 - 166**

**Conference paper / Rad u zborniku**

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

*Permanent link / Trajna poveznica:* <https://um.nsk.hr/um:nbn:hr:291:977696>

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



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# FROM COINAGE TO CONNECTIVITY: SOME NOTES ON GREEK-ILLYRIAN COINS FROM SENJ (NORTHERN ADRIATIC)

Original scientific paper

This paper presents new data on three previously unknown specimens of Greek-Illyrian coins discovered on Kuk, a protohistoric hillfort site in Senj. Two can be attributed to issues of the Illyrian King Ballaios, while one is an Issaeon bronze of the volute crater/grape cluster type. In addition to general data about the coin findspot, circumstances of the find, and analysis of the numismatic features, the paper also addresses some questions about the movement and spreading of these coins in the context of Adriatic maritime connectivity and trade networks in the last centuries BCE. Based on current distribution maps, the Ballaios and Issaeon coins from Senj, as some of the westernmost finds thus far, confirm their regional reach towards the northern Adriatic.

**KEY WORDS: GREEK-ILLYRIAN COINAGE, HELLENISTIC COINS, ISSA, BALLAIOS, SENJ, MARITIME NETWORK**

## A NOTE ON THE SITE AND CIRCUMSTANCES OF THE FIND

Recent work carried out on the systematic documentation of numerous museum and private numismatic collections has significantly improved the current knowledge about the earliest coinage in the area of the eastern Adriatic and its hinterland (Ilkić 2016; Ilkić, Kožul 2017; e.g. Ilkić, Šešelj 2017; 2018; Čelhar, Ilkić 2019; Paškvan, Visonà

2020). As a contribution to the subject, this paper analyses three coin specimens presently kept within the private property of Z. Dominez from Buje. According to the owner, he originally discovered them as surface finds, along with some other material, on Kuk, a hillfort site near the town of Senj, and kept them to this day.<sup>1</sup> Regarding the data on the circumstances of the find, the group of coins singled out and presented here could be defined as a „cumulative site find“ (for an explanation of the term cf. Ujes Morgan 2012: 119–122).

**1** — Z. Dominez from Buje, shared useful information about the circumstances of the find. As far as he remembers, he discovered them, somewhere between 1965 and 1970. With an amateur interest in archaeology, he occasionally visited the site of Kuk, especially „after strong rains, which would wash the eroded (cultural) layers and leave different (archaeological) objects highly visible on the surface“. For the purpose of this paper, three Greek-Illyrian coins have been singled out, although his small collection also includes one Carthaginian specimen (Tanit/horse type), one bronze specimen from Apulia-Salapia (horse/dolphin type), and a few Roman and medieval coins found mostly in Senj. According to the owner, all the coins from Kuk discovered as single, surface finds on different positions on the southern and southwestern slopes. He also collected some „interesting sherds of black pottery,“ but later misplaced them. He has kept the coins to this day, wishing to donate them to the local town museum in Senj, which will hopefully come about. I would like to thank Z. Dominez for his insights on coins and his permission to analyse and publish them. I am also grateful to V. Kramberger and K. Narloch for their help and assistance with the literature.



Kuk is a hill positioned approximately 2 km northeast of the center of present-day Senj. In archaeological literature, it stands out as a notable hillfort site from the prehistoric and protohistoric period (A. Glavičić 1966: 391–393; M. Glavičić 1993: 81–82; 1994: 45; Glavaš 2010; Lipovac Vrkljan et al. 2016: 196–198). The position is naturally protected by steep rocks and inclines on the northwest and southwest sides (Fig. 1). Collapsed drystone wall structures indicate that the slopes were probably terraced due to the steep terrain morphology. Despite its relatively small size, visibility analyses indicated that the Kuk hillfort provided visual connections with other prehistoric hillforts on Velebit Mountain. This could imply it had a prominent status in late prehistoric settlement hierarchies (Glavaš 2014: 12, 19). Rising 160 meters above sea level, the hillfort is a very convenient point for visual surveillance, encompassing the expanse of present-day Senj, particularly the inlet of Senjska Draga and the protected bay which probably encroached more extensively into land in the past. Additionally, it overlooks the wider Northern Velebit area and the Velebit Channel towards the south.

Even though all the current data indicates high archaeological potential, no excavations on the site have been carried out thus far. Therefore, the general hypothesis that the earliest traces of habitation on the Kuk hillfort date back to the Late Bronze Age is still not supported by archaeological evidence (A. Glavičić 1966: 391–393). Intensive activity during the Late Iron Age is evidenced by an abundance of surface material, predominantly amphorae, and a smaller number of fineware, mostly of Hellenistic provenance. The numismatic record of the site consists of eight specimens; aside from those aforementioned, kept in a private collection (Z. Dominež; 7 spec.), there is one Carthaginian coin of Tanit-horse type from the late 3<sup>rd</sup> c. BCE, found as a single find on the western slopes in the 1970s and already published (Dukat, Glavičić 1975: 170). It is assumed that the hillfort's significance gradually waned with the Roman expansion on the eastern Adriatic, as the focal point of urban development shifted to the area at the foot of the hillfort, closer to the port, where the Roman municipium of *Senia* was established (cf. M. Glavičić 1993: 83–85).



Fig. 1 – Kuk hillfort (photo: P. Domines Peter)



The earliest coinage in the wider Senj area is traceable to the middle of the 3<sup>rd</sup> c. BCE. Among the published coins kept in the collection of Senj City Museum and documented in the old numismatic collection of the Senj Gymnasium, there are coins from Carthage, Numidia, Egypt, Greek-Illyrian mints, and the Roman Republic. These coins fit in the earliest depiction of coinage across the broader Velebit region (Dubolnić Glavan, Glavaš 2011; Šešelj, Ilkić 2014). Carthaginian coins are among the most common finds on numerous Late Iron Age hillforts of northern Dalmatia and Lika (cf. Ilkić 2017: 154; Dubolnić Glavan, Glavaš 2011: 102–104). Alongside the aforementioned specimen from the Kuk hillfort (for a recent photo see Šešelj, Ilkić 2014: 46), it cannot be excluded that another Carthaginian specimen, mistakenly determined as Panormus (Sicily), was found in the inner center of present-day Senj, near the site of Štela (Dukat, Glavičić 1975: 170–171). Apulian (Tate) and Numidian coins have been recorded on the Nehaj hill in Senj (Dukat, Glavičić 1975: 171), (for recent photo see Šešelj, Ilkić 2014: 48) (fig. 2). The Gradina hillfort in Starigrad is the origin of more than 10 pre-imperial coins, including nine Numidian bronzes and a poorly preserved specimen from Ptolemaic Egypt (Dukat et al. 1984: 54).

Roman Republic coinage has been registered in Senj, Sveti Juraj, and Stolac (Dukat, Glavičić 1975: 171–172; Dukat et al. 1984: 49; cf. Bilić 2015: 62, 104). Among the Greek-Illyrian coinage (for definition and overview see Bilić 2020), there are two drachmas of Apollonia and Dyrrhachium found in Senj (Dukat, Glavičić 1975: 171). Private collections, some of which are no longer traceable, make mention of other specimens of Greek and Roman republican coinage, but without precise data regarding their location and circumstances of the find (cf. Krajač 1956: 17–19).

## NUMISMATIC FEATURES

### Coins of Ballaios

Based on their stylistic characteristics, two coins from the Kuk hillfort can undoubtedly be attributed to the issue of the Illyrian King Ballaios. Although they significantly differ in terms of preservation, the typical iconography is discernible, featuring a male ruler's head on the obverse and the figure of Artemis with a legend on the reverse. Both specimens are made of a copper alloy and belong to the so-called Risan type (Brunšmid 1998: 90–94; Ciołek 2021: 83).



**Fig. 2** – Pre-Roman coin findspots in the area of present-day Senj: 1. Kuk hillfort, 2. Štela site, 3. Nehaj hill (photo and modified by: P. Domines Peter)

The first specimen (AE, 16.7 mm, 3.05g, 5h), with the obverse depicting the ruler's head turned to the left and the reverse showing Artemis walking with a torch and two spears to the left, is especially well-preserved (Fig. 3).<sup>2</sup> The flan has even edges and a slightly rounded profile towards the obverse side. The exceptional portrait features stand out on the obverse and, combined with the legend on the reverse, emphasize the ruler's distinctive individuality. The realistic large head of Ballaios occupies the whole surface of the planchet. It is characterized by short curly hair, deep-set round eyes, a straight nose with high cheekbones, and a broad neck. The reverse prominently displays a large figure of the goddess stepping left, dressed in a short tunic, probably holding a torch in her left hand and two spears in her right. Only a few letters (BAΛ?) on the

right side are readable. The specimen can be identified as Brunšmid's Risan type (Brunšmid 1998: 94, no. 23–26), Marović IIA Risan type (Marović 1988: 84), or type R. IV/2 according to the latest typology by R. Ciołek (Ciołek 2021: 83).

The state of preservation of the second specimen (AE, 15.9 mm, 1.77g, 9h) is incomparably worse (Fig. 4). The obverse suggests the portrait of a king with a recognizable hairstyle, turned to the right in this case. The reverse depicts Artemis facing left, holding a torch, with her right foot slightly raised. The legend is not legible, but it seems that spears are missing. It is not possible to precisely determine the subtype but it also belongs to the Risan mint (Brunšmid 1998: 90–91, no. 1–6; Marović IIB Risan type (Marović 1988: 84), Ciołek's R. V/4? (Ciołek 2021: 83)).



**Fig. 3** – Ballaios (AE, 16.7 mm, 3.05g, 5h) – ruler's head left / Artemis left holding two spears (photo: P. Domines Peter)



**Fig. 4** – Ballaios (AE, 15.9 mm, 1.77g, 9h) – ruler's head right / Artemis left holding a torch (photo: P. Domines Peter)

<sup>2</sup> — Although the original patina is well preserved and the depictions are more or less readable, it is partially the result of later attempts of cleaning and oil treatment of coins by the owner.

In the total absence of historical records, coins stand as the exclusive evidence attesting to the rule of the mysterious King Ballaios. It is assumed that he governed over a significant territory and issued coinage from two mints located in Pharos on the island of Hvar and in Rhizon in Boka Kotorska Bay (Šašel Kos 2007: 128; Ciołek 2021: 67–70). Therefore, Brunšmid suggested a distinction between the so-called Pharos type (without a royal title) and the so-called Risan type (with a royal title) (Brunšmid 1998: 88–90). However, while numerous specimens have been documented in Pharos (cf. Jeličić Radonić, Gorické-Lukić, Mirnik 2017: 132–143), the total number is significantly smaller and nearly incomparable to Risan, where the quantity of Ballaios coins (cca. 7000 spec.) far surpasses those from all individual sites on the Adriatic (Dyczek 2019: 198). More than five hundred individual finds were discovered during the systematic excavations conducted by Polish archaeologists in the Carine area in the period from 2001 to 2009 (Ciołek 2011: 73–74), while a particularly important find was an exceptional hoard, unearthed in 2010, which contained a total of 4656 coins of Ballaios (Ciołek 2011). The hoard was found in a ceramic jar buried beneath the floor of a residential building covered with an ash layer believed to be the result of the burning of wooden roof structures (Ciołek 2010: 7–8; Dyczek 2010: 45). Radiocarbon dating of burned wood provided the following results: 270–210 BCE, 250–190 BCE, 255–195 BCE, and 245–185 BCE, with a margin of error of  $\pm 30$  years (Dyczek et al. 2012: 98).<sup>3</sup> Most researchers previously placed Ballaios' reign in the period around 168–135 BCE (Evans 1880: 291–292; Brunšmid 1998: 88; Dukat, Mirnik 2008: 55–58; Šašel Kos 2007: 125), after the defeat of Gentius in the Roman-Illyrian wars (Marović 1988: 85; Brunšmid 1998: 88), or in a slightly earlier period, from 195 to 175 BCE (cf. Šašel Kos 2007: 127). However, the archaeological context of the mentioned hoard in Risan shed a completely new light on the existing narratives. Based on the results of radiocarbon dating, Polish archaeologists proposed a new chronology for Ballaios' reign, placing it between 260/250 and 230 BCE (Ciołek 2011: 86–92; Dyczek et al. 2012: 97–99; Dyczek 2020: 431). This sets Ballaios' reign in the period before the First Illyrian War. The significant quantity of bronze

coinage, minted mostly in a single denomination, points to the high intensity of coin production and the extended period of Ballaios' rule.<sup>4</sup> A number of quite different portraits characterizing the Risan type with the royal title could perhaps indicate that this type of coins was still minted in some period after Ballaios' rule (cf. Jeličić Radonić, Gorické-Lukić, Mirnik 2017: 193–194, 197). In the latest typology by R. Ciołek, Pharos and Risan are joined by two additional principal types: „Illyrian“ and „transitional“. While the „transitional“ type encompasses iconographic characteristics of Risan-type reverse and Pharos-type legend, the „Illyrian“ type consists of coins characterised by deteriorating quality and stylized features, previously often called "barbarized" (cf. Brunšmid 1998: no 27; Dragičević 2016: 118), which were probably produced in the royal mint by much less skilled craftsmen who replaced earlier Greek masters (Ciołek 2021: 25). Along with silver coinage, excavations in Risan revealed the first known examples of silver-plated *subaerates*, which were probably produced in a short time using the same dies as for the bronzes (Ciołek 2021: 27–29; similarly suggested earlier by Marović 1988: 93). The typological, metrological, and stylistic features of Ballaios' coinage have been extensively discussed in relevant literature (Brunšmid 1998: 88–97; Gorini 1984: 43–49; Marović 1988: 231–234; Šašel-Kos 2007; Ciołek 2011; Dyczek 2019; Dyczek 2020; Mirnik, Kapetanić 2019), with particular attention given to the depiction of Artemis, which might have had a privileged social and religious significance within the kingdom of Ballaios (Dyczek 2014: 105; for maritime aspects of Artemis cf. Kirigin 2016: 150–151).

The distribution of Ballaios' coins could be traced along the entire Adriatic and over a wider area – from Montenegro to Istria and northern Italy, with some specimens recorded in Sardinia, southern Banat, Hungary, and Slovakia (for latest distribution data cf. Ilkić, Šešelj 2017: 286–287; Ciołek 2011: 314–332; see Visonà 2017: 200, f. 26 and references there; Mirnik, Kapetanić 2019: 37–46), although the reasons for such a widespread distribution cannot be adequately explained. In general, the quantity of Ballaios' coinage in the eastern Adriatic and its hinterland has significantly increased in recent years, notably by documenting numerous unpublished finds from private

3 — Recent excavations on the Risan acropolis brought to light a mould for casting coins (Łajtar 2021: 98).

4 — Very small bronzes discovered in Risan in the same cultural layers as Ballaios' mints led R. Ciołek to assume that it was a smaller denomination which concurrently circulated on the city territory. One specimen of those tiny coins was found attached to an amphora stopper (Ciołek 2021: 63).



or museum collections. In Northern Dalmatia, 23 unknown specimens originating from 10 indigenous hillfort sites have recently been published (Ilkić, Šešelj 2017: 286–287) (Fig. 6). Seven sites in Herzegovina with 54 Ballaios' coins, more than half of which are from Ošanjići near Stolac, could indicate a significant influx of coinage towards the hinterland of central and southern Dalmatia (Dragičević 2022: 39).<sup>5</sup>

### The Issaean coin of the volute crater / grape cluster type

One specimen discovered on the Kuk hillfort can be confidently identified as a coin of Issa, a Syracusan colony on the island of Vis. The coin is made of a copper alloy, it is well-preserved, with some surface impurities that could suggest that the coin was never cleaned or treated (Fig. 5). In the typology of Issaean coinage, it can be classified as the "volute crater/grape cluster" type (Brunšmid 1998: 78, no. 30; Visonà 2017: 207; Ciołek 2011: 158, type VIII). The obverse prominently features a meticulously crafted depiction of a heart-shaped volute crater with a wide mouth flanked by volute handles. The form and decoration of the vessel body, with a profiled conical foot and vertical fluting that seems to extend to the crater's shoulder, are especially emphasized. Above the crater, the Greek ethnic  $\Sigma$  is displayed. On the reverse, a twig with a bunch of grapes is shown, bordered by two vine leaves. Similar to the reverse, the figuration of small details like individual grape grains, and leaf shapes, demonstrates a refined artistic mastery in mold shaping.

According to Visonà, the issue of Issaean bronze coins of the volute crater/grape cluster type may have been entirely overstruck on the Syracusan litrae of Hieron II, with a diameter of about 20 mm, featuring the head of Poseidon / a trident, minted between 269 and 240 BCE (Visonà 2017: 207). Based on that, Visonà suggests that the Issaean overstrikes might be placed somewhat later, in the second half of the 3<sup>rd</sup> c. BCE, perhaps between 220 and 210, or towards the end of the 3<sup>rd</sup> c. BCE. His hypothesis is additionally supported by similarities with Roman and Carthaginian overstrikes (Visonà 2017: 207). The coin blank with rounded edges and the slightly eccentric and displaced figures of the reverse indicate that the specimen from Senj is probably

an overstrike. Given the total number of known specimens, which, according to available data, are no more than 20, it seems that this issue was struck in small quantities. Brunšmid mentions 17 specimens of this type, seven of which are from the Zanella collection on Vis (Brunšmid 1998: 78), while Visonà increases the total number by adding three new specimens: one from the Archaeological Museum in Zagreb (AMZ) and two from the Vatican Library (VL) (Visonà 2017: 218–221). He also presents data on one specimen of the same type which was part of lot 585 sold at the auction of LHS Numismatik AG in Zürich (23–24 April 2007), but its great condition could indicate it originated from some old collection (Visonà 2017: 96, f.11). Except for those probably found on Vis (Zanella coll.), the exact findspots for other specimens are unknown. In that regard, it seems that the coin from Senj is the first one found outside the island of Vis.

With a diameter of 19.4 mm, the specimen from Senj fits within the module range (19–21 mm) documented in other examples of this type (Senj 19.4 mm; VL 20 mm, 20.5 mm; AMZ 20.3 mm; Zanella coll. 19–21 mm; LHS 20 mm). Their weight usually varies between 5.76 and 6.28 g (Senj 5.10 g; VL 6.28 g; 6.20 g; AMZ: 5.76 g; LHS 5,23g) (Visonà 2017: 218–221; Brunšmid 1998: 78). The issue was likely struck in a single denomination, probably involving one obverse die and two reverse dies (Paškvan, Visonà 2021: 139). Variations are only noticeable in the die axes orientations (Senj: 12 h; VL: 1h, 8 h; AMZ: 9h; LHS 12h).

In the general typology and chronology of Issaean coinage, the issue of the volute crater/grape cluster type marks a break from the previous tradition of depicting deities and animals and introduces a new iconographic theme based on Dionysian motifs like the kantharos, the bunch of grapes, or Dionysus himself. Furthermore, the depiction of the vessel, which can be confidently identified as a volute crater (often mistakenly described as an amphora), is very specific to Issaean monetary iconography and appears for the first and only time in this issue. The crater, a vessel used for mixing wine and water and consuming the mixture, together with the bunch of grapes, holds strong symbolic significance in the Hellenistic world and is most commonly associated with the god Dionysus (Florenzano 1999:

5 — The recent discovery of a Ballaios' coin by a metal detectorist near Gospić is thus far the first known evidence of distribution in the Lika region thus far (personal communication, June 2023).



Fig. 5 – Issaeian coin (AE, 19,4 mm, 5.10g, 12 h), volute crater / grape cluster (photo: P. Domines Peter)

37–48; cf. Paškvan 2005: 199–206; Ignatiadou 2014; Visonà 2017: 208). The same motifs can be traced on a series of silver and bronze Greek coins from the 5<sup>th</sup> c. BCE, such as those from Thebes in Boeotia (Head, Poole 1884 (=BMC *Central Greece*), 69, 72, 74, 92, 95, 98, 111–112), Thasos (Poole 1877 (=BMC *Tauric Chersonese*), 53–58); Breitenstein, Schwabacher 1943: 1029–1032), or Corcyra (Gardner 1883 (=BMC *Thessaly to Aetolia*), 130–131)). The clearly emphasized details of the crater may indicate the existence of an actual object that served as a model. In some details, the depiction of the crater on the Issaeian coin is even similar to the marble craters from Macedonia from the 4<sup>th</sup> c. BCE which are characterized by arranged fluting on the body (Ignatiadou 2014: 58, pl. VII). However, like the later representation of the kantharos, the motif of the crater cannot be reliably related to the repertoire of vessels that are known to have been produced by a local Issaeian workshop that likely began working in the mid-3<sup>rd</sup> c. BCE (Miše 2013: 126).<sup>6</sup> On the other hand, if we assume that the model was adopted from a similar foreign issue, then the bronzes of Corcyra depicting the volute crater and a bunch of grapes, which belong to the 4<sup>th</sup> c. BCE (Gardner 1883 (=BMC *Thessaly to Aetolia*), 121; Breitenstein, Schwabacher 1943: 165), represent the closest iconographic parallel.<sup>7</sup>

The inauguration of new issues based on imagery with pronounced Dionysian symbolism points to a strongly developed cult of Dionysus in Issa. The appearance of such motifs can be linked to the intensive development of viticulture and the wine industry, which, at least from the 3<sup>rd</sup> c. BCE, played an increasingly significant role in the prosperity of the Issaeian economy (for the Dionysius cult and the wine industry in Issa cf. Paškvan 2005; Kirigin, Katunarić, Šešelj 2005; Ugarković 2016: 82–83; Paškvan, Visonà 2020: 139–140). It seems that the growth and expansion of the sphere of Issaeian influence in the second half of the 3<sup>rd</sup> c. BCE was partly effected by the events in the Second Illyrian War that weakened the role of Pharos as the closest rival on the regional market (Kirigin 2018: 397). Alongside the distribution of the acclaimed wine – perhaps a major export commodity, which even reached remote Mediterranean markets (Kirigin, Katunarić, Šešelj 2005: 10) – an equally important export product was ceramic ware from local Issaeian workshops. Different types of locally produced Gnathia-style fineware were quickly embraced by the neighboring islands and coastal communities in the central Dalmatian region. In this context, the iconography of the crater and kantharos on silver and bronze coins could also be seen as an „advertisement“ of the most important products – pottery and wine

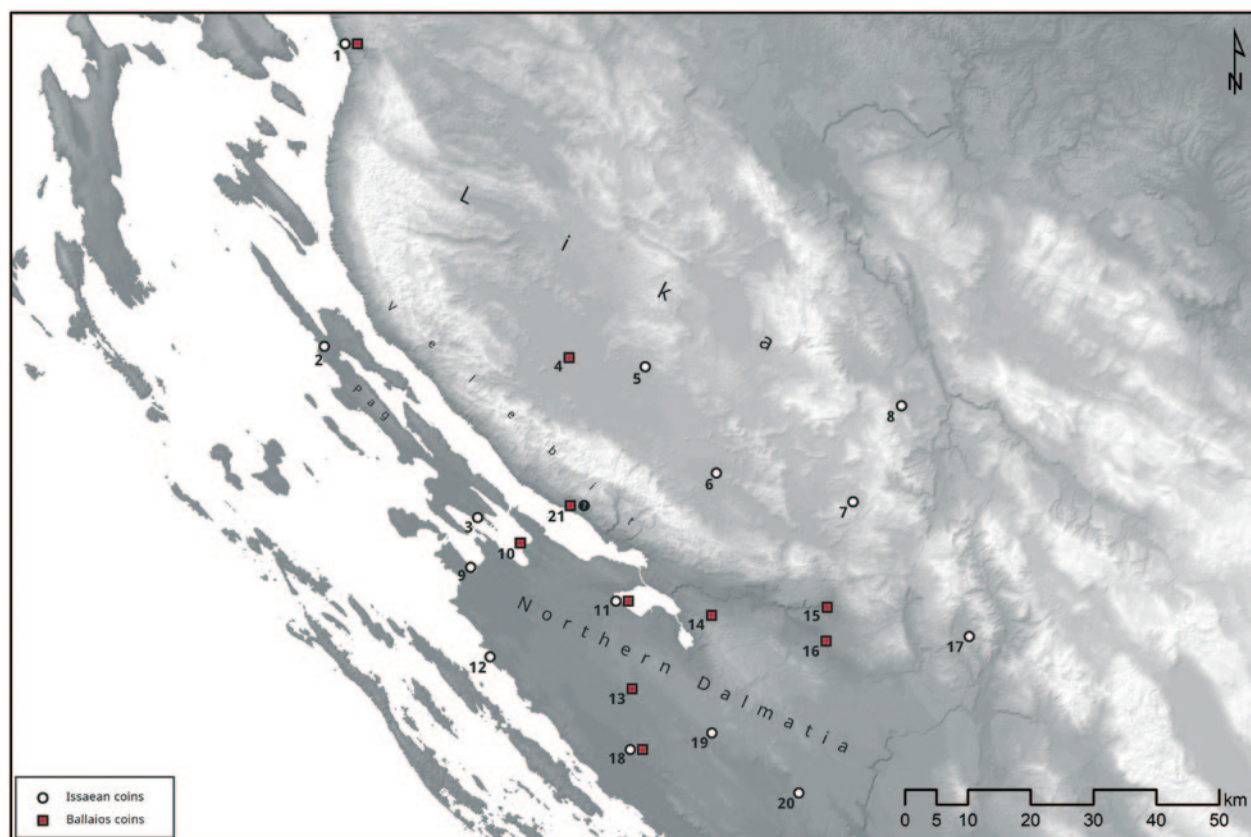
<sup>6</sup> — Based on the available data, large craters (such as bell-shaped and volute craters), which were the characteristic type of vessel in the initial and middle phase of Gnathia production in southern Italy in the mid-to second half of the 4<sup>th</sup> c. BCE, were not represented in the later repertoire of local Issaeian Gnathia-style ware (cf. Miše 2013; 2015).

<sup>7</sup> — There were contacts between Issa and Corcyra during the 3<sup>rd</sup> and 2<sup>nd</sup> c. BCE. Silver and bronze coins from Korcyra, which made up a large part of the coinage structure in the Adriatic region in the same period, have been recorded in Issa (Paškvan, Visonà 2020: 142; for Corinthian type B amphorae produced in Corcyra cf. Miše, Quinn 2022: 224). The aforementioned Korcyra coin of the volute crater/cluster type may have had a similar promotional meaning in the Korkyrean wine trade. If the Issaeians used it as an inspiration for their own mints, it is logical to assume they had already been familiar with it and its unique iconography.



(Paškvan, Visonà 2020: 140). Through the concentration of finds of Issaeian coins and pottery – with the correlation being particularly well attested at the Grad site and the nearby Nakovana cave on the Pelješac peninsula (Pamić, Visonà 2019: 66) – it is possible to trace the sphere of Issaeian regional interests, which seems to have primarily encompassed the market of central and south Dalmatia, with an expanding focus on trade with the continental hinterland (Kirigin et al. 2005; Paškvan, Visonà 2020: 134; for recent Issaeian coin finds in Herzegovina see Dragičević 2016; 2022: 35). On the other hand, according to the current state of research, Issaeian bronzes reached numerous indigenous coastal and inland sites in northern Dalmatia and southeastern Lika (Fig. 6), where their presence is usually interpreted as an indicator of trade interactions between the Issaeians and the local inhabitants (Visonà 2017: 196; Ilkić, Šešelj 2017; Ilkić 2018). Registered Issaeian specimens from northern

Dalmatia come from the sites of Podgrađe (Benkovac), Budim (Posedarje), Plavno, Bribir, Trojan (Stabanj), Nin, Zadar, Starigrad Paklenica (the map from Paškvan, Visonà 2020: 134).<sup>8</sup> On the island of Pag, there are finds from the Gradac hillfort near Smokvica, with two specimens of the "head of Athena / goat" type (Ilkić, Kožul 2017: 89–96), and from Novalja, with an old find of one Issaeian bronze of the "female head (Hera?) / dolphin" type (Brunšmid 1998: 73). In southeastern Lika, recent finds have been recorded at the hillforts of Cvituša in Lovinac, Gradina near the southern edge of Gubavčevo Polje, and Gradina above Dobroselo (Ilkić 2018: 57–66). Therefore, the specimen from Senj presented here, as the westernmost find of an Issaeian coin on the Adriatic thus far, expands current distribution maps. However, it seems that this is not the only Issaeian coin found in Senj. As already correctly stated by Visonà, it is quite possible that the specimen held in the old collection of the Senj Gymnasium,



**Fig. 6** – Distribution map of Issaeian and Ballaios' coins in Northern Adriatic, Northern Dalmatia, and Lika: 1. Senj (Kuk), 2. Novalja, 3. Smokvica (Gradac), 4. Gospić area, 5. Lika region, 6. Lovinac (Cvituša), 7. Gubavčevo Polje (Gradina), 8. Dobroselo (Gradina), 9. Nin, 10. Ljubač, 11. Posedarje (Budim), 12. Zadar, 13. Nadin, 14. Kruševo (Cvijina Gradina), 15. Smokovac, 16. Prndelji, 17. Plavno, 18. Stabanj (Trojan), 19. Podgrađe, 20. Bribir; 21. Starigrad Paklenica (Sv. Trojica) (after Brunšmid 1998: 73; Ilkić, Šešelj 2017; Ilkić 2018; Paškvan, Visonà 2021: 134; base: EU DEM v1.1, made by: P. Domines Peter)

<sup>8</sup> — Although this is stated by Paškvan and Visonà (2020: 134), some authors (Ilkić, Vučić 2022: 192, f. 4) argue that no Issaeian coins have been recorded in the Starigrad Paklenica area thus far.

described by F. Kenner as "AE 4" with "head of Pallas r. / horse trotting" and the legend  $\text{I}\Sigma$ , and attributed to Amphipolis, actually represents an Issaeian coin of the "head of Athena / stag" type (Visonà 2017: 195). The specimen originated from „the area of Senj or the neighboring Kvarner islands" (Kenner 1865: 124).

### The Adriatic maritime trade network in the last centuries BCE: a model for coin movement and spreading?

Numismatic and pottery evidence suggests that, during the last centuries BCE, the indigenous community in Senj was integrated into the wider regional and Mediterranean network of maritime connections and trade activities (Glavaš et al. 2020: 274; Glavaš 2010: 8–10). The strategic position at the foot of the Vratnik pass, near the port and the closest route connecting the continental hinterland and the sub-Velebit coast (Glavaš 2010), probably had a crucial impact on the economy and prosperity of local settlement which transform into an important trading hub. The transit role was probably built upon the reception and further distribution of various goods that arrived by sea routes and went on to the markets of hinterland communities on the well-established road through Senjska Draga and via the Vratnik pass, as well as *vice versa*.<sup>9</sup> In general, the evidence of pre-Roman (sometimes categorically defined as „Hellenistic" or „pre-imperial") coinage in the Senj area fits into the same timeframe of the 3<sup>rd</sup> to 1<sup>st</sup> c. BCE, along with the finds of other Hellenistic imports, such as amphorae and fineware (Glavaš et al. 2020: 277). Furthermore, the available spatial data on coin findspots from the Senj area correlates well with the concentration of Hellenistic pottery, thus far attested on three major sites – the Kuk hillfort, Nehaj, and the Štela site (Fig. 7).<sup>10</sup>

The finds of Issaeian and Ballaios' coins in Senj confirm their regional distribution towards the northern Adriatic. Although there is no reason to doubt that their occurrence in Senj, as well as their movement along the Adriatic, was facilitated by a maritime network, there are still many gaps regarding that model of their spreading. The

pattern of concentration of pre-Roman coinage in important port centers is already well attested by finds in Zadar (Kramberger 2020), Budim near Posedarje (cf. Ilkić 2016; Ilkić, Šešelj 2017), or Ljubač (cf. Ilkić 2017), and particularly by numismatic evidence from Diomedes' sanctuary on Cape Ploče, where Greek-Illyrian and other Hellenistic coins were discovered as votive offerings (Šešelj 2010: 311–315; Šešelj, Ilkić 2014: 49–50; 2015: 428–431). The coins presented here belong to the period of the 3<sup>rd</sup> c. BCE, when both the Illyrian kingdom of Ballaios and Issa strongly benefited from maritime activities, whether related to piracy (Ujes 1999: 203–217; Dyczek 2011: 162–167; Dyczek 2020: 431) or the distribution of local pottery and wine (Kirigin et al. 2005: 10).<sup>11</sup> In comparison to the Issaeian wine industry, the large quantity of G-I and other types of Hellenistic amphorae discovered at Risan imply that the Illyrian kingdom was not excluded from the wider Adriatic trade of amphorae-borne commodities (Dyczek 2012).

Amphorae, as ceramic containers designed to transport goods, are often regarded as a primary archaeological source for understanding maritime trade and commerce on the Adriatic during the Hellenistic period (cf. Kirigin 1994; Kirigin et al. 2005; Kirigin 2018; Lindhagen 2009; Cipriano, Mazzocchin 2017; Miše, Quinn 2022). Recently published data on numerous finds of late Hellenistic/early Roman amphorae of Greco-Italic (G-I) and Lamboglia 2 (LA 2) types from various sub-Velebit terrestrial (hillfort) and underwater findspots point to the conclusion that the indigenous inhabitants of the Velebit littoral participated in foodstuffs trade and were interested in acquiring amphorae and amphora-borne commodities (Glavaš et al. 2020: 274). Previous indications were well confirmed by a recent surface survey of the Kuk hillfort (conducted by the author), which revealed an abundant quantity of surface finds in which more than 80% are amphorae sherds, primarily G-I, LA 2 forms, with different „transitional" forms between these two types registered as well. Such an enormous quantity of amphorae certainly confirms the highly receptive character of the indigenous settlement. Furthermore, it could imply

<sup>9</sup> — A recent survey has also provided new data on an alternative path that directly connects the Kuk hillfort and the Vratnik pass (Glavaš 2010: 7).

<sup>10</sup> — This potentially indicates a „multicentric" organisation of protohistoric settlements with three different but related areas of activities. The surface material registered on the Nehaj hillfort is forthcoming. A few sherds of Hellenistic provenance from old excavations on the Štela site have been published recently (Konestra, Glavaš 2024: 30, 56–57).

<sup>11</sup> — According to R. Ciołek, the scale of Illyrian piracy in this period and the notion of Ballaios as a pirate leader would explain the large amount of money needed to maintain troops, as well as the distribution of coins on both sides of the Adriatic (Ciołek 2021: 107–108).

that the regional trans-Velebit (re)distribution of wine (and/or other amphora-borne commodities) towards the continental markets had a significant value for local economy. However, although those types of amphorae (LA 2, G-I) have traditionally been interpreted as serving for the storage and transport of wine (cf. Glavaš et al. 2020: 272), we still have to be careful while analysing amphora finds – such as those from the Kuk hillfort or other Velebit sites – because of the complex relation between types, content, and provenance. Some recent studies on the subject indicate that the amphora distribution system was far more complex and included primary use, as well as (re)filing and reusing amphorae with various commodities, not necessarily only wine (e.g. raw clay from the Žirje shipwreck) (Bevan 2014: 392; Pecci et al. 2017; Miše, Quinn 2022: 11). Considering that the subjects of origins, provenance, or producer-customer interactions are much more difficult to study (Miše, Quinn 2022: 11), it seems that the direct linking of amphora finds exclusively to wine consumption could be misleading in some cases.<sup>12</sup> Ultimately, the intensive distribution of amphorae and amphorae-borne commodities, very likely in mixed cargoes of merchant ships, perhaps along with some Hellenistic fineware as a secondary cargo, or other trading products such as pithoi or volcanic millstones,<sup>13</sup> could provide an as-yet hypothetical model to explain the distribution of pre-Roman coinage. However, it is important to emphasize that a commercial organization of maritime trade in this period is nevertheless very far from being clearly understood; who it involved – Greek traders, foreign agents or intermediaries – and whether local maritime-oriented communities, such as the one in Senj, had a more active role, remain questions for further debates.

Despite the analysed coin, there is yet no evidence to confirm that Issaeian merchants or their wine ever reached Senj. However, finds of potential Issaeian fineware in the necropolis in *Nesactium* and Kastav (Mihovilić 2002: 507) could indicate that the northern Adriatic was not beyond their trading range. A recently pub-

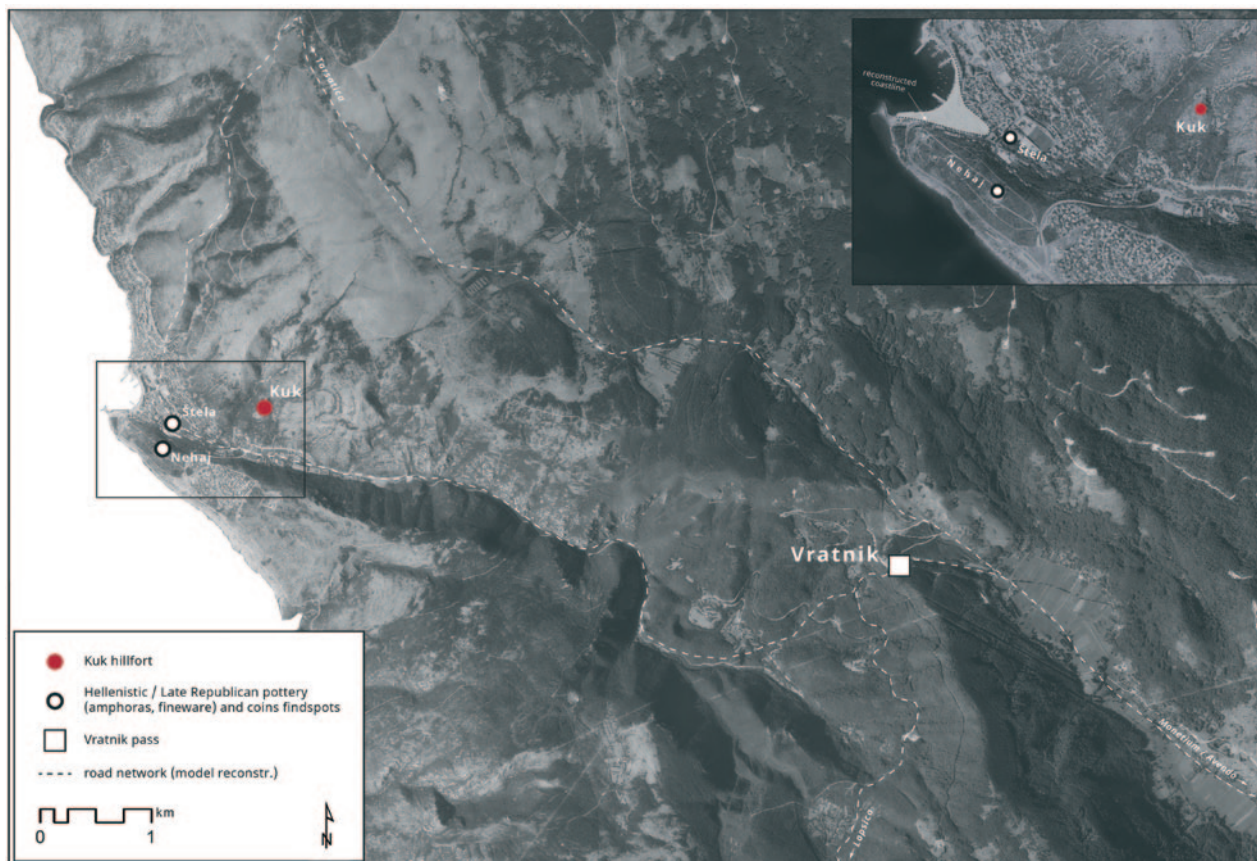
lished coin of Pharos, found somewhere in the territory of Prozor (near Otočac, Gacka region) (diam. 18 mm, weight 2.98 g), suggests that coins of Greek colonies in the Adriatic reached the territory of northern Lika (Ilkić 2018: 61). In that case, it seems logical to assume that the corridor through the Senj port and over the Vratnik pass played a key role in spreading the coins and other products towards the hinterland.

Given their occurrence in an indigenous context, it should be noted that the coins analysed here could have had a different function or meaning. One theory argues that a large amount of pre-Roman coinage from the area of northern Dalmatia and Lika, especially of North African provenance, was used as a „means of payment“. Based on that, it is often claimed that there was a system of „monetary economy“ adopted by indigenous communities in Liburnia (modern-day Northern Dalmatia) and/or Japodia (modern-day Lika) which used money in everyday transactions (Šešelj, Ilkić 2014; Dubolnić Glavan, Glavaš 2014; Cesarik, Kramberger 2018; see remarks by Visonà 2018 and discussion by Bilić 2019). However, the occurrence of Issaeian and Ballaios' coins in this area is statistically still rare and sporadic. Accordingly, Visonà argues it is unlikely that such coins of small intrinsic value had a major role in monetary transactions and payments of local goods and services by Greek traders (Visonà 2017: 197). Therefore, while discussing the function of these coins in Senj, in an indigenous context that was nevertheless far outside their „primary“ monetary zone (central to south Dalmatia), we should consider other possible meanings whereby such coins could in fact have represented exotic objects, war booty, trading gifts, or just symbolic artifacts with no monetary function attached (Luley 2008: 182–187; Visonà 2017: 197). In the case of Issaeian bronzes of volute crater /grape cluster type, very distinctive iconography and limited dispersion could additionally point to some „special purpose“, perhaps adopted in a particular sphere of exchange between Greeks and local inhabitants.

<sup>12</sup> — The large quantity of amphorae could imply that the local merchants in Senj acted as an intermediary and used amphorae from various suppliers to distribute them to the hinterland market.

<sup>13</sup> — Fragments of imported pithoi and volcanic millstones were recorded among the surface finds on the Kuk site (for pithoi on the Adriatic see remarks by Kirigin 2012; 2017; for millstone finds see Radić Rossi 2017: 16; Borzić, Radić 2021: 353–354).





**Fig. 7** – Hellenistic/Late Republican pottery and coin findspots in the area of Senj (base: Geoportal DGU, DOF 2021; made by: P. Domines Peter)

## 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), carried out at the Institute of Archaeology in Zagreb.

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## INTERNET SOURCES

**Geoportal DGU** – Geoportal, Državna geodetska uprava / State Geodetic Administration, <https://geoportal.dgu.hr/> (accessed 05 December 2023)

**EU DEM** – European Digital Elevation Model v.1.1. <https://land.copernicus.eu/imagery-in-situ/eu-dem/eu-dem-v1.1> (accessed 10 December 2023)

## BIBLIOGRAPHY

**Bilić, T.** 2015, *Zbirka rimskog republikanskog novca Arheološkog muzeja u Zagrebu*, Arheološki muzej u Zagrebu, Zagreb.

**Bilić, T.** 2019, A paradigm shift in the making: the case of North African and Italic bronzes in the northeastern Adriatic, *The Numismatic Chronicle*, Vol. 179, 31–48.

**Bilić, T.** 2020, Greek-Illyrian coinage of the central Adriatic region: an overview, *Latina et Graeca*, Vol. 2(38), 7–20.

**Bevan, A.** 2014, Mediterranean Containerization, *Current Anthropology*, Vol. 55(4), 387–418.

**Gardner, P.** (ed.), 1883 = *BMC Thessaly to Aetolia, Catalogue of Greek Coins in the British Museum, Thessaly to Aetolia*, London

**Head, B. V., Poole, R. S.** (eds.), 1884 = *BMC Central Greece, Catalogue of the Greek coins in the British Museum, Central Greece. (Locris, Phocis, Boeotia, and Euboea)*, London.

**Poole, R. S.** (ed.), 1877 = *BMC Tauric Chersonese, Catalogue of the Greek coins in the British Museum, Tauric Chersonese, The Tauric Chersonese, Sarmatia, Dacia, Moesia, Thrace, etc.*, London.

**Borzić, I., Radić, D.** 2021, Rezultati rekonstrukcije gradinskog naselja Brdo-Stine kod Žrnova na otoku Korčuli, *Archaeologia Adriatica*, Vol. 15, 341–369.

**Breitenstein, N., Schwabacher, W.** (eds.) 1943, *SNG Copenhagen, Sylloge Nummorum Graecorum: The Royal Collection of Coins and Medals, Thessaly – Illyricum*, Danish National Museum, Copenhagen.

**Brunšmid, J.** 1998, *Natpisi i novac grčkih gradova u Dalmaciji*, priredila i prevela s njemačkog jezika M. Bonačić Mandinić, Književni krug Split.

**Cesarik, N., Kramberger, V.** 2018, Prilog poznavanju najstarijeg optjecaja novca na području Like, *Diadora*, Vol. 32, 105–152

**Ciołek, R.** 2010, „Great hoard“ of 4656 coins of King Ballaios from Risan, *Novensia*, Vol. 21, 7–12.

**Ciołek, R.** 2011, *Emisje króla Ballaios Początki mennictwa w Ilirii*, Warszawa.

**Ciołek, R.** 2021, *The Monetary System in the Kingdom of Ballaeus*, in: Rhizon/Risinium, Dyczek P. (ed.), Vol. 2, Warsaw.

**Cipriano, Mazzocchin,** 2017, Western Adriatic amphorae productions: the research status, in: *Adriamphorae. Amphorae as a resource for the reconstruction of economic development in the Adriatic region in Antiquity: local production*, Proceedings of the workshop, Zagreb, 21st April 2016, Lipovac Vrkljan G., Radić Rossi I., Konestra A. (eds.), Institut za arheologiju, Zagreb 33–47.

**Čelhar, M., Ilkić, M.** 2019, Nalazi hispanškoga novca s istočne jadranske obale i iz njezina zaleđa, *Vjesnik za arheologiju i historiju dalmatinsku*, Vol. 112, 33–55.

**Dragičević, I.** 2016, Daorski novac i prilog poznavanju optjecaja novca na daorskom području, *Vjesnik za arheologiju i historiju dalmatinsku*, Vol. 109(1), 107–128.

**Dragičević, I.** 2022, Nove spoznaje o grčkom i grčkom-ilirskom novcu u Hercegovini, *Vjesnik za arheologiju i historiju dalmatinsku*, Vol. 114(1), 29–68.

**Dubolnić Glavan, M., Glavaš, V.** 2011, Prilog poznavanju najstarijeg optjecaja novca na prostoru južnog Velebita, *Prilozi Instituta za arheologiju u Zagrebu*, Vol. 28, 95–122.

**Dukat, Z., Glavičić, A.** 1975, Numizmatičke vijesti iz Senja i okolice, *Senjski zbornik*, Vol. 6, Senj, 167–196.

**Dukat, Z., Mirnik, I., Neralić, J.** 1984, Numizmatičke vijesti iz Senja i okolice II, *Senjski zbornik*, Vol. 10–11, 41–56.

**Dukat, Z., Mirnik, I.** 2008, *Numismatic Collection, Guide*, Zagreb Archaeological Museum Zagreb.

**Dyczek, P.** 2010, Preliminary remarks on the archaeological context of the discovery of the “great hoard” of 4656 coins of King Ballaios in Risan (Rhizon/Risinium), *Novensia*, Vol. 21, 45–50.

**Dyczek, P.** 2011, From the history of ancient Rhizon/Risinium: Why did Illyrian king Agron and queen Teuta come to a bad end and who was Ballaios?, in: *Classica Orientalia, Essays Presented to Wiktor Andrzej Daszewski on his 75th Birthday*, Meyza H., Zych I. (eds.), Warszawa, 157–174.

**Dyczek, P.** 2012, Gifts of Dionysus in Rhizon, capital of Queen Teuta, On the typology of the so-called Greek-Italic amphorae, *Études et travaux*, Vol. 25, 65–80.

**Dyczek, P.** 2014, Artemis and Theseus with Minotaur on gems from ancient Rhizon/Rhisinium (Montenegro), in: *Proceedings of the International Conference „Arts and Crafts over the passage of time“*, Novotná M., Werner J., Dufková M., Kuzmová K., Varsik V. (eds.), Anodos, Studies of the Ancient World, Vol. 11 (2011), Perzinok, 99–110.

**Dyczek, P.** 2019, *Illyrian King Ballaios, King Agron and Queen Teuta from ancient Rhizon*, in: *Proceedings of the International Conference Ancient Communities and Their Elites from the Bronze Age to Late Antiquity*, Novotná M., Werner J., Kuzmová K., Varsik V., Hrnčiarik E. (eds.), Anodos, Studies of the Ancient World, Vol. 13 (2013), Trnava, 195–202.

**Dyczek, P.** 2020, Rhizon – capital of the Illyrian kingdom – some remarks, in: *Ex Oriente Lux. Studies in Honour of Jolanta Młynarczyk*, Jakubiak K., Łajtar A. (eds.), Warszawa, 423–433.

**Dyczek, P., Kowal, T., Lemke, M., Reclaw, J.** 2012, Preliminary Report on the Excavations of The Center for Research on the Antiquity of Southeastern Europe, *Archeologia*, Vol. 62–63, 91–109.

**Evans, A.** 1880, On some recent discoveries of Illyrian coins, *The Numismatic Chronicle*, Vol. 20, 269–302.

**Florenzano, M. B. B.** 1999, Notes on the imagery of Dionysus on Greek Coins, *Revue belge de numismatique et de sigillographie*, Vol. 147, 37–48.

**Glavaš, V.** 2010, Prometno i strateško značenje prijetoj Vratnik u antici, *Senjski zbornik*, Vol. 37, 5–18.

**Glavaš, V.** 2014, Analize vidljivosti u prapovijesnom krajoliku Velebita, *Archaeologia Adriatica*, Vol. 8, 1–26.

- Glavaš, V., Konestra, A., Tonc, A.** 2020, Wine consumption in the Kvarner and Sub-Velebit area (NE Adriatic) in the last centuries BCE: evidence from amphora finds, in: *Exploring the neighborhood: the role of ceramics in understanding place in the Hellenistic world*, 3rd IARPotHP conference, Kamenjarin I., Ugarković M. (eds), Phoibos, 271–286.
- Glavičić, A.** 1966, Arheološki nalazi iz Senja i okolice (I), *Senjski zbornik*, Vol. 2, 383–418.
- Glavičić, M.** 1993, Prilog proučavanju poleogeneze i urbanističkog razvoja antičke Senje, *Radovi Filozofskog fakulteta u Zadru*, Vol. 32(19), 79–104.
- Glavičić, M.** 1994, Značenje Senje tijekom antike, *Senjski zbornik*, Vol. 21, 41–58.
- Gorini, G.** 1984, Re Ballaios: una proposta cronologica, *Il Crinale d Europa, L'area illirico danubiana nei suoi rapporti con il mondo classico*, Roma, 43–49.
- Ignatiadou, D.** 2014, The Symbolic Krater, in: *Le Cratère à volutes. Destinations d' un vase de prestige entre Grecs et non-Grecs, Cahiers du Corpus Vasorum Antiquorum France N 2*, de La Genière J. (ed.), Paris, 43–59.
- Ilkić, M.** 2016, Novac jadranske Korkire s liburnske gradine Budim kod Posedarja, *Vjesnik za arheologiju i historiju dalmatinsku*, Vol. 109, 99–105.
- Ilkić, M.** 2017, Numizmatički nalazi s područja Ljupča, in: *Župa Ljubač – zrcalo povijesnih i geografskih mijena u sjeverozapadnom dijelu Ravnih kotara*, Faričić J., Lenkić J. (eds.), Zadar, 152–181.
- Ilkić, M.** 2018, Lički nalazi farskog i isejskog novca, *Vjesnik za arheologiju i historiju dalmatinsku*, Vol. 111(1), 57–66.
- Ilkić, M., Kožul, P.** 2017, Numizmatički nalazi s prapovijesne gradine Gradac kod mjesta Smokvice na otoku Pagu, in: *Zbornik radova 8. međunarodnoga numizmatičkog kongresa u Hrvatskoj*, Dobričić, J. (ed.), Rijeka, 89–96.
- Ilkić, M., Šešelj, L.** 2017, Noviji nalazi grčko-ilirskog novca s područja sjeverne Dalmacije / Recent finds of Graeco-Illyrian coins from northern Dalmatia, *Vjesnik za arheologiju i historiju dalmatinsku*, Vol. 110, 281–302.
- Ilkić, M., Vučić, J.** 2022, Numizmatički nalazi s područja Općine Starigrad, in: *Starigrad-Paklenica*, Uglešić A., Šikić Z., Tomić M. (eds.), Zadar – Starigrad, 190–203.
- Jeličić Radonić, J., Goricke-Lukić, H., Mirnik, I.** 2017, *Faros III: Grčki, grčko-ilirski i rimski novac*, Književni krug, Split.
- Kenner, F.** 1865, Beiträge zu einer Chronik der archäologischen Funde in der österreichischen Monarchie (1862-1863), in: *Archiv für Kunde österreichischer Geschichts Quellen 33*, Wien, 1-162.
- Kirigin, B.** 1994, Grčko-italske amfore na Jadranu, *Arheološki Vesnik*, Vol. 45, 15–24.
- Kirigin, B.** 2012, Prilog proučavanju pitosa/dolija s otoka Visa, Biševa, Sveca i Palagruže, in: *Scripta in honorem B. Djurić*, Migotti B., Mason P., Nadbath B., Mulh T. (eds.), 285–304.
- Kirigin, B.** 2016, Salona and the Sea, in: *Croatia at the Crossroads, a consideration of archeological and historical connectivity*, Davidson D., Gaffney V., Miracle P., Sofaer J. (eds.), Oxford, 139–155.
- Kirigin, B.** 2017, Pithoi from Pharos, in: *Ante portam auream, Studia in honorem professoris Aleksandar Jovanović*, Vujović M. B. (ed.), University of Belgrade, Faculty of Philosophy, Beograd, 53–69.
- Kirigin, B.** 2018, Pharos, Greek Amphorae and Wine Production, in: *Paros IV, Paros and its colonies. Proceedings of the Fourth International Conference on the archaeology of Paros and the Cyclades*, Katsonopoulou D. (ed.), Athens, 397–419.
- Kirigin, B., Katunarić, T., Šešelj, L.** 2005, Amfore i fina keramika (od 4. do 1. st. pr. Kr.) iz srednje Dalmacije: preliminarni ekonomski i socijalni pokazatelji, *Vjesnik za arheologiju i povijest dalmatinsku*, Vol. 98(1), 7–21.
- Konestra, Glavaš** 2024, *Senj – Štela: povezanost i potrošnja antičkog grada kroz keramičke nalaze*, Sveučilište u Zadru, Zadar
- Krajač, V.** 1956, U Senju nađen novac bana Šubića?, *Vijesti društva muzejsko-konzervatorskih radnika NR Hrvatske*, Vol. V(1), 17–19.
- Kramberger, V.** 2020, Predcarski novac s gradske plaže Kolovare u Zadru, *Diadora*, Vol. 33–34, 100–122.
- Łajtar, A.** 2021, Peripoloi and the god Medaurus in a newly discovered Greek inscription from Rhizon, *Tyche*, Vol. 36, 97–108.
- Lindhagen, A.** 2009, The transport amphoras Lamboglia 2 and Dressel 6A: a central Dalmatian origin?, *Journal of Roman Archaeology*, Vol. 22, 83–108
- Lipovac Vrkljan, G., Tonc, A., Glavaš, V., Konestra, A., Molak Župan, Ž.** 2016, Rezultati terenskih pregleda na području podvelebitskog primorja i neposrednog zaleđa, *Annales Instituti Archaeologici*, Vol. 12, 196–200.
- Luley, B. P.** 2008, Coinage at Lattara. Using archaeological context to understand ancient coins, *Archaeological Dialogues*, Vol. 15, 174–195.
- Marović, I.** 1998, Novac ilirskog vladara Baleja u Arheološkom muzeju u Splitu, *Vjesnik za arheologiju i historiju dalmatinsku*, Vol. 81, 81–145.
- Mihovilić, K.** 2002, Grčki i helenistički nalazi u Istri i Kvarneru, in: *Grčki utjecaj na istočnoj obali Jadrana*, Cambi N., Čače S., Kirigin B. (eds.), Split, 499–519.
- Mirnik, I., Kapetanić, N.** 2019, *Nalazi starog novca sa Sokolgrada / Finds of Old Coins from the Sokol Castle*, Društvo prijatelja dubrovačke starine, Dubrovnik.
- Miše, M.** 2013, Prilog proučavanju isejske keramike tipa Gnathia, *Vjesnik za arheologiju i povijest dalmatinsku*, Vol. 106(1), 99–130.
- Miše, M.** 2015, *Gnathia and Related Hellenistic Ware on the East Adriatic Coast*, Oxford.
- Miše, M., Quinn, P. S.** 2022, Origins and Distribution of Hellenistic and Late Republican Transport Amphorae in the Dalmatian Region and its Implications for Adriatic Trade and Economy, *Archaeological and Anthropological Sciences*, Vol. 14, 225. <https://doi.org/10.1007/s12520-022-01689-x>
- Pamić, I., Visonà, P.** 2019, Pronalazak rijetkog isejskog brončanog novca na gradini Grad u Nakovani (Pelješac), *Vjesnik za arheologiju i historiju dalmatinsku*, Vol. 112(1), 57–70.
- Paškvan, S.** 2005, Elementi dionizijeva kulta na novcu grčkih polisa Isse (Visa) i Pharosa (Hvara), te slični primjeri iz antičkog svijeta, in: *INCC 2004. Zbornik radova 4. međunarodnog numizmatičkog kongresa u Hrvatskoj 20. –25. rujna 2004. Stari Grad (Pharos), otok Hvar I M/B Marko Polo*, Dobričić J. (ed.), Rijeka, 199–206.
- Paškvan, S., Visonà P.** 2020, Dosad nepoznati srebrni novac Ise iz srednje Dalmacije, *Vjesnik za arheologiju i historiju dalmatinsku*, Vol. 113(1), 131–149.



- Pecci, A., Clarke, J., Thomas, M., Muslin, J., van der Graaff, I., Toniolo, L., Miriello, D., Crisci, G. M., Buonincontri, M., Di Pasquale, G.** 2017, Use and reuse of amphorae, Wine residues in Dressel 2–4 amphorae from Oplontis Villa B (Torre Annunziata, Italy), *Journal of Archaeological Science: Reports*, Vol. 12, 515–521 <https://doi.org/10.1016/j.jasrep.2017.02.025>
- Radić Rossi, I.** 2017, Amfore tipa Korint B iz hrvatskog podmorja, in: *Amphorae as a Resource for the Reconstruction of Economic Development in the Adriatic Region in Antiquity: Local Production*, Lipovac Vrkljan G., Radić Rossi I., Konestra A. (eds.), Institut za arheologiju u Zagrebu, Zagreb, 13–25.
- Šašel Kos, M.** 2007, The Illyrian king Ballaeus – some historical aspects, in: *Empire, Illyrie, Macédoine*, Berranger-Auserve D. (ed.), Clermont-Ferrand, 125–138.
- Šešelj, L.** 2010, *Promunturium Diomedis: svetište na rtu Ploča i jadranska pomorska trgovina u helenističkom razdoblju*, Unpublished PhD Thesis, Sveučilište u Zadru, Zadar.
- Šešelj, L., Ilkić, M.** 2014, Money circulation in Liburnia in the pre-imperial period: preliminary report, in: *Akten der 5. Internationaler Österreichischer Numismatikertag in Enns 21. und 22. Juni 2012, Forschungen in Lauriacum 15*, Abram M., Emmerig H., Harreither R. (eds.), Enns – Linz, 43–53.
- Šešelj, L., Ilkić, M.** 2015, Maritime trade in the Pre-Roman Period in the Eastern Adriatic: a preliminary report on ceramic and numismatic evidence in Liburnia, in: *AdriAtlas et l'histoire de l'espace adriatique du VIe s. a.C. au VIIIe s. p.C. Actes du colloque international de Rome (4–6 novembre 2013)*, Marion Y., Tassaux F. (eds.), Bordeaux, 419–433.
- Ugarković, M.** 2016, Trouble in paradise? Among the last comedy scenes in red-figure: an oinochoe from Issa and its cultural context, *Vjesnik za arheologiju i historiju dalmatinsku*, Vol. 109, 57–98.
- Ujes, D.** 1999, Rhizon (Montenegrin coast), a trading and staple town on the crossroads of Mediterranean and inland Balkan routes – Late Classical and Hellenistic pottery evidence, *Quaderni ticinesi di numismatica e antichità classiche*, Vol. 28, 203–220.
- Ujes Morgan, D.** 2012, Ancient Greek Coin Finds from Risan, in: *Dans L'Illyrie méridionale et l'Épire dans l'antiquité V, Actes du 5ème Colloque international de Grenoble (10–12 octobre 2008)*, Lamboley J.-L., Castiglioni M. P. (eds.), De Bocard, Paris, 114–132.
- Visonà, P.** 2017, Rethinking the coinage of Issa, a Greek island polity, *Vjesnik za arheologiju i historiju dalmatinsku*, Vol. 110(1), 193–232.
- Visonà, P.** 2018, A numismatic newsletter from northern Dalmatia, *The Numismatic Chronicle*, Vol. 178, 107–122.