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A HOARD OF DRACHMS OF APOLLONIA AND DYRRHACHIUM FROM THE CITY MUSEUM SISAČKA

The City Museum Sisak has obtained a hoard of imitations of the drachms of Apollonia and Dyrrhachium allegedly found in the nearby Odra Sisačka in the early 1980s. The coins are most likely *subaerati*, poorly executed with no legends on the reverses (save for the abbreviated city name *DYP*) and two legends on the obverses (one nonsensical). Curiously, their die axes are aligned and oriented to 12h, and they were produced by four different die combinations. The distribution of both the original coins of Apollonia and Dyrrhachium and their imitations suggests that this hoard was almost certainly produced, and most likely also deposited, in the areas further to the east. The hoard is only the second example of a collective find consisting exclusively of imitations of the drachms of Apollonia and Dyrrhachium (alongside the Romanian Troianul hoard), and the metrological analysis and comparative study alongside other similar hoards from Romania and Hungary has provided the means of dating the hoard in the early second half of the 1st c. BC.

Key words: Apollonia; Dyrrhachium; imitations; Odra Sisačka; Siscia; coin circulation / *Ključne riječi: Apolonija; Dirahij; imitacije; Odra Sisačka; Siscija; optjecaj novca*

The circumstances of the find and the description of the hoard

If authentic, the hoard reportedly found in the immediate vicinity of Sisak would almost certainly belong to the coin circulation of the pre-conquest period – i.e. the period prior to the Roman capture of the Late Iron Age settlement of Segest(ic)a. The issue of authenticity revolves around the unreliability of the report relating the actual find-site.¹ The find in question is a hoard of imitations of the drachms of Apollonia and Dyrrhachium reportedly from Odra Sisačka (ca. 1800 m as the crow flies from the north-western corner of ancient Siscia), ‘representing a chance find of a hoard, according to the finder’s [or finders’] report’.² My attempts to obtain more information on the circumstances of the find from the intermediary responsible for the City Museum Sisak’s acquisition of the hoard remained futile, which speaks volumes on the reliability of the information he presented during the transaction. According to the memories of Zdenko Burkowski, at

1 This paper is an enlarged and updated version of the text published in Bilić 2020: 157–159. I would like to thank the GMS director Vlatko Čakširan and the GMS curators Iskra Bačani, Rosana Škrkulja and Tea Tomaš Barišić for giving me the opportunity to study and publish this hoard. My thanks also extend to Zdenko Burkowski, a former GMS curator, who first drew my attention to the hoard, and to Ivan Drnić, my colleague at the AMZ, who motivated me to study and publish it.

2 Burkowski 2008: 15. According to the typology offered in Sășianu 1987: 209–219, these imitations should be more properly classified as ‘counterfeits’. The hoard is mentioned in the files of the Numismatic department of the AMZ s.v.; Burkowski 1983: (4), (7)–(8); 2001: 14–15, 22–23 cat. 2–5; 2004: 29–30, 74 (cat. 131–133); 2008: 15, 26 (cat. 2–4); Mirnik 1996: 528.



Map 1. Yellow dashed rectangle: the assumed position of the Augustan-Tiberian military camp (after Drnić 2018); yellow dotted irregular oblong: Roman Siscia (after Demicheli *et al.* 2012); yellow dashed ellipse: Roman 1st-2nd c. structures and small finds excavated in 2010; blue ellipse: the north-western necropolis of Siscia (after Demicheli *et al.* 2012); blue dashed ellipse: 1st-2nd c. Roman necropolis; red dashed circle: the Late Iron Age settlement on the Pogorelac (after Drnić 2018); red dashed ellipse: the assumed position of the Late Iron Age settlement on the left bank of the Kupa (after Drnić 2018); red circle: the assumed find-site of the Odra hoard (made by T. Bilić, 2020) / Karta 1. Pravokutnik isprekidanih žutih linija: pretpostavljeni položaj vojnog logora iz augustovsko-tiberijskog razdoblja (prema Drnić 2018); izduženi nepravilni oblik omeđen žutom istočkanom linijom: rimska Siscija (prema Demicheli *et al.* 2012); isprekidana žuta elipsa: rimske strukture i pokretni nalazi 1.-2. st. otkriveni 2010.; plava elipsa: sjeverozapadna nekropola Siscije (prema Demicheli *et al.* 2012); isprekidana plava elipsa: rimska nekropola 1.-2. st.; crveni istočkani krug: mladeželjeznodobno naselje na Pogorelcu (prema Drnić 2018); isprekidana crvena elipsa: pretpostavljeni položaj mladeželjeznodobnog naselja na lijevoj obali Kupe (prema Drnić 2018); crveni krug: pretpostavljeno mjesto nalaza ostave iz Odra (izradio T. Bilić, 2020.)

the time a curator at the Museum, the hoard was found during the construction of a shed in Odra, more precisely, in the part of the village nearest to Sisak, i.e. at its easternmost part.³

The City Museum Sisak at present keeps 69 coins from this hoard. All coins appear to be *subaerati* (silver-coated coins with a copper or bronze core or coins made from a copper-silver alloy of an unknown ratio),⁴ and were produced by three obverse dies (with one of these appearing in two variants) and four reverse dies. Two die combinations share a single obverse die, with (type 1) or without (type 1A) the (nonsensical) inscription ΣΤΙΠ, while their reverse dies are different.⁵ The reverses of these coins imitate Dyrrhachian drachms, which also applies to another die combination with 23 pieces (type 2).⁶ All three combinations bear an inscription ΔΥΡ on the reverse and depict a cow on the obverse turned left. This particular orientation of the cow is characteristic of late Apollonian drachms, which opens the possibility that we are here dealing with hybrids; that is, it is possible that the obverses were imitating precisely the late Apollonian drachms. The reverse of the last of these three combinations has some symbols in the field to the left and right of the central motif. These symbols are reminiscent of similar symbols (club, spear tip, bow, lizard) appearing on Dyrrhachian (and Apollonian) staters much earlier than drachms. The flans on which this type was struck are somewhat larger (range 18,5–23 mm, average diameter ca. 20 mm, median diameter 20,75 mm) in comparison to the flans of the remaining three types. With these only two flans approximate 20 mm, while all are in the range of 16–20 mm with an average diameter of ca. 17,5 mm and a median diameter of 18 mm. The last type of imitations or counterfeits (type 3) emulates an Apollonian drachm bearing the name of the mint magistrate ΝΙΚΩΝ and a symbol in the exergue perhaps imitating *caduceus* – a symbol appearing on the original drachm of this type – on the obverse together with a cow turned right (on original drachms it is actually turned left), dating from the 60s BC or somewhat earlier;⁷ it appears that the reverse depiction on this type was derived from the reverse die of the preceding type rotated 90°, including the – now stylized – symbols to the left and right of the central motif.



Fig. 1. An original Apollonian drachm of the mint magistrate Nikon (Davissons Ltd. E-Auction 6 Lot 11; <https://davcoin.com/lot/e-auction-6-lot-11>) (left) and its imitation from the Odra hoard (GMS inv. 1227) (right) (photo by I. Krajcar, 2020) / Sl. 1. Originalna apolonijska drahma kovničkog magistrata Nikona (Davissons Ltd. E-Auction 6 Lot 11; <https://davcoin.com/lot/e-auction-6-lot-11>) (lijevo) i njezina imitacija iz odranske ostave (GMS inv. 1227) (desno) (fotografija I. Krajcar, 2020.)

- 3 Burkowsky, pers. comm., 2019. At a position immediately next to the right bank of the Odra, i.e. at the easternmost part of the modern village, some Roman structures and small finds (1st–2nd c. ware, coins from the 1st c. onwards) were excavated (Bačani 2010: 313–314). At the same time, the remains of a 1st–2nd c. necropolis were found on the left bank of the Odra (Bačani 2009: 291–292). No pre-Roman material was found at either of these positions.
- 4 The term ‘*subaerati*’ will be used throughout this paper heuristically in both senses due to the lack of metallurgical analysis of the coins.
- 5 The die combination with the obverse inscription: inv. nos. 1189–1190, 1195–1199, 1202–1206, 1243–1246, 1250; the die combination without the obverse inscription: inv. nos. 1188, 1191–1194, 1200, 1255–1256.
- 6 Inv. nos.: 1201, 1207–1226, 1252–1253.
- 7 Inv. nos.: 1227–1242, 1247–1249, 1251, 1254. For the date see Petrányi 1995–1996: 6 (series -18, 66/65 BC). Picard, Gjongecaj 2000: 159 (no. 60), date this emission to the third phase of Apollonian drachms (120/100–80/70 BC). The original drachms of this type are rather rare; a total of 17 pieces are known from the hoards of Dieci 1, Dieci 2, Bobaia and Taşad in Romania and Rupci, Sadovec and ‘NW Bulgaria’ in Bulgaria, nowhere exceeding five pieces (Petrányi 1995–1996: 6; Picard, Gjongecaj 2000: 159).

GMS inv. no.	obv.-rv. combination*	weight (g)	diameter (mm)	axis	no. on plates
1203	1	3.94	18	20° ccw	1
1198	1	3.85	18	10° ccw	2
1244	1	3.51	17.5	10° ccw	3
1243	1	3.45	17.5	10° ccw	4
1204	1	3.36	17	10° ccw	5
1246	1	3.32	18	20° ccw	6
1250	1	3.32	18	20° ccw	7
1197	1	3.26	16.5	20° ccw	8
1196	1	3.08	17.5	10° ccw	9
1205	1	3.06	17	20° ccw	10
1202	1	3.01	18	10° ccw	11
1206	1	2.92	16	10° ccw	12
1190	1	2.89	17	10° ccw	13
1195	1	2.89	16.5	10° ccw	14
1189	1	2.81	17	20° ccw	15
1199	1	2.73	17	20° ccw	16
1245	1	2.65	18	10° ccw	17
1256	1A	3.73	19	20° ccw	18
1188	1A	2.8	17	12	19
1194	1A	2.72	18	12	20
1192	1A	2.67	18	10° ccw	21
1193	1A	2.59	17	10° ccw	22
1200	1A	2.57	18	10° ccw	23
1191	1A	2.54	17	20° ccw	24
1255	1A	2.54	18	20° ccw	25
1225	2	3.67	21	12	26
1214	2	3.29	20	10° ccw	27
1217	2	3.26	21	12	28
1212	2	3.24	20	12	29
1222	2	3.24	20	12	30
1201	2	3.22	20	12	31
1216	2	3.09	19.5	12	32
1209	2	3.08	21	12	33
1218	2	3.06	19.5	12	34
1207	2	3.05	19.5	12	35
1253	2	3.03	19.5	10° ccw	36
1219	2	3.02	23	12	37
1208	2	3.01	20	12	38
1252	2	3.01	20	10° ccw	39
1226	2	2.94	19	12	40
1220	2	2.92	19	10° ccw	41
1210	2	2.89	18.5	12	42
1221	2	2.86	19	10° ccw	43

1213	2	2.76	19	12	44
1224	2	2.72	20	12	45
1223	2	2.68	19	10° ccw	46
1215	2	2.64	21	12	47
1211	2	2.56	19	12	48
1247	3	3.56	18	10° ccw	49
1236	3	3.55	19	10° ccw	50
1234	3	3.24	19	10° ccw	51
1233	3	3.19	20	10° ccw	52
1254	3	3.19	18	10° ccw	53
1248	3	3.16	17	12	54
1239	3	3.03	17.5	10° ccw	55
1240	3	3.01	18	10° ccw	56
1241	3	3	18	12	57
1227	3	2.97	19	10° ccw	58
1251	3	2.92	18	10° ccw	59
1231	3	2.85	18	10° ccw	60
1229	3	2.83	18	10° ccw	61
1232	3	2.81	18	10° ccw	62
1237	3	2.77	18	10° ccw	63
1238	3	2.75	20	12	64
1249	3	2.67	17	10° ccw	65
1228	3	2.66	18	10° ccw	66
1235	3	2.51	17.5	10° ccw	67
1230	3	2.48	17	10° ccw	68
1242	3	2.15	17	12	69

Table 1. The drachms of Apollonia and Dyrrhachium from the Odra Sisačka hoard (*1 = obv. 1 + rv. 1; 1A = obv. 1 + rv. 2; 2 = obv. 2 + rv. 3; 3 = obv. 3 + rv. 4) / *Tablica 1. Drahme Apolonije i Dirahija iz Odre Sisačke* (*1 = av. 1 + rv. 1; 1A = av. 1 + rv. 2; 2 = av. 2 + rv. 3; 3 = av. 3 + rv. 4)

The die-axes orientations

The coins from the Odra hoard display a rather unusual technological characteristic. All drachms were struck with almost no deviation between the obverse and reverse orientations, i.e. with an axis orientation of 12h/0°. This is somewhat unusual for this type of coins. Twenty-three coins were aligned precisely at 12h/0° (with a tolerance of ca. 5° during measurement), 36 coins deviate ca. 10° (always in the counterclockwise direction), while ten coins deviate ca. 20° (also always in the counterclockwise direction). For this level of precision the craftsman had to align the dies mechanically, for example by hinged dies, or with some other device, which is a rather unexpected technological proficiency in a LIA counterfeiter; otherwise, some other, less precise, method of marking the die alignment could have been used, for which a clear motivation is difficult to discern.⁸

⁸ For the methods of obtaining fixed die alignments see Macdonald 1906: 178; De Callatay 1996: 90–96; Haymann, Hollstein 2016: 386, 391. Mechanically fixed dies did not appear before the 3rd c. AD; prior to this period a deviation of ca. 1h (30°) in both directions was tolerated (De Callatay 1996: 93; Haymann, Hollstein 2016: 391). The coins from the Odra Sisačka hoard, with the maximal deviation of 20°, fit into this category of material.

Moreover, contemporary numismatic studies emphasize the value of the appearance of aligned dies as an 'authenticity test' for the specimens from a certain emission, whether in relation to ancient or modern counterfeits.⁹ At the same time, a study focusing on this particular issue has made clear that the original drachms of Apollonia and Dyrrhachium in general do not show an inclination towards the use of aligned dies; the latest emissions of Apollonian drachms, showing a certain inclination to a die axis orientation of 6h, might prove to be an exception to this rule.¹⁰ My analysis of the drachms of Apollonia (204) and Dyrrhachium (181) kept at the Zagreb Archaeological Museum partially supports de Callataÿ's conclusion, but not without certain qualifications.¹¹ In the corpus of analysed coins only the orientations to cardinal directions (12, 3, 6, 9 h) surpassed 10% of the total number of coins. Moreover, all eight cardinal orientations (four in Apollonian and four in Dyrrhachian coins) surpassed the 10% share. The share of orientations to cardinal directions was 58,56% (Dyrrhachium) and 51,97% (Apollonia). These percentages suggest that some orientations were preferred, while others were used much less frequently. If the tolerance of 1h/30° in relation to an ideal orientation of 12h is accepted, 25,49% Apollonian coins and 19,88% Dyrrhachian are aligned to this particular direction. Furthermore, the orientations to sectors ('12', '3', '6', '9') defined in these terms are rather evenly distributed: Dyrrhachium: 19,88% – 25,96% – 20,99% – 33,14%; Apollonia: 25,49% – 26,96% – 25,98% – 21,56%. These percentages make the idea of a dominant orientation to 12h highly unlikely. Thus the supposition that the aligned dies were used by the counterfeiter in order to adjust his product to original coins has to be discarded. In any case, the quality of execution of these coins, especially the reverses, would certainly be a more obvious criterion in determining their authenticity, much more than the somewhat abstract die orientation. Some coins are cracked on the rim, suggesting that they were struck when the flan has already cooled off.¹²

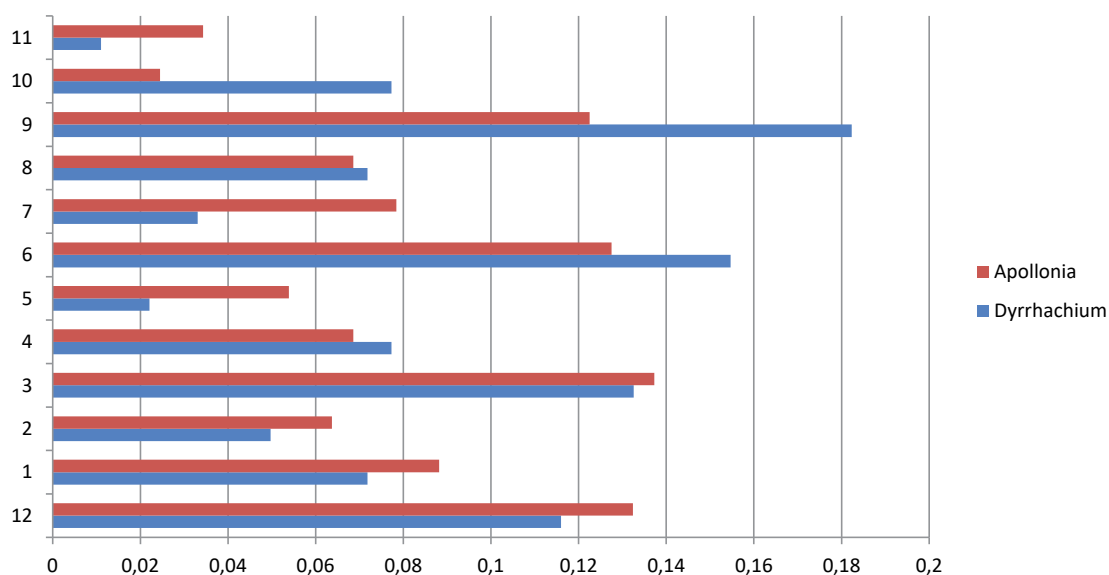


Fig. 2. The die axis orientations of the Apollonian and Dyrrhachian drachms from the AMZ collection (made by T. Bilić, 2020) / Sl. 2. Orijentacije osi drahmi Apolonije i Dirahija iz fundusa AMZ-a (izradio T. Bilić, 2020.)

⁹ Mildenberg 1989: 23–29; De Callataÿ 1996: 12, 97–100; Haymannn, Hollstein 2016: 382, 390.

¹⁰ De Callataÿ 1996: 53.

¹¹ In comparison, De Callataÿ has analysed 117 coins of Apollonia and 312 coins of Dyrrhachium from the Copenhagen, Cambridge and Tübingen collections (De Callataÿ 1996: 53, n. 200).

¹² Rant 2000: 34, 38.

Comparanda

The imitations of drachms from the Odra Sisačka hoard are somewhat reminiscent of the corpus of imitations or counterfeits kept in the Museum of Slavonia in Osijek, and which were probably found in the area of Osijek. Their production is attributed to the Scordisci, and they are made of poor-quality silver, silver-coated bronze or simply bronze, most often imitating the latest emissions of Apollonian and Dyrrhachian drachms, which are indeed the most numerous types found in the region.¹³ One bronze (originally suberate?) imitation of a Dyrrhachium drachm is serrated, reflecting the influence of Republican *denarii*, which circulated in the area partially contemporaneously with the Adriatic drachms (see below).¹⁴ This particular coin imitates the Dyrrhachian drachm with the legend ΜΕΝΙΣΚΟΣ on the obverse, which was struck in the second half of the 50s BC, so it could not have been made prior to this date.¹⁵ At the same time, the Odra Sisačka imitations can be compared with the hoard of 417 *subaerati* of Dyrrhachian drachms, as well as Apollonia/Dyrrhachium hybrids (Dyrrhachian obverse/Apollonian reverse), from Troianul in Muntenia.¹⁶ Along with the Odra hoard, the Troianul hoard is the only find of this type that consists solely of imitations/counterfeits. It was found during ploughing in a ceramic vessel; soon afterwards a trial trench was excavated at the find site, which yielded a small number of additional coins.¹⁷ In this way, the authenticity of this find seems undisputable. All coins in this hoard were struck by ten obverse and only four reverse dies, but as much as 401 coins were struck by only two reverse dies.¹⁸ The legends on the obverse and, especially, reverse are full of mistakes and often nonsensical, but the depictions – especially reverse – are more faithful to the originals in comparison with the Odra pieces. Unfortunately, the die axis orientations of the coins from this hoard are not recorded, so the Troianul hoard cannot be compared in this particular way with the unusual technological aspect of the production of the Odra drachms noted above.

Metrological considerations

The weights of Apollonian and Dyrrhachian drachms can be used as an indication of the authenticity of coins and, to some extent, as the chronological indicator for separate emissions. The average weight of the Odra Sisačka drachms – in the range of 2,15–3,94 g – is precisely 3,00 g, with the average weight of type 1 drachms being 3,18 g, that of

13 Göricke-Lukić 2004: 38–39, 41–45, cat. 9–23; 2018: 42–43, 58–61, cat. 27–41. For imitations and counterfeits of Apollonian and Dyrrhachian drachms see also Sășianu 1980: 68–70, Popović 1987: 114–115, Meta 2012, 25; 2015: 243–245, and, especially, Sășianu 1987. The popularity of these imitations/counterfeits is reflected in the find of casting moulds for imitations of Dyrrhachian drachms, as well as the cast silver-coated drachms themselves, at Zboryanovo (or Sboryanovo) in NE Bulgaria (Dzanev, Prokopov 2007: 74; Paunov 2013: 167). Mitrea 1981–1982: 48 (cf. Sășianu 1987: 218) believed that the imitations found in the ‘Geto-Dacian’ territory were produced in the Adriatic mints themselves, or perhaps in their immediate vicinity, which is clearly repudiated by the Zboryanovo (or Sboryanovo) find.

14 Göricke-Lukić 2004: 42, cat. 14; 2018: 59, cat. 33.

15 Petrányi -8 to -3, i.e. 55–50 BC (Petrányi 1995–1996: 11, cf. <https://asklapiadas.ancients.info/05dDyrIssues.html>). According to Meta 2015: 125–130, this is the last (86th) emission of the latest (V) phase of the Dyrrhachian mint (80/70–60/55 BC).

16 Mitrea 1981–1982: 32–33 recognizes the categories of *subaerati*, bronze pieces without a visible silver coating and pieces that appear to have been made of silver; Sășianu 1987: 217–218 treats them all as *subaerati*.

17 Mitrea 1981–1982: 31.

18 Mitrea 1981–1982: 35–36.

type 1A 2,77 g, type 2 3,01g and type 3 2,92 g. The median weight of drachms is 3,05 g if all specimens are included, but 3,02 g if extremely light (2,15 g) and extremely heavy (four pieces heavier than 3,67 g) coins are excluded. The median weight of type 1 is 3,30 g (3,08 g if two extremely heavy coins are excluded); the median weight of type 1A is 3,14 g (2,67 g if one extremely heavy coin is excluded); the median weight of type 2 is 3,12 g (2,93 g if one extremely heavy coin is excluded); the median weight of type 3 is 2,86 g (3,02 if one extremely light and two extremely heavy coins are excluded). The vast majority of coins (64, 92,75%) falls in the weight range from 2,45 to 3,60 g (with one lighter and four heavier pieces), while the largest number of coins (8) lies within the weight range of 3,00–3,05 g.

	average weight	median weight	median weight without extremes	range (>90%)
total	3,00 g	3,05 g	3,02 g	2,45–3,60 g (>90%)
type 1	3,18 g	3,30 g	3,08 g	
type 1A	2,77 g	3,14 g	2,67 g	
type 2	3,01 g	3,12 g	2,93 g	
type 3	2,92 g	2,86 g	3,02 g	
NIKΩN		3,32 g		3,18–3,46 g

Table 2. The weights of the drachms from the Odra hoard by types and the weight of the drachms issued by magistrate Nikon / *Tablica 2. Težine drahmi iz odranske ostave po tipovima te težina drahmi magistrata Nikona*

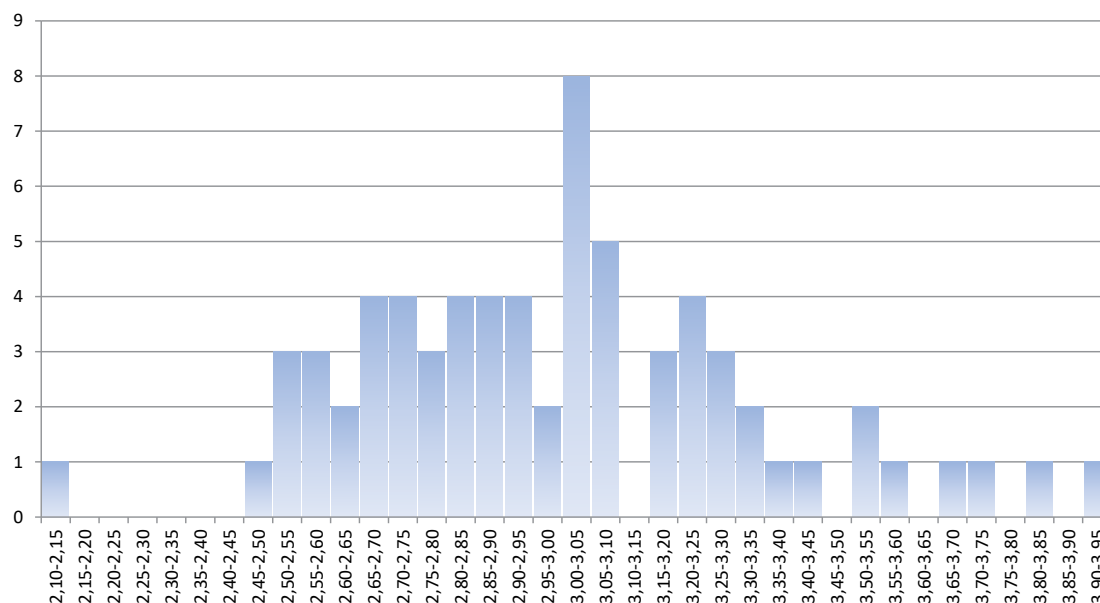


Fig. 3. Histogram of the weights of the drachms of Apollonia and Dyrrhachium from the Odra hoard (made by T. Bilić, 2020) / *Sl. 3. Histogram težina drahmi Apolonije i Dirahija iz odranske ostave (izradio T. Bilić, 2020.)*

Although an ideal official weight standard certainly existed, the actual weights of Apollonian and Dyrrhachian drachms were in practice inconsistent, whether between separate emissions or between individual coins of the same emission.¹⁹ Thus the median weight of Apollonian drachms is between 2,92 and 3,30 g (range from 2,89 g to 3,46 g in a 95% confidence interval); the lower limit advances to 3,13 g if the last three emissions

¹⁹ Meta 2012: 22; 2015: 6 and Ujes-Morgan 2012: 368 note the ideal weight of drachms as ca. 3,40 g, Meta 2015: 185 that of ca. 3,30/3,40 g, while Picard, Gjongecaj 2001: 248–249 recognize a weight range of 3,00–3,20 g.

are excluded.²⁰ The median weight of the coins (15 in all) issued by the mint magistrate Nikon, perhaps the model for the Odra Sisačka type 3 coins, was 3,32 g, with the lightest piece of 3,18 g and the heaviest of 3,46 g.²¹ At the same time, the median weight of Dyrrhachian drachms was between 2,71 and 3,37 g (range from 2,44 g to 3,69 g in a 95% confidence interval); the lower limit advances to 3,15 g if the last five emissions are excluded, while in this case the lightest coin in a 95% confidence interval rises to 3,06 g.²² It appears that the weights of the latest emissions of Apollonian and Dyrrhachian drachms are somewhat reduced,²³ but this is somewhat compromised by the existence of specimens of late Apollonian drachms from the weight range of 2,20–2,50 g and those of ca. 3,30 g of the same emission.²⁴

In terms of hoards, the original Apollonian drachms from the Drăgești hoard encompass a weight range of 2,50–3,00 g, that from the Tašad hoard are mostly lighter than 3,00 g, while the pieces from the Dieci 2 hoard are all heavier than 3,00 g;²⁵ the greatest number (249, 91,54%) of the original drachms of Apollonia and Dyrrhachium from the Pânade hoard falls in the weight range of 3,06–3,45 g.²⁶ Since the weights of the original drachms vary significantly, it does not seem prudent to assert that the imitations of Apollonian drachms are reduced in comparison to the originals.²⁷

The weights of imitations themselves also show some significant variations. Thus the imitations and counterfeits from the Museum of Slavonia, perhaps found in the area of modern Osijek, have an average weight of 2,58 g, in the range of 2,0–3,6 g. The median weight of these coins is 3,0 g, but if the two heaviest coins of 3,6 g, which stand out considerably with their weight, are excluded, the median weight is 2,6 g. Twelve out of the total of 15 coins are lighter than 3,0 g (more precisely, they fall in the range of 2,0–2,6 g).²⁸ On the other hand, one Apollonia (obv.)/Dyrrhachium (rv.) hybrid and the imitations of Apollonian and Dyrrhachian drachms from the Doboz hoard are all heavier than 3,00 g (3,01–3,73 g),²⁹ while the imitations of Apollonian drachms of poor silver from the Sacalasau Nou hoard fall in the weight range of 2,05–3,68 g.³⁰ The imitations of Dyrrhachian drachms of better quality in general weight between 3,11–3,40 g, while those of lesser quality encompass the range of 2,11–3,10 g, with the Dyrrhachian *subaerati* weighing between 2,11 and 3,00 g.³¹ This weight distribution shows how difficult it is to claim that the imitations are reduced in weight in comparison to the original products of the two Adriatic mints.

20 Petrányi 1995–1996: 7.

21 Petrányi 1995–1996: 7.

22 Petrányi 1995–1996: 11.

23 Petrányi 1995–1996: 8–9 for Apollonia from 59/58 BC onwards and for Dyrrhachian issues from 60/59 BC onwards, Petrányi 1995–1996: 11, cf. <https://asklapiadas.ancients.info/05dDyrIssues.html> (Meta 2015: 118–130, 232–238 dates the last (V) phase of Dyrrhachian mint to 80/70–60/55); Meta 2015: 204 with Figs. 11–12, 236 with Fig. 16 on p. 237, for Dyrrhachian phase V.

24 Sășianu 1987: 213.

25 Sășianu 1987: 213. With respect to the Drăgești hoard, this applies to 45 out of 68 drachms (66,2%; Sășianu 1980: 123) of the emissions selected by Sășianu; but of the total of 123 original drachms in the hoard, only 66 (53,66%) weigh less than 3,00 g. For the Tašad hoard see Sășianu 1980: 173; for the Dieci 2 hoard see Sășianu 1980: 112–113.

26 Mitrea 1981–1982: 43; Conovici 1986–1991: 55, Fig. 11 (265 pieces, 95,32%).

27 Sășianu 1987: 213.

28 Göricke-Lukić 2004: 41–45, cat. 9–23; 2018: 58–61, cat. 27–41.

29 Biró Sey, Goldman 1978: 233, nos. 136–139, 144; Sășianu 1987: 215.

30 Sășianu 1980: 146–147; 1987: 216 (where it is claimed that all imitative drachms from this hoard are lighter than 2,70 g, which is contradicted by the data published in the earlier publication).

31 Sășianu 1987: 217–218.

As already mentioned, the Odra Sisačka hoard finds its best parallel in the Troianul hoard, which makes a comparison with the weights of these *subaerati* of Dyrrhachian drachms and Apollonia/Dyrrhachium hybrids (Dyrrhachian obverse/Apollonian reverse) of utmost importance. The weights of *subaerati* hybrids (84) from the Romanian hoard lay within a range of 1,50–3,30 g.³² The majority of drachms (338, 83,05%) are in the weight range of 2,16–3,00 g (with 32 lighter and 37 heavier coins);³³ the average weight of all coins is 2,59 g, while the largest number of drachms (41) is in the weight range of 2,46–2,50.³⁴ However, contrary to our expectations, the comparison of the hoards from Odra and Troianul reveals significant dissimilarities between the weight structures of these two hoards of Apollonian and Dyrrhachian subaerate hybrids. The average weight of the coins in these two hoards is significantly different (Odra 3,00 g : Troianul 2,59 g),³⁵ which also applies to their respective median weights (Odra 3,02 or 3,05 g : Troianul ca. 2,50 g). At the same time, the weight range of the coins from the Troianul hoard – excluding the extreme specimens – is significantly lower in comparison to the weight range of the coins from the Odra hoard (Troianul 2,16–3,00 g : Odra 2,45–3,60 g). Furthermore, the weight structure of the Odra hoard is more similar to that of the Čelopek (Kosovo) hoard, which consists mostly (>90%) of Apollonian drachms of the very late ΝΙΚΟΝΟΣ-ΣΩΣΙΚΡΑΤΗΣ emission (Petrányi -2, 50/49 BC = Picard, Gjongjecaj 74),³⁶ and to several Romanian (Drăgești, Tașad) and Hungarian (Doboz, near the Romanian border, Békés county) hoards.³⁷ The largest number of coins from these hoards is represented by the latest Apollonian emissions (Drăgești: Petrányi -9 to -2; Tașad: Petrányi -10 to -2; Doboz: Petrányi -9 to -1),³⁸ i.e. the period 58–48 BC according to Petrányi or 80/70–48 BC according to Picard, Gjongjecaj 2000, 156.

The median weight of the coins from the Odra hoard (3,02 or 3,05 g) is similar to the median weight of the Čelopek hoard (ca. 2,95 g)³⁹ and the median weight of the coins from the Doboz hoard (3,155 g, or 3,06 g if the heaviest and the lightest coins, which deviate significantly from the rest, are deduced); it is also somewhat similar to the median weight of the coins from the Drăgești hoard (2,86 g if the four extremely heavy and the same number of extremely light coins are excluded) and the Tașad hoard (2,825 g if the two extremely light and one extremely heavy coin are excluded).

At the same time, the weight range of the coins from the Odra hoard (2,45–3,60 g, >90%) is also similar to the weight ranges of the hoards from Čelopek (2,55–3,35 g, >95%), Doboz (2,80–3,50 g, >95%), Drăgești (2,55–3,33 g, >90%) and Tașad (2,50–3,15 g, >95%). The Odra hoard is the most similar to the Drăgești hoard in terms of weight structure

32 Sășianu 1987: 218.

33 Mitrea 1981–1982: 41, has a tally of 336 coins in the range of 2,20–3,00 g, but his Fig. 2 on p. 40 does not bear this out (the actual number is 326).

34 Mitrea 1981–1982: 40, 42; Conovici 1986–1991: 64.

35 The Odra hoard is similar in this particular aspect to the hoards from Doboz (average weight 3,13 g; Biró Sey, Goldman 1978: 231–233), Drăgești (average weight 2,94 g; Sășianu 1980: 122–124) and Tașad (average weight 2,86 g; Sășianu 1980: 173–174). It shares some other structural characteristics with these hoards, of which more will be said in the remainder of this text. The average weights of the coins in the Dieci 2 (3,18 g; Sășianu 1980: 112–119) and Pećinci (3,16 g; Popović 1978: 9–17) hoards are also worthy of comparison.

36 Popović 1976: 175–179; the hoard also contained two imitations, one each of Apollonia and Dyrrhachium.

37 The Romanian hoards Cermei and Talpe should be added to this group of hoards, but since individual coin weights are not available for these hoards, they will not be discussed here. Conovici 1986–1991: 52, Fig. 6 is a combined analysis of these five hoards.

38 Petrányi 1995–1996: 6. This also applies to the Cermei hoard (Petrányi -9 to -3), which will not be analysed on the level of coin here.

39 Although Popović 1976 does not record the weights of individual coins, it is possible to read them off of his diagram (Popović 1976: 177, Fig. 2), although only in intervals of 0,05 g.

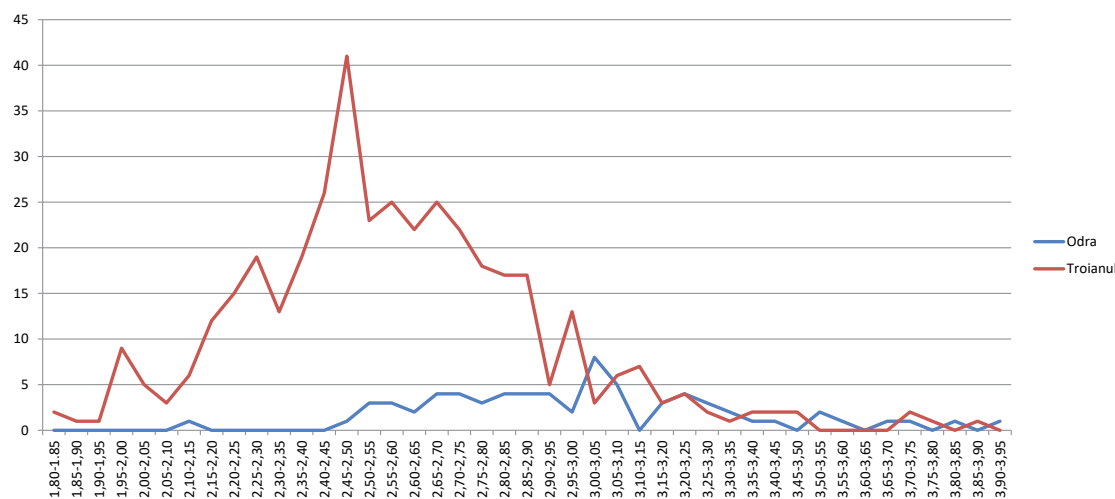


Fig. 4. Histogram of the weights of the drachms of Apollonia and Dyrrhachium from the Odra hoard in comparison with the weights of the drachms from the Troianul hoard (made by T. Bilić, 2020) / Sl. 4. Usporedni histogram težina drahmi Apolonije i Dirahija iz odranske ostave s težinama drahmi iz ostave Troianul (izradio T. Bilić, 2020.)

(see Figs. 5–8) and, in a somewhat lesser measure, to the hoards from Doboz and Tašad, while the Čelopek hoard is somewhat different from these four hoards in this respect.

The Doboz hoard consists mostly of drachms of Apollonia (133), together with several Dyrrhachian drachms (4), but also contains three imitations of Apollonia and a single imitation of a Dyrrhachian drachm, with a single hybrid.⁴⁰ The hoard from Drăgești also consists mostly of drachms of Apollonia (127), but also contained five imitations.⁴¹ Similarly, the Tašad hoard mostly contained Apollonian drachms (64), along with several Dyrrhachian drachms (4) and a single imitation of an Apollonian drachm.⁴² The somewhat earlier Dieci 2 hoard can be compared with these hoards; it consisted of earlier emissions of Apollonian and Dyrrhachian drachms in comparison with these other hoards.⁴³ Together with 52 drachms of Apollonia and 201 drachms of Dyrrhachium (with eight indeterminable drachms), the hoard also contained two Dyrrhachian *subaerati* and 43 Dyrrhachian and a single Apollonian imitation. The median weight of the coins from this hoard is 3,10 g (excluding the six lightest coins), while they fall in the range of 2,65–3,55 (>95%). These values are comparable with the Odra numbers, as well as with similar hoards from Romania and Hungary, but this particular hoard belongs to an earlier chronological horizon. It also differs from the hoards enumerated above in its weight structure, which is clearly displayed in the parallel histograms of the weights of the Apollonian and Dyrrhachian drachms from the Odra hoard and the weights of drachms from other hoards discussed in this section (Figs. 5–9).

Finally, the median weight, as well as the weight range, of the coins from the Pećinci hoard (Syrmia) is comparable to the aforementioned Romanian and Hungarian hoards.

40 Biró Sey, Goldman 1978: 231–233. A Republican *denarius* was also contained in the hoard, RRC 282.2 of 118 BC (Biró Sey, Goldman 1978: 231, no. 1).

41 Sășianu 1980: 122–124. Three Republican *denarii* were also contained in the hoard, RRC 250.1, 328.1 and 352.1a of 132, 100 and 85 BC, respectively (Sășianu 1980: 124, nos. 134–136).

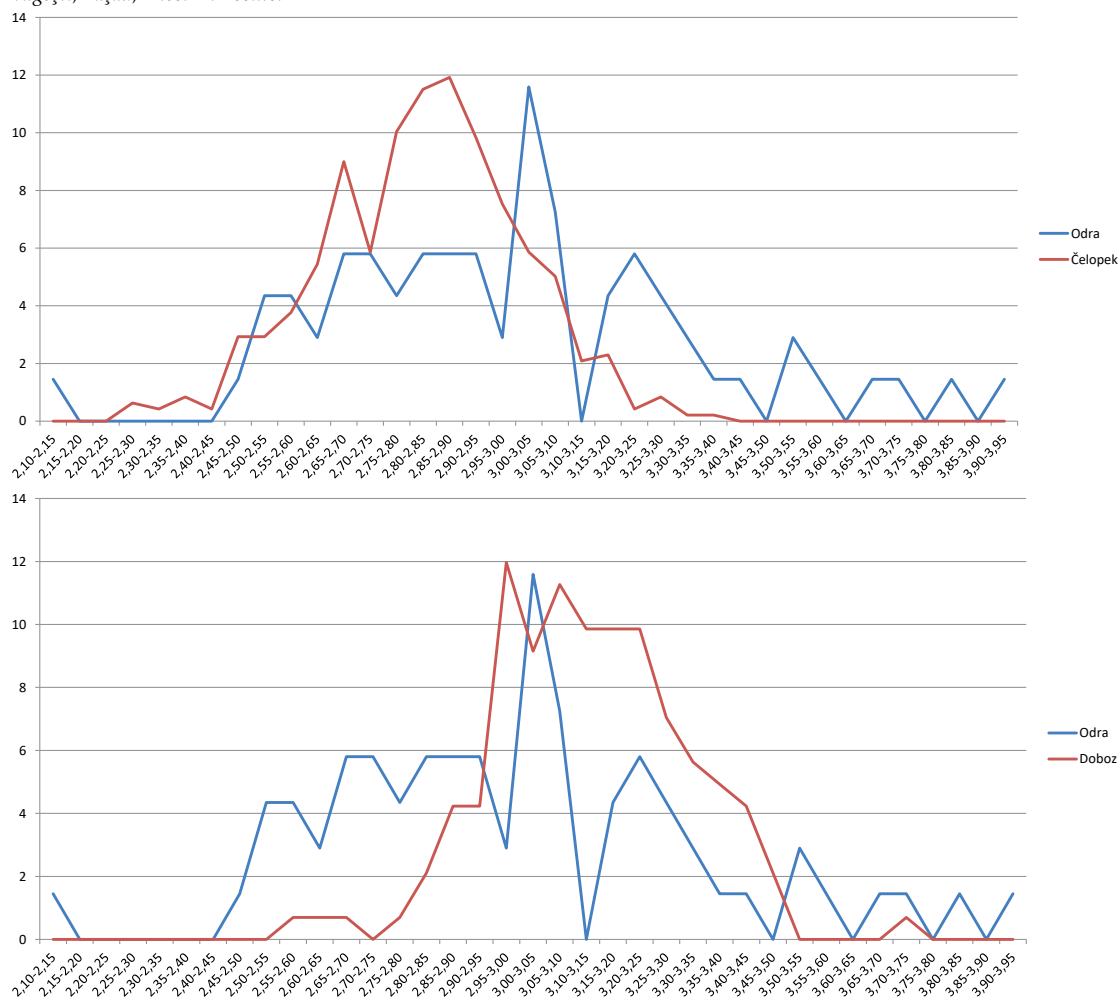
42 Sășianu 1980: 173–174.

43 Apollonian drachms of phase III Picard, Gjongjecaj (120/100–80/70 BC) or 85–60 BC Petrányi (Petrányi 1995–1996: 6; <https://asklapiadas.ancients.info/05eApollIssues.html>); Dyrrhachian drachms -32 to -8 Petrányi, ca. 92–54 BC (Petrányi 1995–1996: 10; <https://asklapiadas.ancients.info/05dDyrIssues.html>), according to Meta 2015: 118–130, 223–238 issued in the last two phases (IV–V) of the Dyrrhachian mint, 120–60/55 BC.

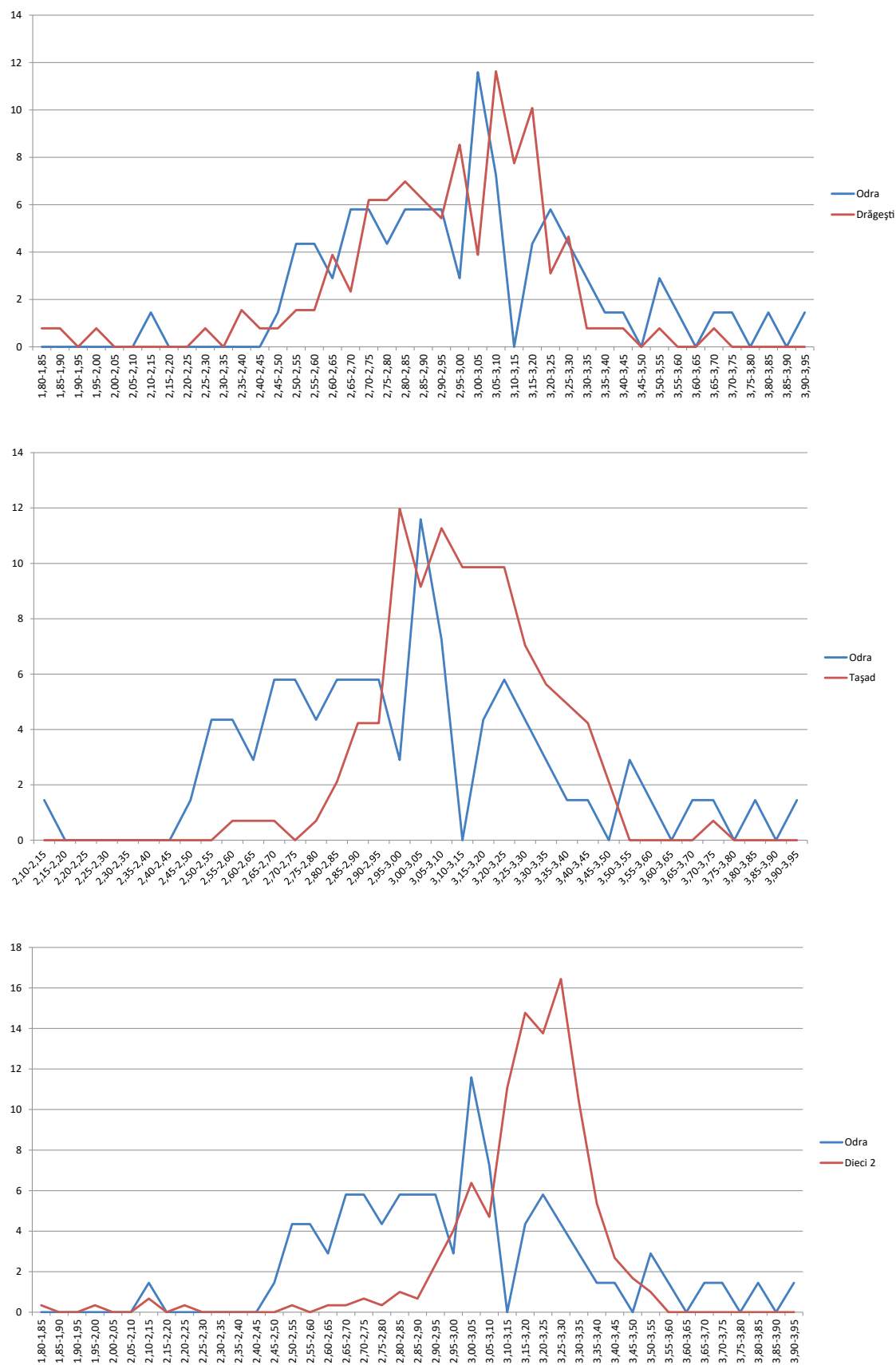
Furthermore, this hoard is composed mainly of the latest issues of the Dyrrhachian mint (Petrányi -10 to -2 = Meta V/84–86), dated to 57–49 BC by Petrányi or 80/70–60/55 BC by Meta,⁴⁴ together with a small number of the latest issues of the mint of Apollonia (Petrányi -9 to -3), dated to 56–50 BC according to Petrányi or 80/70–48 BC according to Picard, Gjongjecaj 2000, 156, and also four imitations of Dyrrhachian drachms.⁴⁵ However, the weight structure of the Pećinci hoard is significantly different from the weight structure of the coins from the Odra hoard (**Fig. 10**).

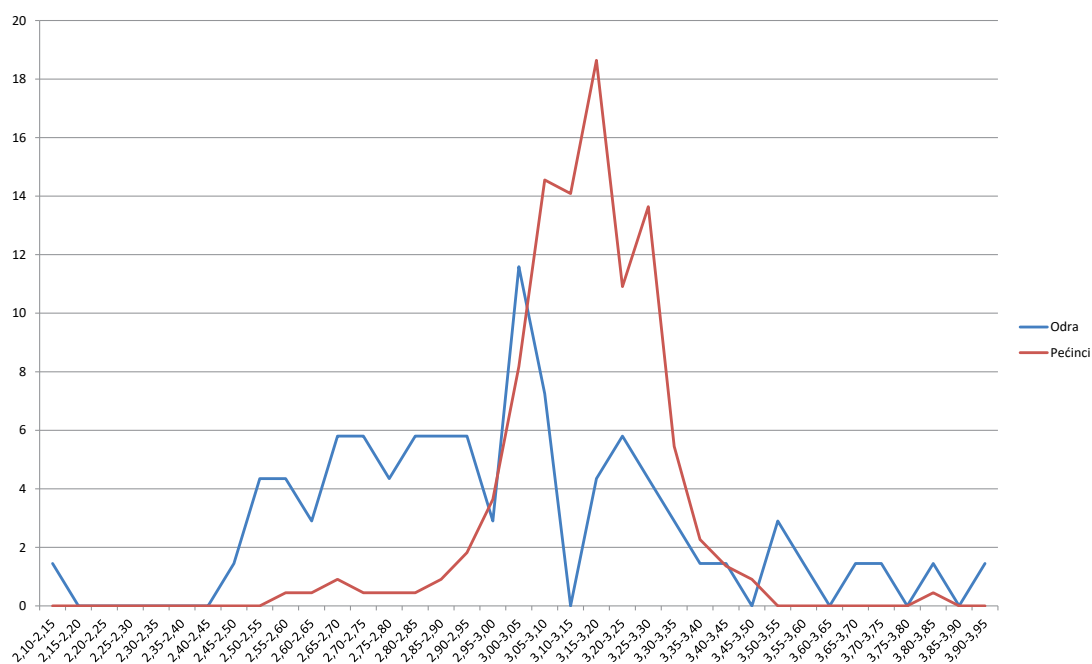
	average weight	median weight	median weight without extremes	range (>90%)	A	D	I	R
Odra	3,00 g	3,05 g	3,02 g	2,45–3,60 g (>90%)	-	-	+	-
Čelopek		ca. 2,95 g		2,55–3,35 g (>95%)	+	-	+	-
Doboz	3,13 g	3,155g	3,06 g	2,80–3,50 g (>95%)	+	+	+	+
Drăgești	2,94 g		2,86 g	2,55–3,33 g (>90%)	+	-	+	+
Taşad	2,86 g		2,825 g	2,50–3,15 g (>95%)	+	+	+	-
Dieci 2	3,18 g		3,10 g	2,65–3,55 (>95%)	+	+	+	-
Pećinci	3,16 g	3,205	3,175 g	2,85–3,50 (>95%)	+	+	+	-

Table 3. The weights and composition of the Odra hoard in comparison with the hoards from Čelopek, Doboz, Drăgești, Taşad, Dieci 2 and Pećinci / Tablica 3. Pregled težina i sastava odranske ostave u usporedbi s ostavama Čelopek, Doboz, Drăgești, Taşad, Dieci 2 i Pećinci



⁴⁴ Petrányi 1995–1996: 10; <https://asklapiadas.ancients.info/05dDyrIssues.html>; Meta 2015: 118–130, 232–238.
⁴⁵ Popović 1978.





Figs 5–10. Parallel histograms of the weights of Apollonian and Dyrrhachian drachms from the Odra, Čelopek, Doboz, Drăgești, Tašad, Dieci 2 and Pećinci hoards (in percentages) (made by T. Bilić, 2020) / Sl. 5–10. Usporedni histogrami težina drachmi Apolonije i Dirahije iz odranske ostave s težinama drachmi iz ostava Čelopek, Doboz, Drăgești, Tašad, Dieci 2 i Pećinci (u postocima) (izradio T. Bilić, 2020.)

In this way the metrological analysis suggests that the Odra hoard can be dated to a period similar to the one to which the hoards from Doboz, Drăgești and Tašad (as well as Pećinci) belong, that is, after 48 BC. But it is important to emphasize that this method of determining chronological positions is very insecure and must be understood only as a tentative suggestion. The Odra hoard, together with its Troianul counterpart, is the only hoard of Apollonian and Dyrrhachian drachms that consists exclusively of imitations. They also share the characteristic of being of a very poor quality, both in terms of the quality of metal used for their production (*subaerati*) and the (un)faithfulness of die displays to the originals, especially the reverse dies. But while the Troianul drachms are somewhat more faithful to the original representations – the reverses of the Odra drachms, except from the legend ΔYP , do not show any ambition to reproduce the original legends – the weights of the Odra coins are significantly larger and thus closer to the original drachms. The average and median weight, as well as the weight structure, of the Odra hoard is much more similar to several Romanian and eastern Hungarian hoards that consist of original drachms produced in the latest phases of the two Adriatic mints. These hoards, although dominated by Apollonian and/or Dyrrhachian drachms, also contained a smaller number of imitations (Čelopek 2, <0,5%, with 4 *subaerati* total of 1,26%; Doboz 5, ca. 3,5%; Drăgești 6, 4,4%; Tašad 1, <1,5%). Alongside Troianul and Odra, the only hoard that contained a large number and proportion of imitations is the somewhat earlier Dieci 2 hoard with 46 *subaerati* and imitations, ca. 15% of the total number of coins. However, all imitations from these hoards, including those from the Troianul hoard, attempt, however incompetently, to reproduce the legends from the original drachms.⁴⁶ The lack of any ambition to this effect makes the counterfeiter of the coins from the Odra hoard a unique forger of Apollonian and Dyrrhachian coins.

46 Troianul: Mitrea 1981–1982: 45–46, T. I–II; Čelopek: Popović 1976, T. IV: 28–29; Doboz: Biró Sey, Goldman 1978: 229, Fig. 7, 136–139, 144; Dieci 2: Sășianu 1980: T. XX–XXI.

Distribution and circulation

The distribution of drachms produced in the two Adriatic mints and their imitations supports the chronological positioning of the Odra Sisačka find reached by the metrological analysis of the hoard. Furthermore, the analysis of the distribution of this coinage suggests, but does not prove, the original provenance (in the meaning of find-site) of the hoard 'from Odra Sisačka' or the region in which the coins contained in the hoard were struck. Since the drachms of Apollonia and Dyrrhachium were almost completely replaced in the early second half of the 1st c. BC in Pannonia by the Roman Republican *denarii*, it can be presumed that their imitations or counterfeits appeared at least shortly prior to this event. This replacement could hardly have taken place much earlier, since the drachms of these two mints themselves arrived in greater numbers in this region only during the previous several decades of the 1st c. BC.⁴⁷ In this sense, if the find-site of the 'Odra' hoard were authentic, it would belong to the margins of coin circulation in ancient Sisak in the period not long prior to the Roman conquest of the LIA settlement. But since there are legitimate doubts that these imitations or counterfeits were actually produced somewhere else, this find cannot be taken unequivocally as representing a testimony of the coin circulation in the area of Sisak in the Late Iron Age. It is important to emphasize that the drachms of Apollonia and Dyrrhachium were not included in the standard ancient coin circulation in the area of Sisak and north-western Croatia,⁴⁸ which raises the question of the motivation of the hypothetical local counterfeiter.⁴⁹ It seems more probable that these imitations or counterfeits were produced in the regions further to the east, i.e. in the territory of modern Romania, northern Serbia, eastern Hungary or northern Bulgaria, which is further supported by the distribution of the emission of the Apollonian drachm bearing the name of the mint magistrate ΝΙΚΩΝ on the obverse, as well as the distribution of imitations and counterfeits of the drachms of Apollonia and Dyrrhachium.⁵⁰ Thus, taking into account the metrological and stylistic analysis, the most likely scenario is that the imitations were produced somewhere in the central or eastern Balkans area, probably in the 40s BC. But it is much more difficult to reconstruct how they arrived to the City Museum Sisak. If we are willing to put our trust in the words of the middleman by whose mediation the find arrived to the Museum, then we are obliged

47 For a review of opinions on this subject see Bilić 2014: 266–267, 273, 275–276; to the literature there cited one should add Meta 2012: 24–25, 29, 31; 2015: 223–225, 232–235, 260–267. Dizdar 2016: 42 suggests, on the basis of surface finds of the coins of Apollonia and Dyrrhachium on the site of Blato in Vinkovci, where the finds from Lt D1 period (i.e., prior to ca. 80 BC) are dominant, that these coins, together with Roman Republican *denarii*, arrived to southern Pannonia in a somewhat earlier period. By courtesy of Marko Dizdar I have had the opportunity to examine the photographs of the numismatic finds from the site of Blato, which do not support Dizdar's hypothesis. I had a total of six coins of Apollonia and Dyrrhachium at my disposal, all of which are undoubtedly dated to the latest periods of activity of these mints, in the period corresponding in archaeological terms precisely to Lt D2. These are the drachms of Dyrrhachium Petrányi -7 and -6 (of 54 and 53 BC, respectively) = Meta V/86 (the latest emission of the last period of activity of Dyrrhachian mint 80/70–60/55 BC), drachms of Apollonia Petrányi -6 (two specimens) and -4 (53 and 51 BC, respectively) = Picard, Gjongjecaj 69 and 67 (the last period of activity of the mint of Apollonia, 80/70–48 BC), and one Apollonian hybrid (obverse Petrányi -9 of 56 BC = Picard, Gjongjecaj 70; reverse Petrányi -11 or -5 of 58 or 52 BC = Picard, Gjongjecaj 72–74; all Picard, Gjongjecaj emissions belong to the last period of activity of the mint of Apollonia, 80/70–48 BC).

48 Only four pieces were found in Sisak, one of which is a hemidrachm (Bilić 2017a: 460, 468, nos. 28–31), with mere two examples in the north-western Croatia outside Sisak, one of which is a bronze imitation (Bilić 2017b: 226, 239, nos. 8–9).

49 Cf. Göricke-Lukić 2004: 38; 2018: 43.

50 A distribution map of imitations and counterfeits of the drachms of Apollonia and Dyrrhachium is reproduced in Săşianu 1987: 211, Fig. 2.

to accept the modern Odra Sisačka, in the immediate surroundings of ancient Segest(ic)a/Siscia, as the find site of these imitations of drachms produced in the central or eastern Balkans. But if the distribution and area of circulation of Apollonian and Dyrrhachian drachms, as well as their imitations, is taken into account, that is, their almost complete absence from the area of south-western Pannonia, the central or eastern Balkans emerges as a more plausible region of origin of the hoard, i.e. the hoard would in this case have been deposited most probably somewhere in the region during or not long after the 40s BC. In this scenario Sisak would have been used as a well-known site that provided 'legitimation' of the find within the framework of south-western Pannonia.

Naturally, despite the almost total absence of drachms of Apollonia and Dyrrhachium and their imitations from the area of south-western Pannonia, the possibility that the coins from the Odra hoard were imported in the region during the Late Iron Age cannot be categorically discarded. In this scenario the Scordisci, the eastern neighbours of the carriers of the material culture of the eastern spread of the Mokronog group,⁵¹ would probably be the decisive agents in the production and/or the transfer of the coins from the Odra hoard from the regions further to the east.⁵² Indeed, the drachms of Apollonia and Dyrrhachium were an important feature of the coin circulation in the territory of the Scordisci (without raising the question of the function of these and other coins in the Scordiscan society, i.e. whether they were used as money or para-monetary objects), where a number of hoards and individual finds of this coinage were found.⁵³ Also, as already mentioned, the imitations of these types of coins were undoubtedly present on the Scordiscan territory, more precisely, in the area of the modern eastern Slavonia.⁵⁴ At the same time, some tangible relations existed between the inhabitants of Segest(ic)a/Siscia and the Scordisci in the Late Iron Age, including the appearance of the coins of the Scordisci in Siscia itself.⁵⁵ It was previously proposed that the rare finds of the drachms of Apollonia and Dyrrhachium in Sisak should be understood as related to the contacts with the Scordisci.⁵⁶ Also, a modest number of Tauriscan coins, who were the carriers of the material culture of the Mokronog group, was present in coin circulation in the Scordiscan area.⁵⁷ From this perspective the immediate surroundings of Sisak cannot be completely discarded as the location of the deposition of the hoard, although it seems more likely that it was deposited and eventually recovered in the areas further to the east and that it only arrived to Sisak in the period immediately prior to its acquisition by the City Museum.

51 I.e. the Taurisci, Dizdar 2011: 71–73, 89–90; 2013: 11–12; cf. Šašel-Kos 1997: 25.

52 The hoard was associated with the Scordisci in Bilić 2015: 68; 2017a: 460–461.

53 See Ujes-Morgan 2012.

54 Göricke-Lukić 2004: 38–39, 41–45, cat. 9–23; 2018: 42–43, 58–61, cat. 27–41.

55 Bilić 2015: 68; 2017a: 458, 461, 466.

56 Bilić 2015: 68; 2017a: 460, 466. The same would apply to several Macedonian and Epirote bronze coins (Bilić 2015: 68; 2017a: 460).

57 Bilić 2012: 362, 364, 365, Fig. 3; 2017a: 462–463.

TYPE 1









Plates I–IV. The coins from the Odra hoard (photos by I. Krajcar, 2021) / Table I–IV. Kovanice iz ostave iz Odre Sisačke (fotografije I. Krajcar, 2021.)

Pl. / T. I: 1. GMS inv. no. / br. 1203
Pl. / T. I: 2. GMS inv. no. / br. 1198
Pl. / T. I: 3. GMS inv. no. / br. 1244
Pl. / T. I: 4. GMS inv. no. / br. 1243
Pl. / T. I: 5. GMS inv. no. / br. 1204
Pl. / T. I: 6. GMS inv. no. / br. 1246
Pl. / T. I: 7. GMS inv. no. / br. 1250
Pl. / T. I: 8. GMS inv. no. / br. 1197
Pl. / T. I: 9. GMS inv. no. / br. 1196
Pl. / T. I: 10. GMS inv. no. / br. 1205
Pl. / T. I: 11. GMS inv. no. / br. 1202
Pl. / T. I: 12. GMS inv. no. / br. 1206
Pl. / T. I: 13. GMS inv. no. / br. 1190
Pl. / T. I: 14. GMS inv. no. / br. 1195
Pl. / T. I: 15. GMS inv. no. / br. 1189
Pl. / T. I: 16. GMS inv. no. / br. 1199
Pl. / T. I: 17. GMS inv. no. / br. 1245
Pl. / T. I: 18. GMS inv. no. / br. 1256
Pl. / T. I: 19. GMS inv. no. / br. 1188
Pl. / T. I: 20. GMS inv. no. / br. 1194
Pl. / T. I: 21. GMS inv. no. / br. 1192
Pl. / T. II: 22. GMS inv. no. / br. 1193
Pl. / T. II: 23. GMS inv. no. / br. 1200

Pl. / T. II: 24. GMS inv. no. / br. 1191
Pl. / T. II: 25. GMS inv. no. / br. 1255
Pl. / T. II: 26. GMS inv. no. / br. 1225
Pl. / T. II: 27. GMS inv. no. / br. 1214
Pl. / T. II: 28. GMS inv. no. / br. 1217
Pl. / T. II: 29. GMS inv. no. / br. 1212
Pl. / T. II: 30. GMS inv. no. / br. 1222
Pl. / T. II: 31. GMS inv. no. / br. 1201
Pl. / T. II: 32. GMS inv. no. / br. 1216
Pl. / T. II: 33. GMS inv. no. / br. 1209
Pl. / T. II: 34. GMS inv. no. / br. 1218
Pl. / T. II: 35. GMS inv. no. / br. 1207
Pl. / T. II: 36. GMS inv. no. / br. 1253
Pl. / T. II: 37. GMS inv. no. / br. 1219
Pl. / T. II: 38. GMS inv. no. / br. 1208
Pl. / T. II: 39. GMS inv. no. / br. 1252
Pl. / T. II: 40. GMS inv. no. / br. 1226
Pl. / T. II: 41. GMS inv. no. / br. 1220
Pl. / T. II: 42. GMS inv. no. / br. 1210
Pl. / T. III: 43. GMS inv. no. / br. 1221
Pl. / T. III: 44. GMS inv. no. / br. 1213
Pl. / T. III: 45. GMS inv. no. / br. 1224
Pl. / T. III: 46. GMS inv. no. / br. 1223

Pl. / T. III: 47. GMS inv. no. / br. 1215
Pl. / T. III: 48. GMS inv. no. / br. 1211
Pl. / T. III: 49. GMS inv. no. / br. 1247
Pl. / T. III: 50. GMS inv. no. / br. 1236
Pl. / T. III: 51. GMS inv. no. / br. 1234
Pl. / T. III: 52. GMS inv. no. / br. 1233
Pl. / T. III: 53. GMS inv. no. / br. 1254
Pl. / T. III: 54. GMS inv. no. / br. 1248
Pl. / T. III: 55. GMS inv. no. / br. 1239
Pl. / T. III: 56. GMS inv. no. / br. 1240
Pl. / T. III: 57. GMS inv. no. / br. 1241
Pl. / T. III: 58. GMS inv. no. / br. 1227
Pl. / T. III: 59. GMS inv. no. / br. 1251
Pl. / T. III: 60. GMS inv. no. / br. 1231
Pl. / T. III: 61. GMS inv. no. / br. 1229
Pl. / T. III: 62. GMS inv. no. / br. 1232
Pl. / T. III: 63. GMS inv. no. / br. 1237
Pl. / T. IV: 64. GMS inv. no. / br. 1238
Pl. / T. IV: 65. GMS inv. no. / br. 1249
Pl. / T. IV: 66. GMS inv. no. / br. 1228
Pl. / T. IV: 67. GMS inv. no. / br. 1235
Pl. / T. IV: 68. GMS inv. no. / br. 1230
Pl. / T. IV: 69. GMS inv. no. / br. 1242

LITERATURE / LITERATURA

- Baćani 2009 Iskra Baćani, Sisak – Komunalna zona (AN 4), in: Z. Wiewegh (Ed.), *HAG* 6, 2009., 291–292.
- Baćani 2010 Iskra Baćani, Odra – Staro Pračno (AN 4), in: Z. Wiewegh (Ed.), *HAG* 7, 2010., 313–314.
- Bilić 2012 Tomislav Bilić, Coin Circulation 3rd Century BC – AD 193, in: B. Migotti (Ed.), *The Archaeology of Roman Southern Pannonia*, British Archaeological Reports International Series 2393, Archaeopress, Oxford, 2012., 359–388.
- Bilić 2014 Tomislav Bilić, A hoard of Republican *denarii* from Prud, near Bosanski Šamac / Ostava republikanskih denara iz Pruda kod Bosanskog Šamca, *VAMZ* 47, 2014., 253–283.
- Bilić 2015 Tomislav Bilić, Predcarski novac iz Siska / Pre-imperial coins from Sisak, u: / in: R. Škrkulja, T. Tomaš Barišić (ur. / Eds.), 35. *prije Krista / 35 years before Christ*, Gradski muzej Sisak, Sisak, 2015., 65–69.
- Bilić 2017a Tomislav Bilić, Pre-Imperial coinage from Sisak, in: D. Demicheli (ur. / Ed.), *Illyrica antiqua – in honorem Duje Rendić-Miočević, Proceedings of the International Conference Šibenik, 12th–15th September 2013*, Sveučilište u Zagrebu, Zagreb, 2017., 457–478.
- Bilić 2017b Tomislav Bilić, Coin circulation in the pre-Imperial period in north-west Croatia, *VAMZ* 50, 2017., 223–253.
- Bilić 2020 Tomislav Bilić, Mlađeželjeznodobni numizmatički nalazi s područja Siska / Late Iron Age numismatic finds from the area of Sisak, u: / in: I. Drnić (ur. / Ed.), *Segestika i Siscija – naselje s početka povijesti / Segestica and Siscia – A Settlement from the Beginning of History*, Arheološki muzej u Zagrebu, Zagreb, 2020., 150–159.
- Biró Sey, Goldman 1978 Katalin Biró Sey, György Goldman, A dobozi görög éremlelet, *Archaeologiai Értesítő* 105, 1978., 223–234.
- Burkowsky 1983 Zdenko Burkowsky, *Skupni nalazi srebrnog novca na području Siska*, Gradski muzej Sisak, Sisak, 1983.
- Burkowsky 2001 Zdenko Burkowsky, *Novac u Sisku kroz minula stoljeća*, Gradski muzej Sisak, Sisak, 2001.
- Burkowsky 2004 Zdenko Burkowsky, *Željezo doba u Sisku i Moslavini*, Gradski muzej Sisak, Sisak, 2004.
- Burkowsky 2008 Zdenko Burkowsky, *Katalog numizmatike Gradskog muzeja Siska. Predrimsko i rimsko ranocarsko razdoblje. Svezak 1.*, Gradski muzej Sisak, Sisak, 2008.
- Conovici 1986–1991 Niculae Conovici, Noi contribuții privind circulația drahmelor din Dyrrhachium și Apollonia: aspectul metrologic, *Buletinul Societății Numismatice Române* 80–85.134–139, 1986–1991., 67–75.
- Demicheli et al. 2012 Dino Demicheli, Ivan Radman-Livaja, Zoran Wiewegh, List of personal names on a ceramic bowl fragment from Siscia, in: M. Fuchs, R. Sylvestre, C. Schmidt Heidenreich (éds.), *Inscriptions mineures: Nouveautés et réflexions. Actes du premier Colloque Ductus, 19–20 juin 2008*, P. Lang, Bern–Berlin–Bruxelles, 2012., 185–192.
- De Callataÿ 1996 François De Callataÿ, *Les monnaies grecques et l'orientation des axes*, *Glaux* 12, Edizioni ennerre, Milano, 1996.

- Dizdar 2011 Marko Dizdar, The La Tène culture in central Croatia: The problem of the Eastern border of the Taurisci in the Podravina region, in: M. Guštin, M. Jevtić (Eds.), *The Eastern Celts. The communities between the Alps and the Black Sea*, Univerza na Primorskem, Koper, 2011., 71–90.
- Dizdar 2013 Marko Dizdar, *Zvonimirovo – Veliko polje. Groblje latenske kulture 1 / A Cemetery of the La Tène Culture 1*, Institut za arheologiju, Zagreb, 2013.
- Drnić 2018 Ivan Drnić, Segestika i Siscija – od ruba imperija do provincijskog središta / Segestica and Siscia – from the periphery of the Empire to a provincial center, u: / in: I. Drnić (ur. / Ed.), *Segestika i Siscija – od ruba imperija do provincijskog središta / Segestica and Siscia – from the Periphery of the Empire to a Provincial Center*, Arheološki muzej u Zagrebu, Zagreb, 2018., 7–21.
- Dzanev, Prokopov 2007 Georgi Dzanev, Ilya Prokopov, Coin Hoard and Coins from II–I c. BC. Collection of the Historical Museum Razgrad, in: I. Prokopov, R. Gushterakliev, G. Dzanev, *Numismatic Collection of the Historical Museum Lovech (Anc. Melita) & Numismatic Collection of the Historical Museum Razgrad (Anc. Abritus)*, Coin Collections and Coin Hoards from Bulgaria 1, Provias, Sofia, 2007., 69–103.
- Göricke-Lukić 2004 Hermine Göricke-Lukić, Novčani opticaj u Osijeku i okolici prije rimskog osvajanja, *OZ* 27, 2004., 35–48.
- Göricke-Lukić 2018 Hermine Göricke-Lukić, *Mursa u svjetlu numizmatičkih nalaza 1.–3. stoljeća / Mursa in the Light of Numismatic Finds from the 1st–3rd century*, Mursa Aeterna 7, Hrvatska akademija znanosti i umjetnosti, Zavod za znanstveni i umjetnički rad u Osijeku, Muzej Slavonije u Osijeku, Osijek, 2018.
- Haymannn, Hollstein 2016 Florian Haymannn, Wilhelm Hollstein, Beobachtungen zur Prägetechnik republikanischer Münzen: Die Stempelstellung, in: F. Haymannn, W. Hollstein, M. Jehne (Hrsg.), *Neue Forschungen zur Münzprägung der Römischen Republik. Beiträge zum internationalen Kolloquium im Residenzschloss Dresden 19.–21. Juni 2014*, Nomismata, Historisch-numismatische Forschungen 8, Habelt, Bonn, 2016., 381–392.
- Macdonald 1906 George Macdonald, Fixed and loose dies in ancient coinage, in: G. F. Hill (Ed.), *Corolla Numismatica. Numismatic essays in honour of B. V. Head*, Oxford University Press, London–New York–Toronto, 1906., 178–188.
- Meta 2012 Albana Meta, Names and mintmarks at the mint of Dyrrhachium (c. 270-60/55 BC): a case study, *Revue Belge de Numismatique et de Sigillographie* 158, 2012., 21–38.
- Meta 2015 Albana Meta, *Le monnayage en argent de Dyrrachion (375-60/55 av. J.-C.)*, Recherches archéologiques francoalbanaises 1, École Française d'Athènes, Athens, 2015.
- Mildenberg 1989 Leo Mildenberg, Those ridiculous arrows. On the meaning of the die position, *Nomismatika Chronika* 8, 1989., 23–27.
- Mirnik 1996 Ivan Mirnik, A Contribution to the Study of the Circulation of the Drachms of Apollonia and Dyrrhachium in Southern Pannonian Plain, *Annotazioni numismatiche* 24, 1996., 526–529.

- Mitrea 1981–1982 Bucur Mitrea, Monede false grecești descoperite în Dacia. Tezaurul de la Troianul, *Buletinul Societății Numismatice Române* 75–76.129–130, 1981–1982., 31–59.
- Paunov 2013 Evgeni Paunov, *From Koine to Romanitas: The numismatic evidence for Roman expansion and settlement in Bulgaria in antiquity (Moesia and Thrace, ca. 146 BC – AD 98/117)*, Ph.D. thesis, Cardiff University, Cardiff, 2013.
- Petrányi 1995–1996 Gyula Petrányi, Relative chronology of the drachms of Apollonia and Dyrrhachium in the final period of minting, *Numizmatikai Közlöny* 94–95, 1995–1996., 3–18.
- Picard, Gjongecaj 2000 Olivier Picard, Shpresa Gjongecaj, Les drachmes d'Apollonia à la vache allaitant, *Revue numismatique* 155, 2000., 137–160.
- Picard, Gjongecaj 2001 Olivier Picard, Shpresa Gjongecaj, Apollonia et le monnayage épirote: le trésor de Bakërr, *Revue numismatique* 157, 2001., 233–249.
- Popović 1976 Petar Popović, Ostava drahmi Apolonije iz Čelopeka kod Peći, *Starinar* 27, 1976., 175–179.
- Popović 1978 Petar Popović, Ostava drahmi Apolonije i Dirahiona iz Pećinaca, *Numizmatičar* 1, 1978., 9–22.
- Popović 1987 Petar Popović, *Novac Skordiska*, Arheološki institut Beograd – Matica srpska, Beograd–Novi Sad, 1987.
- Rant 2000 Andrej Rant, Novčarska tehnologija noričkih i panonskih Kelta / Mint technology of Norican and Pannonian Celts, u: / in: J. Dobrinić (ur. / Ed.), *Zbornik radova 2. Međunarodnog numizmatičkog kongresa u Hrvatskoj, 15.–17. listopada 1998. / Proceedings of the 2nd International Numismatic Congress in Croatia, October 15–17, 1998*, Dobrinić & Dobrinić, Hrvatsko numizmatičko društvo, Opatija, 2000., 33–41.
- Sășianu 1980 Alexandru Sășianu, *Moneda antică în vestul și nord-vestul României*, Muzeul Țării Crișurilor, Oradea, 1980.
- Sășianu 1987 Alexandru Sășianu, Imitations and counterfeits of the Apollonia and Dyrrhachium type drachmas and their circulation, in: P. Cabanes (éd.), *L'Illyrie Méridionale et l'Épire dans l'Antiquité I, Actes du Colloque international de Clermont-Ferrand (22–25 octobre 1984)*, Adosa, Clermont-Ferrand, 1987., 209–219.
- Šašel-Kos 1997 Marjeta Šašel-Kos, The End of the Norican Kingdom and the Formation of the Provinces of Noricum and Pannonia, in: B. Djurić, I. Lazar (Hrsg.), *Akten des IV. internationalen Kolloquiums über Probleme des provinzialrömischen Kunstschaffens, Situla* 36, Narodni muzej Slovenije, Ljubljana, 1997., 21–42.
- Ujes-Morgan 2012 Dubravka Ujes-Morgan, 1st Century BC Drachms of Apollonia and Dyrrhachium in the Territory of the Scordisci. A Prologue to the Roman Conquest of the Balkans, in: E. Paunov, S. Filipova (Eds.), *ΗΡΑΚΛΕΟΥΣ ΣΩΤΗΡΟΣ ΘΑΣΙΩΝ: Studia in honorem Iliae Prokopov sexagenario ab amicis et discipulis dedicata*, Faber, Veliko Turnovo, 2012., 367–387.

SAŽETAK

Ostava imitacija drahmi Apolonije i Dirahija iz Gradskog muzeja Sisak

Gradski muzej Sisak nabavio je tijekom ranih 1980-ih ostavu imitacija drahmi Apolonije i Dirahija navodno pronađenu u obližnjoj Odri Sisačkoj. Kovanice su najvjerojatnije suberati, loše su izrađene, bez legendi na reversima (osim skraćenog oblika imena grada ΔYP) i s dvije legende na aversima, od kojih je jedna besmislena. Neobično je to što su orijentacije osi poravnate prema 12h, a sve kovanice su izrađene sa svega četiri kombinacije pečata. Distribucija originalnih kovanica Apolonije i Dirahija, kao i njihovih imitacija, sugerira da su drahme iz ove ostave gotovo sigurno izrađene, a vjerojatno i odložene, u područjima istočnije od Panonije. Ostava je tek drugi skupni nalaz koji se sastoji isključivo od imitacija Apolonije i Dirahija (uz ostavu iz rumunjskog Troianula), a metrološka analiza ostave, kao i usporedba s drugim sličnim ostavama iz Rumunjske i Mađarske, omogućila je njezino datiranje u ranu drugu polovicu 1. st. pr. Kr.