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Coin circulation in the pre-Imperial period in north-west Croatia

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The paper will in the first place analyse in detail all pre-Imperial individual coin finds (that is, coins issued in or before 31 B.C.) recovered from the area of modern north-west Croatia, more or less corresponding to the area of the later province of Pannonia Savia. In the same time, the corresponding hoards, composed of the same types of coins, found in this region will also be discussed. The rich site of Segestica/Siscia, modern Sisak, has yielded the largest number of finds, but other lesser-known sites have also contributed to the general picture of coin circulation in the area, and the emphasis of this study will be precisely on those finds. The vast majority of coins are stray finds (i.e., fall under Reece's coin supply category),¹ while only a few spec-

imens were recovered during archaeological excavations (i.e., fall under Reece's coin loss category).² The largest number of specimens are Roman Republican coins, as a result of their large concentration in Sisak, but Celtic (Iron Age) coinage is also represented in significant numbers, especially that of the Taurisci. The newly published data, however scanty, allows a revision of some current conclusions with respect to the distribution of certain coin types, as well as a balanced discussion on the coin circulation in this region in the given period.

Key Words: coin circulation, Pannonia Savia, north-west Croatia, Celtic coinage, Iron Age coinage

¹ Reece 2003, 141, 165, cf. 141–149.

² Reece 2003, 141, 165, cf. 149–165.

INTRODUCTION³

Since a full-scale analysis of pre-Imperial coin finds from Sisak was recently published,⁴ I will here only briefly reproduce the conclusions from this study and focus on numismatic material from other sites in the area of the future Pannonia Savia.⁵ In archaeological terms, this region represents an eastern extension of the Tauriscan Mokronog group.⁶ The circulation at the all-important site of Sisak, it will be shown, differs significantly from the surrounding area, i.e. the region in which it is situated and which more or less gravitated towards it (present-day north-west Croatia and the immediately adjacent parts of Slovenia and Bosnia and Herzegovina). This important fact probably reflects a difference in the level of monetisation or, more generally, in coin use – and thus coin finds – between rural and urban sites, which is best documented in the analyses of respective coin uses in urban and rural monetary zones in the Roman world.⁷ However, the period analysed in this study – roughly the period prior to the Roman conquest of Segestica/Siscia in 35 B.C. – certainly incorporates additional elements that determined the nature of these two noticeably different monetary zones occupying the area of the future Pannonia Savia: the great prehistoric urban centre of Segestica/Siscia (later Roman Siscia), which entered the Roman zone of influence as early as the late first half of the 2nd c. B.C.,⁸ and the largely non-urbanised surrounding region that came under direct Roman rule only with the Augustan wars culminating in the capture of Seges-

tica/Siscia itself more than a century later.⁹ I will not discuss these additional elements, although some of them (e.g. the coinage of the Taurisci) will emerge naturally from the analysis of the coins themselves.

SEGESTICA/SISCIA¹⁰

It has been possible to analyse a total of 140 coins found in the area of modern Sisak. A great majority of the coins are Roman Republican specimens (99 pieces, 70,71%), followed by Celtic, i.e., Iron Age coins (27 pieces, 19,29%). Of the total number of the latter, 55,6% (i.e. 15 pieces) represent Tauriscan coinage, three more (11,1%) represent Norican coinage, and 18,5% (5 pieces) represent the coinage of the Scordisci. Twenty Celtic/Iron Age coins were made of silver (74,1%), and the remaining 7 pieces of billon or bronze (25,9%). No fewer than three quarters of the Celtic/Iron Age coins are tetradrachms (21 pieces, 77,8%), with the remaining 6 pieces (22,2%) representing smaller denominations. Almost all the Roman Republican coins found in Sisak are *denarii* (92 pieces, 92,93%), with an additional 4 *quinarii* (4,04%) and a single *victoriatu*s; a single bronze *semis* and an *aureus* of Quintus Cornuficius were also found. The diversity of the coin assemblage from Sisak can be explained by mere fortuity, or, perhaps more plausibly, it reflects the “cosmopolitan” nature of the Late Iron Age settlement of Segestica/Siscia. Strong connections with the Scordisci can be discerned in the 1st c. B.C.; the coinage of the Taurisci is also well represented in Sisak, which is hardly surprising due to the proximity of the territory occupied by this people, and Sisak was certainly an important location with respect to the penetration of Roman Republican coinage into the western and central Balkans area, as well as Transdanubia and, perhaps, Dacia.

³ This paper is a significantly expanded version – or rather an unabridged version – of Bilić, Nad forthcoming.

⁴ Bilić 2017.

⁵ For a geographical definition of the region discussed in this paper see Dizdar 2011, 71 n. 1; 2013, 11 n. 1. Dizdar included, in his survey of the region, the Kordun and Banovina sub-regions; I have further added the Ogulin-Plaški vale, since it is a logical geographical continuation of the territories to its north-east, leaning against a bulwark formed by the Dinaric Alps.

⁶ Dizdar 2011, 71–73, 89–90; 2013, 11–12; cf. Šašel-Kos 1997, 25.

⁷ Howego 1992, 20; Hollander 2007, 111, 134–135.

⁸ Dzino 2010, 72–73.

⁹ Mócsy 1974, 22; Domić-Kunić 2006, 93–95; Dzino 2010, 110–111.

¹⁰ This is a short summary of the discussion in Bilić 2017.

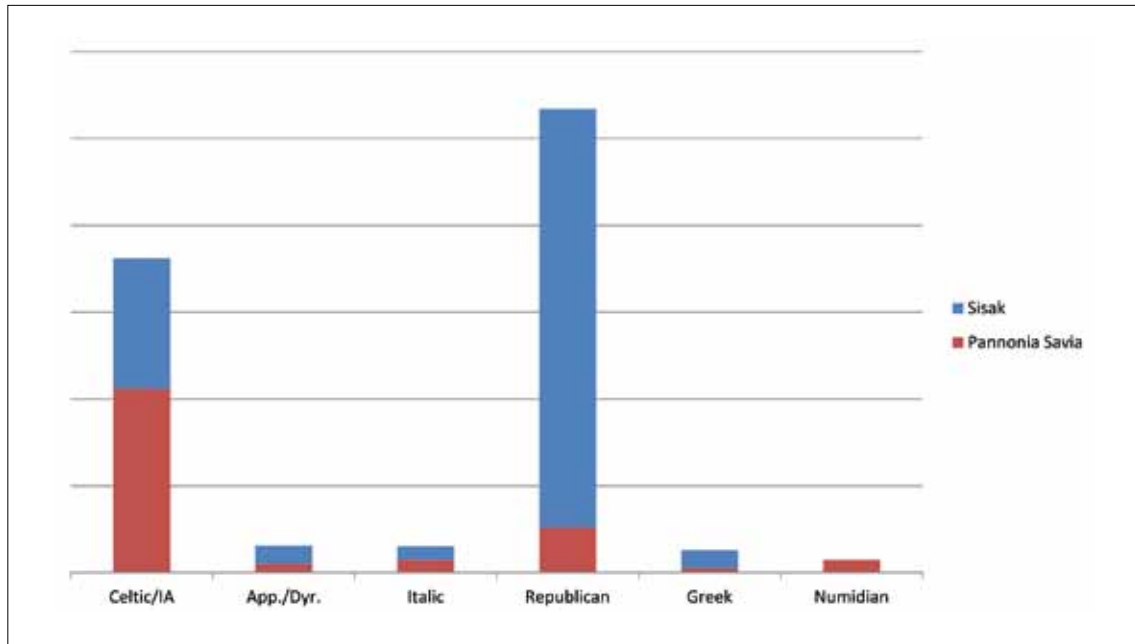


Chart 1: Comparison of the ratio of various types of pre-Imperial individual coin finds from Sisak and the surrounding region (north-west Croatia, i.e. Pannonia Savia)

Comparison with the corresponding data on Republican coinage from the two neighbouring sites of Emona (modern Ljubljana) and Celeia (modern Celje, both in present-day Slovenia) reveals the fact that the Republican coinage in Emona reflects the circulation of the late Augustan and succeeding periods, while that from Segestica/Siscia and Celeia reflect the circulation of the 1st c. B.C.¹¹ Several Republican coins have actually been recovered in archaeological excavations in Late Iron Age contexts, suggesting that they arrived in the area prior to the conquest of 35 B.C., and it is possible that this coinage in general indeed reflects the circulation of the 1st c. B.C. in Sisak, rather than that of the Imperial period. Furthermore, the structure of Celtic/Iron Age coins also reflects the circulation in the 1st c. B.C., with an occasional earlier type also present. In general, almost all finds suggest a context of the 1st century B.C.

¹¹ For Emona and Celeia see Kos 1986, 26, 53–56.

It remains an open question whether the specimens of Celtic/Iron Age coinage, at least the chronologically later types, together with specimens of (at least later types of) Roman Republican coinage found outside a confirmed stratigraphic context, which comprises almost all coinage of this type, actually found in Sisak, remained in circulation after the conquest of 35 B.C. and really reflect the circulation of early or perhaps late Augustan or even later periods, rather than that of the period prior to the conquest.

Finally, it is important to emphasise that a mere eleven coins out of total 140 were recovered in proper archaeological excavations (7,86%). The bias towards the precious-metal coinage and higher denominations shown in the coins from Sisak reflects, I believe, precisely this fact, rather than a specific, less well monetised character of the settlement in comparison to, for example, Emona.

THE FUTURE PANNONIA SAVIA (SISAK EXCLUDED)

Individual finds
(see Table 1 at the end of the article)

In stark contrast to the situation in Sisak, the rest of the region analysed in this study shows a high predominance of “autochthon” Celtic/Iron Age coinage (45 pieces, 69.23%), with a relatively minor presence of Roman Republican coins (10 pieces, 15.38%).

Italian and Greek coins

The earliest example of Italian currency found in the region is a bar similar to those with the *ramo secco* pattern on their surface (cat. no. 1).¹² This piece was found in a mound that was actually part of the fortification system of the Trsište hill fort, which unfortunately cannot be dated with any precision.¹³ Another bar fragment of the *aes formatum* type was found in 2008 in the River Kupa upstream of Karlovac, near the Vrlovka cave (cat. no. 2).¹⁴

These crude Italian (or, more precisely, Etruscan) ferruginous copper bars were already being produced in the 6th c., and also appear in hoards of the 3rd c.,¹⁵ together with *aes signatum*, which are Roman oblong, quadrilateral or brick-shaped pieces of leaded tin bronze, carrying various depictions, without any marks of value, issued during the first half of the 3rd c. B.C.¹⁶ Their appearance in the region, at Sisak and Trošmarija, and in the Kupa near Karlovac,

¹² Brunšmid 1896–1897, 48 with n. 1; Mirnik 1987, 386; Balen-Letunić 1999–2000, 24. A *ramo secco* bar was also found at Sisak (Bilić 2017, cat. 32).

¹³ Balen-Letunić 1999–2000, 24.

¹⁴ 297.03g; 63x41x33mm, type IIa Bertol, Farac 2012; it was found by K. Zubčić of the Croatian Conservation Institute in an underwater archaeological survey. I would like to thank him for showing me the piece and allowing me to use the information here.

¹⁵ Crawford 1985, 4, 282 App. 2; 2009, 195; Burnett *et al.* 1986, 127–128; Craddock, Meeks 1987, 195–196, cf. T. 3 on p. 194; Burnett 1989, 41; 2012, 302; *HNI* p. 45; Vecchi 2013, 7, 26–28; Murgan, Kemmers 2016, 277, 284–285.

¹⁶ Thomsen 1957, 55–59; *RRC* 3–12; Crawford 1985, 41; 2009, 195; Burnett *et al.* 1986, 128–129; Burnett 1989, 34–35, 40; 2012, 299, 302, 305; *HNI* p. 45; Vecchi 2013, 29–31; Murgan, Kemmers 2016, 277–278.

must be associated with their presence in the so-called Mazin-type hoards, consisting of Carthaginian, Numidian and Egyptian and other Greek and Italic/Roman currency (*aes rude*, *aes formatum*, *ramo secco* and associated bars, *aes signatum*, *aes grave*).¹⁷

Several more 3rd- and 2nd-c. bronze coins found in the area of the future Pannonia Savia could be associated with the Mazin-type hoards (cat. nos. 3–7). Even though the Mamertini coinage (cat. no. 3, found in archaeological excavations but in an indeterminate context) was never documented in any of the actual hoards, it seems to belong to this group of coin types both chronologically and typologically. Sicilian (cat. no. 4) and Numidian (cat. nos. 5–7) coins, on the other hand, are well documented in the hoards of the Mazin type.

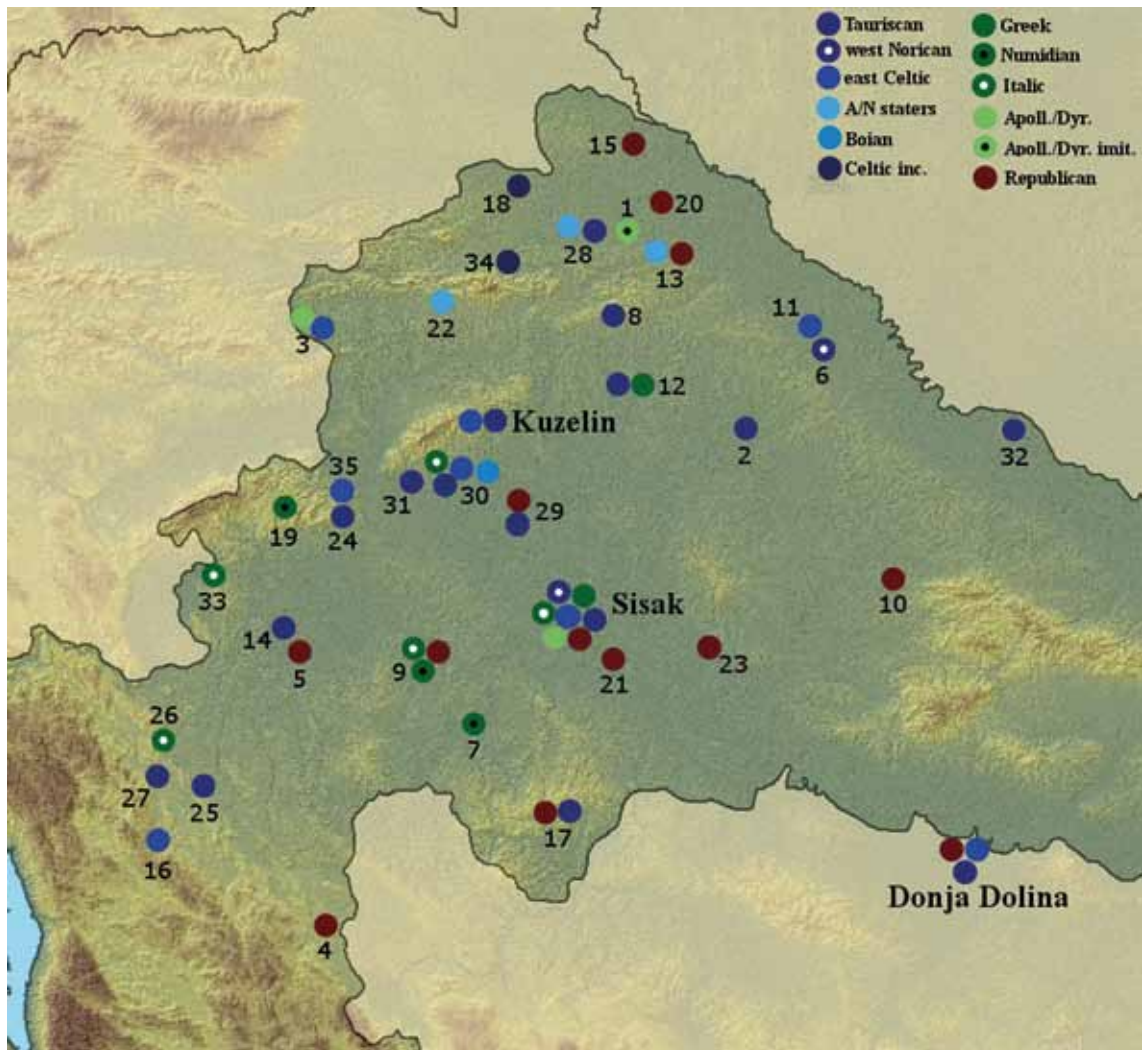
In concordance with the situation in Sisak, a small number of Apollonia and Dyrrachium coins have also been documented in the region (cat. nos. 8–9). Their normal area of circulation was to the east of the Požega Mountains, which is east of the region discussed here, but immediately adjacent to it. Both specimens are impossible to date more precisely than 280–49/48 B.C.,¹⁸ although cat. no. 9 is an AE imitation, which perhaps allows a more precise dating. The drachms of Apollonia and Dyrrachium were indeed sometimes imitated by the Scordisci; they were made of poor quality silver, bronze or silvered bronze, with stylized representations and unintelligible inscriptions, and they usually imitated the coins issued in the third, i.e. the latest period of minting (80s or 70s B.C.–40s B.C.).¹⁹ Popović argues that they were in general produced in the Danubian area at the end of the 1st quarter of the 1st c. B.C., before the major input of the original coins of this type.²⁰ To summarise

¹⁷ Dukat, Mirnik 1976, 200; Mirnik 1987; Bertol, Farac 2012, 96–99; Bilić 2012, 367; 2014; Bertol 2014; Murgan, Kemmers 2016, 285.

¹⁸ See the review of recent publications discussing the chronology of these issues in Ujes-Morgan 2012, 369–372.

¹⁹ Göricke-Lukić 2004, 39, 41–45, cat. nos. 9–23.

²⁰ Popović 1987, 115; cf. Popović 1976, 16–17, where he offers a similar chronological framework and further associates the production of these imitations with contemporaneous imitations of Republican *denarii*.



Map 1: Individual pre-Imperial coin finds in north-west Croatia: 1 Bartolovec-Jalžabet, 2 Bjelovar, 3 Brezova Ravna, 4 Drežnik, 5 Dubovac, 6 Đurđevac, 7 Glina, 8 Kalnik, Veliki Kalnik, 9 Kirnigrad, 10 Končanica, 11 Kraljevec, 12 Križevci, 13 Ludbreg, 14 Mahično, 15 Međimurje, 16 Modruš, 17 Osječenica, 18 Petrijanec, 19 Plešivica-sedlo, 20 Prelog, 21 Prelošćica (Lonja), 22 Radoboj, 23 Repušnica, 24 Sv. Marija at Okić, 25 Tounj, 26 Trošmarija, 27 Vaganac (Ogulin), 28 Varaždin, 29 Ščitarjevo, 30 Zagreb, 31 Zagreb-Stenjevec, 32 Zvonimirovo-Veliko polje, 33 Vrlovka cave, 34 Cerje Tužno, 35 Samobor (©Wikimedia Commons, adapted by the author)

Celtic/Iron Age coins

a conclusion reached in Bilić (2017), the appearance of the Apollonia-Dyrrachium coins in the region can be associated with the commercial relations between the local inhabitants and the Scordisci during the mid-1st c. B.C. A Macedonian coin from Križevci (cat. no. 10) probably arrived in the region in the same way, together with the Epirote and Macedonian bronzes from Sisak discussed in Bilić (2017).

As noted earlier, the great majority of individual finds from the region are of Celtic/Iron Age coins. Although Tauriscan coinage predominates (26 specimens, 57.78% of all Celtic/Iron Age coins, cat. nos. 28–53), other Celtic/Iron Age currency, usually referred to as East Celtic coinage, is also present. A similar situation obtains with hoards: see below. An early imitation of Philip II's tdr, dating from the first half of

the 3rd c., was found in Zagreb (cat. no. 11),²¹ and some later imitations of the Alexander-type coins of Philip III are known also from Zagreb (cat. no. 12)²² and Modruš (cat. no. 13).²³ The latter example is very peculiar in its stylisation and has no real parallels elsewhere. A couple of characteristic imitations of Macedonian coins, called by Pink and Göbl *Baumreiter mit Bartkranzavers*, and by Preda and Popović *Crisei-Berchieş A*,²⁴ were found near Klanjec (tdr, cat. no. 14)²⁵ and Đurđevac (d, cat. no. 15),²⁶ respectively. Preda and Popović both associate this coinage with north and west Transylvania, and, in its later phase, with south-east Pannonia.²⁷ Dembski, however, groups these coins among South Serbian types,²⁸ while Pink is inclined to associate them with Syrmia,²⁹ and Kolníková associates the drachms of this type (more precisely, of Popović's transitional phase between Preda's two periods) with the Scordisci and emphasizes that they appear at Nĕmčice in the Lt B2–C2 period (late 4th – first half of the 2nd c. B.C., c. 320–150 B.C.).³⁰ In any case, they are not autochthonous to the region here discussed, and must have come from the east. Likewise, a coin of the Huși-Vovriești type was perhaps found at Zagreb (cat. no. 16);³¹ it represents primarily an eastern Dacian (Moldavian) occurrence issued from the end of the 3rd to the mid-2nd c. B.C.³² Finally, a *Zickzackgruppe*

(Sztálinváros/Dunaújváros) tdr was found at Kuzelin in proper archaeological excavations in 1991 (cat. no. 17). This type of coin was issued in the period from the late 3rd to the 1st half of the 2nd c. B.C. in Transdanubia.³³ In addition, a single Syrmian phase C (?) AE tdr was found at Repušnica, with two more AE drachms of the same phase found at Samobor, supporting the finds of Scordiscan coinage in Sisak (five specimens) and further testifying to the relations between the future Pannonia Savia region and that people during the mid-1st c. B.C., observed above.

Another interesting phenomenon occurring in the region is the presence of five imitations of stater of Alexander III (cat. nos. 21–24, plus a specimen from the nearby Slovenska Bistrica near Maribor),³⁴ none of which was found in Sisak. These imitations copy the so-called Athena/Nike stater with a helmeted head of Athena on the obverse and a winged Nike on the reverse. This type of coin was struck relatively frequently in the area occupied by the Boii,³⁵ but it is entirely possible that the Celtic/Iron Age peoples occupying the area of modern Croatia issued similar imitations. Such coins were indeed attributed by Castelin to the area of the "Middle and Lower Danube region";³⁶ Dembski, following Castelin,³⁷ argues that, in the late 3rd c., the original stater came to Moravia together with imitations produced by the tribes living further south;³⁸ Kolníková allows the possibility that this type of coin arrived at the site of Nĕmčice from the Balkans,³⁹ while Jandrasits suggests the possibility that the Athena/Nike stater

²¹ Forrer 1908, 146 Fig. 268; Pink 1939, 134 no. 3. According to J. Winkler, the coin was produced in the south-east Danubian region (Forrer 1969, 54 no. 171 (J. Winkler)).

²² Forrer 1908, 176 Fig. 336; Pink 1939, 134 no. 3; cf. Pink 1939, nos. 586–588, Preda 1973, Pl. LXXIII.

²³ Pink 1939, 118, 140 no. 188; Preda 1973, 338 no. 67.

²⁴ Pink 1939, 58–60; Preda 1973, 97–104 with Fig. 8 on p. 101; Popović 1987, 54–60 with fig. 21 on p. 58.

²⁵ Mirnik 1990, 4.

²⁶ Pink 1939, 60, 139 no. 150.

²⁷ Cf. Allen 1987, 27, 50–51, 80 map 3; Torbágy 2000, 37; Ziegeus 2010, 229, 232, 254.

²⁸ Dembski 1998, 43, 99–100.

²⁹ Pink 1939, 58, criticised in Forrer 1969, 55 no. 182 (J. Winkler).

³⁰ Kolníková 2012, 57.

³¹ Pink 1939, 39–40, 134 no. 3, Abb. 36; Preda 1973, 122 no. 48.

³² Preda 1973, 445; Popović 1980a, 172, 174–175; 1980b, 13; 1983, 14–19; 1987, 60–61, 79; Wartenburg, Kagan 1999, 395–396 n. 1, 400–402; Rudnicki 2003, 18–20; Čizrnář, Kolníková, Noeske 2008, 671; Kolníková 2012, 57; Munte-

anu, Chiriac 2016, 557. For this type of coinage in general see Preda 1973, 111–131, 444–445 and Munteanu, Chiriac 2016. See also below on the Narta hoard.

³³ Allen 1987, 29, 80 map 3; Dembski 1998, 46, 112; Torbágy 2000, 30; Ziegeus 2010, 215.

³⁴ Paulsen 1933, i.8; Kos 1977, 138–141 no. 29.

³⁵ Cf. Kos 1977, 48, 71; see also Kolníková 2006, 8 Tab. 2 for a list of finds from Central Europe.

³⁶ Castelin 1978, 121–122, cat. nos. 1206–1208.

³⁷ Castelin 1965, 6–7, 9, 109–110.

³⁸ Dembski 1972, 55. The Celts of the Czech Republic then started producing their own imitations, which are not easily distinguished from those arriving from the Balkans.

³⁹ Kolníková 2012, 12.

found in Boian territories are perhaps not (all) of local origin, but actually imports from the Balkan area, further dating them to 270–250 B.C.⁴⁰ Similar imitations found in the area of the modern Czech Republic and central Germany are dated to LtB2–C1 (320 – 200 B.C.),⁴¹ which must be close to the date when they were produced in this region. Even though the number of coin finds – all found without a proper archaeological context – is rather low,⁴² it is still possible to infer that the locally produced imitations of Alexander's staters circulated in the area of north-west Croatia in the 3rd century B.C. The great weight of three of the four staters (8.46, 8.34 and 8.21g) suggests their early date (Lt B2, 320–260 B.C.), while the heavily stylised and somewhat lighter specimen (7.84g) must be somewhat later, perhaps minted in the Lt C1 period (260–200 B.C.). In this context, a Boian Muschelstater found near Zagreb can be mentioned (cat. no. 25),⁴³ testifying to the contacts between the area inhabited by this people in Central Europe and our region.⁴⁴

⁴⁰ Jandrasits 2014, 45.

⁴¹ Čižmář, Kolníková, Noeske 2008, 667, 673. Alternative proposals: Polenz 1982, 57–58, 101–102, 116, 129, 138: LtB2 or transition to C1 (the grave at Dobian), 1st half of the 3rd c. or mid-3rd c. B.C.; Kolníková 2012, 12: Lt B2–C2, end of the 4th – 1st half of the 2nd c. B.C. (in archaeological contexts); Kolníková 2006, 7, 9, 2012, 12: late 4th – second half of the 3rd c. B.C., i.e. Lt B2. Torbágy (2013, 66) ascribes them to the Boii, dates them c. 250 B.C., and mentions they were still circulating in the late 3rd c. B.C.

⁴² Gold coins were always carefully managed and their presence, even in low numbers, suggests a more widespread use (cf. Howgego 1992, 11). Their role in the 3rd c. economy, or whether there existed a monetary economy – however rudimentary – in this period at all, cannot be estimated on present evidence. It is much more likely that they acted as "special-purpose money", primarily used for "diplomatic exchange, tribute, dowries, ritual deposition, etc." (Wigg-Wolf 2008, 36). Aarts (2005, 212 with n. 15) believes that most single gold coins represent intentional deposition.

⁴³ According to Paulsen (1933, i.47 no. 1294, 123), this coin is of an early Muschelstater variant; according to Castelin (1976, 262–263), it is a late variant associated with his period C (Castelin 1965, 14–15). It could be dated, on the analogy of Paulsen no. 342 (Paulsen 1933, i.123), to the 2nd half of the 2nd c. (Rudnicki 2003, 11, citing Kolníková 1998, 23–24).

⁴⁴ In this context, it can be mentioned that two AE Đurđevac tdrs (Karwowski, Militký 2011, 132 T. 1; Militký 2016, 100) and a Samobor-type didrachm (Castelin 1972, 2 no. 2; cf. Kos 2012b, 20; but *TKN* p. 85, cf. Göbl 1992, 16 with Abb. 3.3, associates this coin with Norican coinage) were found at Oberleiserberg (Austria). Similar Tauriscan coins found in the area of the Boii include a SC tdr and a SC or Karl-

As already mentioned, Tauriscan coinage clearly predominates in the region, which is, as we will see later, supported by the evidence from hoards. It is necessary to discuss here the question of absolute chronology of Tauriscan coinage, which lately received a strong impetus from a number of dated finds. Thus, two mixed hoards containing proto-Tauriscan and Tauriscan coinage together with other types of coins – (1) Haimburg, where the VES· type tdrs were mixed with West Norican coinage, i.e. *Kugelreiter* tdrs, and (2) the River Ljubljanica, where the Samobor C tdr and 1/4dr were mixed with various Roman Republican coins – completely changed the chronology of minting of the coinage of the Taurisci. Thus, it is convincingly argued they started minting their coinage from at least the mid-2nd century B.C., or at the very end of the 1st half of the 2nd c.⁴⁵ The earliest types of Tauriscan coinage, the Varaždin A and, immediately afterwards, Varaždin B (derived from the somewhat earlier VES· type), were minted somewhere in the Varaždin area in the mid-2nd century B.C., either somewhat before, at or after 150 B.C.⁴⁶ Moreover, the Ljubljanica hoard proves that the Taurisci simultaneously minted both tdrs and 1/4drs in the earliest period of their minting, that is, with respect to SC 13 and 14, which developed from the Varaždin B type (cf. *TKN* p. 32, 99, 111 for SC13), and, following those, SC 16 (and, presumably, 23) coins, all minted c. 150 B.C.⁴⁷

steiner Art obols from Stradonice (Militký 2016, 90–91, nos. 1.1, 5–6), Đurđevac tdrs from Plzeň, Zbečno-Sýkořice, Malé Hradisko (*fouillée*), Klentnice (*fouillée*), Zohor and Bratislava-Rusovce (Militký 2016, 93–94, nos. 4.1, 7.1, 9.1, 10.1, 100–101 Tab. 3) and Samobor C tdr from Poštorná (Militký 2016, 94, no. 10.1).

⁴⁵ Kos, Šemrov 2003, 386–387; Kos 2007, 60–63; 2009, 311; 2012a, 355–356; Kos, Mirnik 2011, 102; Miškec 2012, 381, 383; Strobel 2014, 75–77. Strobel (2014, 77–78, cf. 89) actually dates the beginning of "Norican" coinage (the VES· tdrs) at or slightly after the turn of the 2nd c. B.C.

⁴⁶ Kos, Mirnik 2011, 102; Kos 2012a, 355–356; Miškec 2012, 381, 383. Gorini (2004, 59) dates the production of Varaždin A and B coins to between 180 and 160 B.C., cf. Gorini 2008, 99; 2009, 120.

⁴⁷ Kos, Šemrov 2003, 382, 385–387, cf. Kos 2007, 61–62, who dates SC 13, 14 and 16 to the 140s or somewhat earlier and Miškec 2012, 383, who actually dates SC 13 to c. 150 B.C., and SC 14 and 16 to the 140s B.C.; see also Kos 2010, 101 and Strobel 2014, 77.

A strong supporting argument for the inferences drawn from the Ljubljana hoard is provided by the small silver coin found in a grave at Zvonimirovo-Veliko polje dated to the Lt C2 period (200–150 B.C.) (0.44g, cat. no. 31).⁴⁸ It is typologically associated with early Tauriscan tdrs and, furthermore, belongs to a group of small silver coins with depictions of a horse on both sides of the coin, which represent the earliest types of Tauriscan small silver coins.⁴⁹ It supports the late 2nd half of the 2nd c. B.C. as the date of the appearance of the earliest Tauriscan coins, and proves that they were, from the start, issued together with fractional coins.

When deliberating on the chronology of Tauriscan issues it is necessary to include the hoard from Pokupsko (hoard no. 12) in the discussion, even though it properly belongs to the second part of the study, since it gives an insight into the dating of the earliest issues of Đurđevac coins.⁵⁰ Three coins of the Samobor A type (derived from Varaždin A)⁵¹ and three coins of Samobor B (derived, in their turn, from Samobor A or Varaždin A)⁵² were found in this hoard, the former being contemporaneously minted from the start with SC 14, and in the course of time with other SC types, as well as with Samobor B and Đurđevac coins,⁵³ which dates the beginning of the minting of Samobor A coins (especially in the light of the transient nature of Varaždin A – and B, for that matter – coins),⁵⁴ to the early second half of the

2nd c. B.C.⁵⁵ Moreover, the Pokupsko hoard further comprised two Đurđevac coins, more precisely, the very earliest Đurđevac issues, derived directly from Samobor A (obv.) and Samobor B (rv.) dies.⁵⁶ Thus the entire hoard, together with the earliest Đurđevac issues, can be tentatively dated to the early second half of the 2nd c. B.C., probably the 140s.⁵⁷ At the other end of the time spectrum, Đurđevac tdrs were in use after 46 B.C. at Gomolava and c. 10 B.C.–10 AD in Dalmatia.⁵⁸ Thus their presence in coin circulation covers a long period from the mid-2nd c. B.C. to the mid-Augustan period, which is in stark opposition to other earlier East Norican types, while the area of their distribution is similarly much wider when compared to the latter, although the area of distribution of these other earlier East Norican types is not so reduced as generally believed.⁵⁹

Roman Republican coins

The most prominent difference between coin finds from Sisak and those found in the region is not in the presence of Celtic/Iron Age coins in the former, but in an almost complete lack of Roman Republican coins in the latter. A mere ten such coins are documented (cat. nos. 56–65), compared to 99 pieces in Sisak, ca. 70% of all pre-Imperial coins found there. An in-depth analysis of

⁴⁸ I would like to thank M. Dizdar, the head of the excavations, for allowing me the opportunity to study and discuss this coin. For an in-depth study see Bilić, Dizdar 2016. Since coins of this period found in graves are extremely rare in the region (the only other example being cat. no. 45), they are treated here together with individual finds.

⁴⁹ *TKN* p. 46; Mackensen 1972, 9; 1975, 255; Kos 1979, 34.

⁵⁰ Mirnik 1998, 485, 488–489.

⁵¹ *TKN* p. 31–32.

⁵² *TKN* p. 31–32, 100.

⁵³ *TKN*, Synchronogramm Ostnoriker.

⁵⁴ Kos, Mirnik 2011, 102, cf. Gorini 2009, 120 for east Norican coinage in general. With respect to the transient nature of Varaždin A/B coins, the presence of a significantly later *Augentyp-Stamm* coin in the hoard from Križevljan looks suspicious (Kos, Mirnik 2011, 98 no. 35); if it is accepted as fact (which Kos, Mirnik 2011, 106 seriously doubts), it would testify to a far longer presence of Varaždin A/B coins (in circulation?) previous to their concealment.

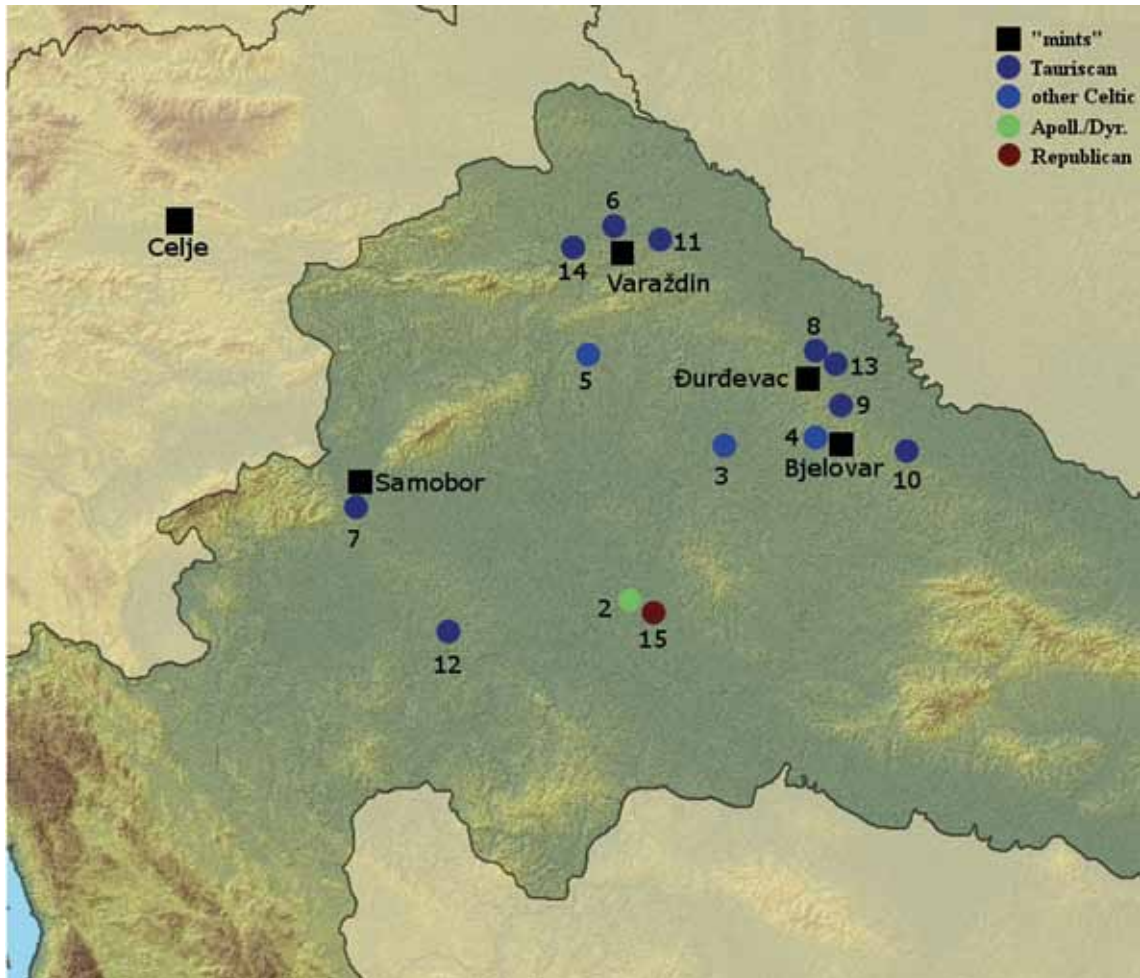
⁵⁵ Gorini (2004, 59) dates the production of Samobor A and B coins to between 170 and 150 B.C., while elsewhere (Gorini 2009, 120) he dates them to the period between 160 and 130 B.C.

⁵⁶ *TKN* p. 32–33, 102. P. Kos has recently informed me that Göbl's "earliest Đurđevac issues" (*TKN* 46–111/112) should be classified under Samobor A coins proper, on the basis of his study of the Samobor hoard itself; if this is true, then the hoard from Pokupsko contained only Samobor A and B coins and is useless in dating the Đurđevac coins (thus *pace* Kos 2009, 311).

⁵⁷ Kos (2009, 311), on the basis of the Pokupsko hoard, dates the beginning of the production of Đurđevac coins to the late 2nd c. B.C.; cf. Strobel 2014, 77. I do not see why "late", especially since he criticizes Gorini's (2005, 59) assessment of 20 years as the approximate duration of minting of specific groups of Tauriscan coinage (Kos 2009, 309 n. 15, 310). Gorini (2009, 120) dates the production of Đurđevac coins to the period between 160 and 130 B.C., recognising that they are derived from the Samobor A group.

⁵⁸ Bilić 2017, with references.

⁵⁹ Bilić 2012, 362–364.



Map 2: Pre-Imperial coin hoards from north-west Croatia. (The numbers refer to the list of hoards in Table 2 at the end of the article) (©Wikimedia Commons, adapted by the author)

these coins is thus not necessary, since they are merely an ephemeral phenomenon in the pre-Imperial coin pool in Pannonia Savia outside Sisak.

Hoards

(see Table 2 at the end of the article)

The hoards reflect the inferences drawn from the analysis of individual finds. Twelve out of 15 known finds represent hoards of Celtic/Iron Age coins (hoards nos. 3–14), while another (hoard no. 1) reflects the same horizon of circulation. In fact, the single known hoard of Republican coins is a heavily dispersed and poorly documented (now small) hoard from Sisak itself (hoard

no. 15), while the remaining hoard (hoard no. 2) comes from the immediate vicinity of Sisak and represents a hoard of imitations (some AE, mostly AR) of the drachms of Apollonia and Dyrrachium. This hoard can be related to another AE imitation of this same coinage found at Bartolovec-Jalžabet (discussed above) and can similarly be associated with the commercial relations between the local inhabitants and the Scordisci during the mid-1st c. B.C.

A hoard of staters (ca. 10) of Alexander III from Croatia (Plavšić coll.) is mentioned in Gohl (hoard no. 1).⁶⁰ This hoard, if from

⁶⁰ Gohl 1922–1923, 6 (not from Zagreb, as in Vasić, Popović, Gaj-Popović 1975, 20 n. 16).

north-west Croatia, must be connected to several early imitations of the Athena/Nike staters discussed above, and certainly belongs to a similar chronological and cultural horizon. Unfortunately, the present circumstances of the hoard are hard to ascertain. The AMZ currently holds 28 staters of Alexander III from the Plavšić coll., but no find site is indicated for them. (Three of them are actually barbarian imitations: A8400, imitating Price 172, issued in Amphipolis (?) in ca. 330–320; A8401, imitating Price 3748, issued in Babylon (?) in ca. 331–325; A8402, imitating Price 2959, issued in Side in ca. 325–320.) Thus it does not seem possible to reconstruct the hoard, at least with the data we presently have.

Three of the Celtic/Iron Age hoards represent eastern or north-eastern intrusions into the region. First, the hoard from Narta consisted of 3 original Macedonian coins (?) and 33 coins of the *Huși-Vovriești* type (hoard. no. 3),⁶¹ a primarily East Dacian issue, which we have already encountered as a stray find from Zagreb (see above). As noted above, the origin of coins of this type is associated with Moldavia, and they are dated from the late 3rd to the mid-2nd c. B.C. It is nevertheless possible not only that they are somewhat earlier, with a *taq* of c. 240 B.C. being established by the presence of Hellenistic coins in mixed hoards, but also that they originated in the area of the Scordisci, south of the Danube.⁶² However, Ziegaus offers significantly higher dates for this type of coins: end of the 4th – 1st half of the 3rd c. B.C.,⁶³ and Levinschi also strongly

argues for a 4th c. date for their production.⁶⁴ Second, the hoard from Ribnjačka⁶⁵ consisted of ca. 112 imitations of tetradrachms of Philip II (hoard no. 4).⁶⁶ The *Turnierreiter* type, representing the majority of coins in the hoard, is associated by Pink with the Scordisci,⁶⁷ which is rejected by Kos and Mirnik,⁶⁸ who opt for the Bjelovar region as its area of origin, while Popović believes it should be associated with regions nearer to Macedonia in the southern Balkans.⁶⁹ A single *Turnierreiter* specimen was indeed found in Kobaš, near Požega,⁷⁰ which is in the immediate vicinity of the Bjelovar region, and supports Kos and Mirnik's conjecture.⁷¹ Furthermore, they argue that the second major type of coins in the Ribnjačka hoard, the *Dreieckhals*, is actually a development of the *Turnierreiter* type,⁷² thus most probably also of local origin.⁷³ However, the question of the autochthony of the

⁶¹ Brunšmid 1895; Pink 1939, 35, 141 no. 205; Preda 1973, 122 no. 45; Dukat, Mirnik 1976, 192; Mirnik 1981, 39 no. 33, 2008, 118.

⁶² Wartenburg and Kagan 1999: 401, citing Pink 1939: 38–39 for the area of origin of the coins. However, since Pink based his conjecture on the presence of countermarks exclusively on the coins found in the southern part of the area of circulation of these coins, i.e. in the region nearer to the Danube (cf. Popović 1983, 18; 1987, 61), the appearance of a large number of countermarks on the coins in the hoards from Vovriești (Romanian Moldavia, Preda 1973, 121, 509–511 Pl. XXV–XXVII), Velikaya Gorazdovka (Transcarpathian Ukraine, Sova-Gmitrov 1961) and Tabani (Moldova, Levinschi and Ciocanu 2003–2004) makes this argument invalid.

⁶³ Ziegaus 2010, 14.

⁶⁴ Levinschi 1997; 1999; 2010, 31. For a review of suggested dates (2nd half of the 4th – 1st c. B.C.) see Munteanu, Chiriac 2016, 550; for a discussion on chronology, Munteanu, Chiriac 2016, 553–557.

⁶⁵ Liščić 1957; Pink 1957; Dukat, Mirnik 1976, 192; Mirnik 1981, 39 no. 36; 2008, 118–120; Kos, Mirnik 1999.

⁶⁶ Nos. 1–44 Kos, Mirnik 1999 = *Turnierreiter* (OTA 120); nos. 45–64 Kos, Mirnik 1999 = OTA 318, described by Pink (1957, 13) as *Übergangstyp zu Dreieckshals*, by Kos, Mirnik 1999 (and Mirnik 2008, 188 no. 109, 189 no. 117) simply *Dreieckhals*, by Ziegaus (2010, 224) a combination of earlier *Dreieckhals* and the *Turnierreiter* reverse; nos. 65–71 Kos, Mirnik 1999 = OTA 417, called by Pink (1957, 13) *Wolljackentyp*, and by Kos, Mirnik 1999, following OTA, *Puppenreiter*.

⁶⁷ Pink 1957, 16–17.

⁶⁸ Kos, Mirnik 1999, 304.

⁶⁹ Popović 1987, 38.

⁷⁰ OTA 120.3; Kos, Mirnik 1999, 305–306 with n. 39.

⁷¹ It is apparently accepted by Ziegaus 2010, 221–222.

⁷² Kos, Mirnik 1999, 306; cf. Ziegaus 2010, 224.

⁷³ Thus Ziegaus 2010, 224, cf. Allen 1987, 30, 61. A coin of this type (“*jüngerer Dreieckhals*”, without a horseman on the reverse) is described as coming “from Croatia” (Leu Numismatik, Auction 83, lot 540, May 6th, 2002 = Ziegaus 2010, 222 no. 589, cf. 224), which supports Kos and Mirnik's (and Ziegaus's) suggestion of north-west Croatia as the place of origin of these coins. However, coins with “*jüngerer Dreieckhals*” obverse in combination with a reverse with a horseman were found in Kaposvár (Pink 1939, 82, 138 no. 124 = Dessewffy 1910, no. 1228, who, however, does not indicate a find site; Ziegaus 2010, 224) and in “Hungary” (Forrer 1908, 46 Fig. 85), while “*jüngerer Dreieckhals*” pieces (without a horseman) were found in the Zemplén county (Dessewffy 1910, no. 1231) and in Stradonice (Pink 1939, 82 Abb. 321; Dembski 1998, 106 no. 1242) (See also the next note).

hoard, or at least the dominant type(s) of coins in the hoard, remains at least partially open.⁷⁴ Kos and Mirnik date the coins from the hoard to the first half of the 2nd c. B.C.⁷⁵

Finally, the hoard from Sveti Petar Orehovec near Križevci consisted of several coins of the Kapostal type (hoard. no. 5).⁷⁶ This type of coin, also found at Sisak, was minted from the mid-2nd c. to the late 1st c. B.C. in Transdanubia, and had a relatively wide distribution.⁷⁷ At the site of Balina Glavica in central Dalmatia Kapostal coins were found in a hoard together with coins of the Đurđevac type (see below);⁷⁸ both types of coins were found at Gomolava in a layer dated to the 2nd half of the 1st century B.C., together with a small hoard of Republican coins and imitations,⁷⁹ while at Szalacska dies of Ka-

postal small silver coins and drachms were found together with a Đurđevac coin.⁸⁰ Thus these two types of coins circulated rather widely and contemporaneously, and were often found together,⁸¹ including at Sisak as individual finds, but in the hoards from the territory of the future Pannonia Savia they do not occur together.

Most of the hoards, nine in all, are of Tauriscan coins: one hoard of Varaždin A and B types (hoard. no. 6), one of Samobor A and B types (hoard no. 7), and no fewer than four hoards of Đurđevac type (hoards nos. 8–11, with no. 10 doubtful), with the mixed Pokupsko hoard, the single inhomogeneous example, discussed above. In all these hoards, except the Pokupsko find, only a single type of exclusively Tauriscan coins was found (ignoring the Varaždin and Samobor A/B distinction), and their value for chronological distinctions is thus minimal. However, they indicate a relatively high level of coin production in the region, reveal the relations of various types and their relative chronology, and, with their concealment and non-recovery, testify to some turbulent events – or processes – that transpired in the region in the second half of the 2nd c. B.C.⁸² Since a lot has been written on these hoards, especially the three largest ones (Varaždin – but actually Križovljan; Samobor – but actually Okić; and Đurđevac – but actually Šemovec) they will not be discussed in detail here.⁸³ I would only like to point out that it was probably local mints that issued these coins, or, perhaps it is safer to say, the coins were minted in the vicinity of Varaždin, Samobor and Đurđevac, respectively.⁸⁴ However, an unpublished hoard from Bartolovec-Jalžabet, kept at the AMZ, deserves to be discussed in further detail (hoard no. 11).⁸⁵ This is the only Đurđevac

⁷⁴ Two *Dreieckhals* coins found in and near (Galishegy) Munkács (Mukačeve) in Transcarpathian Ukraine remain enigmatic (Pink 1939, 82, 137 no. 82, 141 no. 194, Abb. 318; Kos, Mirnik 1999, 306. Actually, the coin from Galishegy referred to by Pink is not *Dreieckhals* type at all, but *Audoleonmonogramm* type. Ziegauš 2010, 224 refers to the coin from Munkács as a “jüngerer”, even though the piece reproduced by Pink (1939) as Abb. 318 is certainly “älterer”, and adds two specimens from a hoard found in relatively nearby Mediešu Aurit (in the Satu Mare county), one of the earlier and the other of the later phase. Actually, the two coins from the Mediešu Aurit hoard are both of the “jüngerer Dreieckhals” type (without a horseman). (See Gohl 1903, 57; cf. Preda 1973, 289, Pl. LIX.4, who, incidentally, refers to this type of coin – the “jüngerer Dreieckhals” type without a horseman – as *Mediešu Aurit* subtype “a” and adds to it the *Schnabelferd* type as subtype “b”). Finally, one Puppenreiter specimen was found in “northern Hungary” (Leu Numismatik, Auction 83, lot 535, May 6th, 2002 = Ziegauš 2010, 211 no. 560), and this type of coin probably originated in this area (Allen 1987, Map 3 on p. 80; Dembski 1998, 110, north-west Hungary, south-west Slovakia; Ziegauš 2010, 211, between Balaton and the Danube). However, another specimen of this type, from a hoard found in east Slavonia, is recorded in the archives of the Archaeological Museum in Zagreb (12.51g).

⁷⁵ Kos, Mirnik 1999, 306; cf. Ziegauš 2010, 222, 224. Preda (1973, 293) dates his type *Mediešu Aurit* to the mid-2nd c. B.C.

⁷⁶ Unpublished. Pink 1939, 103–105, nos. 484–495; *OTA* 484–495; Dembski 1998, 113–114 nos. 1413–1431. Two coins from the hoard are kept in the AMZ (inv. nos. A12554–12555), while at least one more coin of the same type was seen by B. Migotti.

⁷⁷ Torbágy 1997, 12–13; 2001–2002, 244, 246 (no precise date); Kos 2002, 152. In Torbágy 2013, 68 she opts for the late 2nd or even early 1st c. as the starting date for this coinage; in 2000, 38 for the 2nd third of the 1st c.

⁷⁸ Kos 2002.

⁷⁹ Popović 1971, 147–148; 1978, 20; Mirnik 1981, 43 no. 61a; Dautova-Ruževljan 1984, 48, 50–51, 60–61, who treats these two coins as part of the hoard; Crawford 1985, 236; Borić-Brešković, Popović 2006, 39.

⁸⁰ Torbágy 2000, 38; 2001–2002a, 244; Kos 2002, 150 n. 6, 153.

⁸¹ Cf. Kos 2002, 153.

⁸² Cf. Miškec 2012, 382–383.

⁸³ For reference see Bilić 2012, 362, 364. For the Đurđevac hoard, add Kos 2009 and Mirnik 2016.

⁸⁴ *TKN* p. 56; Kos 1977, 47; 2002, 150; 2009, 309; Kos, Mirnik 2011, 102.

⁸⁵ AMZ Num. G2308_1–11, 2309_1.

hoard that consists of bronze tetradrachms, which suggests a later date for both its production and concealment, perhaps as late as the late 1st c. B.C. – early 1st c. AD,⁸⁶ thus after the conquest of the region in Octavian's campaign. (We cannot, however, exclude an earlier date for either the production of the coins or their concealment). Furthermore, the coins were made of low-quality metal, with two specimens having a visible silver coating. Also, the poor workmanship further suggests that we are dealing here with "irregular" issues, i.e. imitations of "regular" Đurđevac coins.⁸⁷ The average weight of all twelve coins is 9.57g (excluding one heavily worn and corroded specimen, G2308_7, of 6.53g, which significantly deviates from other weights, the average weight is 9.85g), which is fairly close to 9.64g, representing the average weight of Đurđevac coins aduced by Göbl,⁸⁸ and also to the average weight of early Đurđevac coins, estimated by Kos at nearly 10g.⁸⁹ Thus these "irregular" issues follow fairly closely the "official" weight of Đurđevac issues, suggesting their contemporaneous production, and thus a somewhat earlier date than the one suggested above – perhaps even mid-2nd c. B.C. (See the discussion above on the chronology of Đurđevac coins).⁹⁰

⁸⁶ Cf. Kos 2002, 154 for the Balina Glavica silver tdrs.

⁸⁷ I would like to thank P. Kos for consulting me on the subject of this hoard and offering his valuable suggestions.

⁸⁸ TKN, Synchronogramm Ostnoriker.

⁸⁹ Kos 2002, 154. Kos (2009, 308–310) divides the coins from the Đurđevac hoard into two groups, with an average weight for the first (earlier) of 9,84g, and for the second (later) of 9,67g.

⁹⁰ The average weight of heavily worn Đurđevac coins from the Balina Glavica hoard, perhaps minted in the late second half of the 1st c. B.C., is 8,97g (Kos 2002, 154). Thus their hypothetical imitations would have to lie in this weight range, although their condition suggests that originally they were heavier. But so, probably, were the Jalžabet-Bartolovec coins.

CONCLUDING DISCUSSION

The analysis of individual coin finds and hoards consisting of coins minted prior to the Augustan conquest of the area of the future Pannonia Savia – taking into account the fact that the chronological position of later Celtic/Iron Age coins is problematic, i.e. some of these issues could have been struck in an early post-conquest period – has shown a stark difference in coin use between the undisputed centre of the region, Segestica/Siscia, and the surrounding area between the Sava and Drava rivers. There are several possibilities that could explain this difference, but the model distinguishing between urban and rural (or non-urban) monetary zones, successfully applied to the analysis of Roman socio-economic relations, probably represents the best possible conjecture for a solution of the problem at the moment. The predominance of Roman Republican coins in the La Tène urban centre of Segestica/Siscia – the majority of which we have contextualised in the pre-conquest period – and its almost complete lack outside it, suggests that this coinage was in widespread use in the city itself, but played a reduced role outside it. On the other hand, it seems that the region produced a solid number of its own issues in this period, starting perhaps with the Turnierreiter and Dreieckhals coins (1st half of the 2nd c. B.C.), produced in the Bjelovar region, and closely followed by major groups of Tauriscan coinage from the mid-2nd c. B.C. onwards, produced in the Varaždin, Samobor and Đurđevac areas. Similarly, some of the later types of Tauriscan coinage were probably in part minted in this same region. A number of fractional coins, securely dated to the very beginning of the minting of Tauriscan coins by the Zvonimirovo find, suggest that these coins were indeed used, besides having an obvious function as a hoarded store of wealth, in everyday local transactions as means of payment and medium of exchange and, as some evidence suggest, also as an inter-regional medium of exchange. The presence of a horizon of

early local imitations of gold staters of Alexander III (Athena/Nike type), which must be dated as early as Lt B2 (probably 1st half of the 3rd c. B.C.), also suggests an early impulse in the local population to produce coins, although their use as money remains problematic.

The main problem remains the chronological affiliation of these coins, i.e., whether they were in use during the pre-conquest period or only after the introduction of Roman rule. Several points should be emphasised with regard to this problem:

1. Both Roman Republican and some Celtic/Iron Age coins were definitely in use in the post-conquest period in the region, the latter at least up to the Tiberian⁹¹ or Claudian period,⁹² the former well into the reign of Marcus Aurelius,⁹³ with legionary *denarii* circulating up to the early 3rd c. A.D. Thus their appearance at certain sites does not immediately signify their pre-conquest use;

2. However, we have previously argued that the pre-Imperial coin assemblage from Sisak indeed reflects the circulation of the 1st c. B.C. This conclusion was in the first place reached on the basis of an analogy with the situation obtaining in Celeia, but was further supported by the coins found in proper archaeological context. Thus a Syrmian phase C tdr was found in a Late Iron Age layer at the Dunavski Lloyd site in Sisak,⁹⁴ while a late Đurđevac tdr was similarly found in a Late Iron Age, i.e. pre-conquest layer at the Frankopanska ulica bb site,⁹⁵ also in Sisak. Three Republican coins were also recovered from Late Iron Age layers at the Dunavski Lloyd site,⁹⁶ one of these in a layer of burning immediately underneath

an early Roman layer.⁹⁷ On the other hand, a late Đurđevac tdr was apparently found in an early Imperial layer at the Frankopanska ulica bb site,⁹⁸ but due to the early phase in the analysis and publishing process of this site it is impossible to draw any definite conclusions from this information. Furthermore, a Samobor A tdr was found in a Roman layer mixed with earlier material at the Povijesni arhiv site in Sisak,⁹⁹ which is similarly inconclusive. Finally, a Republican denarius was actually found in an early Imperial layer at the Kukuljevićeva ulica site,¹⁰⁰ while another was found in a Claudian/Neronian or even early Flavian layer at the Train station site.¹⁰¹ Outside Sisak, the situation is similarly ambiguous, although generally favouring the argument supported here. Thus the small Celtic/Iron Age silver coin from Zvonimirovo (cat. no. 31), as discussed above, was securely dated to the Lt C2 period, while a Samobor C (AE?) tdr (cat. no. 51) found at the Zagreb Upper Town site was found in the context of a late La Tène settlement;¹⁰² other archaeologically contextualised finds are of little value, since their stratigraphic position is undeterminable. Thus a Mamertini bronze (cat. no. 3) found at the Zagreb Upper Town site cannot be precisely contextualised at all;¹⁰³ the stratigraphic position of a Republican denarius found at the Osječenica hill fort is similarly indeterminate, since it was found in a layer with mixed Roman and prehistoric material, or a purely Roman layer (cat. no. 57).¹⁰⁴ However, a Đurđevac tdr was found in a Roman-period grave at Ščitarjevo (cat. no. 45), while a legionary *denarius* was found at the same site (cat. no. 63), surely in a Roman context. These two finds suggest an extended period of use

⁹¹ Mackensen 1975, 267; Kos 1977, 34; 2006, 72. Cf. for Celeia Bausovac 2014, 37.

⁹² For the presence of Celtic/Iron Age coins (both tdrs and fractions) at Magdalensberg up to and including the Claudian period see Krmnicek 2010, 96–97 Tab. 43 with cat. nos. 11–763. See also Mackensen 1975, 267 and Ruske 2012, 102–103.

⁹³ Bilić 2012, 374–375.

⁹⁴ Cat. no. 7 in Bilić 2017.

⁹⁵ Cat. no. 25 in Bilić 2017.

⁹⁶ Cat. nos. 34, 53 and 57 in Bilić 2017.

⁹⁷ Cat. no. 57 in Bilić 2017.

⁹⁸ Cat. no. 24 in Bilić 2017.

⁹⁹ Cat. no. 18 in Bilić 2017.

¹⁰⁰ Cat. no. 87 in Bilić 2017.

¹⁰¹ Cat. no. 95 in Bilić 2017.

¹⁰² Škoberne 1994, 32, 67–68; for the context cf. Majnarić-Pandžić 1994, 3, 11.

¹⁰³ Dukat, Mašić 2005, 134.

¹⁰⁴ See Ožanić 1998, 29, 36–37 for both views.

for both Tauriscan and Republican coins, which is unsurprising (see above). Nevertheless, the most important information in this context is provided by the Kuzelin hill fort site, north-east of Zagreb. In systematic excavations of the site seven Celtic/Iron Age tetradrachms were found in total. All coins were found in a secure archaeological context of the La Tène stratum of the site, widely distributed throughout the hill fort.¹⁰⁵ More specifically, a Samobor B (AE?) tdr (cat. no. 37) was found along a Celtic/Iron Age rampart wall;¹⁰⁶ an Augentyp-Stamm tdr (cat. no. 48) was found in the flooring of a Celtic/Iron Age house¹⁰⁷ and the remaining five Celtic/Iron Age coins (three Đurđevac tdrs, a Samobor A tdr and a *Zickzackgruppe* tdr)¹⁰⁸ were all found in the same layer.¹⁰⁹ It seems that the archaeological material from the site belongs exclusively to the La Tène D1 phase,¹¹⁰ i.e. c. 150/130–70/50 B.C., which would thus make the latter date the *taq* for the appearance of these types of coins. All coins, except the *Zickzackgruppe* tdr, were actually dated by the excavator, together with other archaeological material from the same layer (fibulas, rings, ceramics etc.),¹¹¹ to the middle and 2nd part of the 1st c. B.C. (70–15 B.C.),¹¹² but since this is apparently based on the now discarded chronology for the coins themselves, this must be similarly rejected. After the end of the La Tène occupation of the site, most probably at the end of the 1st c. B.C., there are no traces of Roman presence at the site during the entire 1st c. A.D., but only in the second half of the 2nd century.¹¹³ The Celtic/Iron Age coins – almost exclusively Tauriscan – at Kuzelin were thus found in a secure archaeological context; moreover, there is no

(for the time being) documented continuation of monetary activity at the site until the second part of the 2nd c. Therefore, it is safe to presume that those coins were used exclusively by the La Tène population settled on the site in a pre-conquest period, which is strong support for our argument. A similar conclusion can be reached with respect to another archaeologically excavated Iron Age site, the Gradina at Donja Dolina on the right bank of the River Sava downstream of Sisak, situated in present-day Bosnia and Herzegovina. Here several Republican coins were found,¹¹⁴ together with a Syrmian drachm of phase B or C,¹¹⁵ a Đurđevac (tetra?)drachm¹¹⁶ and a bronze coin of Hiero II.¹¹⁷ Even though Marić (1964, 47, 49) distributed the coins from earlier excavations into settlement occupation phases (IIb, 250 – 150 B.C. and IIIc, 125 B.C. – early 1st century A.D.), he had done this according to the dates he presumed the coins were issued at, so his classification has no value. However, since there is no post-La Tène material on the site,¹¹⁸ all coins found at Donja Dolina must have been used and lost in a pre-Roman period. Therefore, although the precise archaeological context of these coin finds from Donja Dolina is unfortunately lost, it is still possible to associate them, similarly to the situation obtaining at Kuzelin, with the La Tène population settled on the site in a pre-conquest period.

¹⁰⁵ Sokol 2001a, 14.

¹⁰⁶ Sokol 2001a, 8 (picture), no. 3; 1994a, no.3.

¹⁰⁷ Mirnik 1998, 487.

¹⁰⁸ Cat. nos. 17, 34, 40, 41 and 43; Sokol 1994a, nos. 1, 2, 4; 2001, nos. 1, 2, 4, 6 and 7.

¹⁰⁹ Sokol 2001a, 14.

¹¹⁰ Dizdar 2011, 87–88.

¹¹¹ Sokol 2001b, 17 (figure 1–2); 2003, 200.

¹¹² Sokol 2001a, 14, cf. 2009, 154.

¹¹³ Sokol 1994b, 200, 201; 1997, 221; 1998, 10; 2003, 201; 2009, 154.

¹¹⁴ Marić 1964, 47, 49, pl. XXII.2–3, 6: *RRC* 190.1 (169–158 B.C.), 222.1 (143 B.C.) and 254.1 (131 B.C.).

¹¹⁵ Marić 1964, 49, pl. XXII.5; Popović 1987, 50.

¹¹⁶ Marić 1964, 49, pl. XXII.4. Other Tauriscan coins from Donja Dolina are mentioned by various authors: Pink (1939, 136), citing Sergejewski (without further reference), mentions 9 Samobor coins (his reference on p. 113 is ambiguous, mentioning only a “closed find” of the “Croatian-group” coins), Truhelka (1904, 73) mentions 10 coins in total, five of which he excavated himself, while on p. 74 (figs. 53–56) he illustrates the four best-preserved billon Đurđevac tetradrachms (Kos 1977, 46; Mirnik 1998, 487, both referring to four pieces illustrated by Truhelka in figs. 53–56; probably also Liščić 1977–1978, 237, referring to the same pieces). These coins were rather light (between 8.2 and 9.2g, Truhelka 1904, 74) and small (between 21 and 24 mm, Truhelka 1904, 74; according to Marić 1963, 72 the four coins illustrated by Truhelka 1904, 74 figs. 52–56 (and reproduced by himself, Marić 1963, 73 T. II.11–15), have diameters between 19 and 22 mm).

¹¹⁷ *SNG Cop.* 844–856 (Marić 1964, 47; Mirnik 1987, 383).

¹¹⁸ Marić 1964, 49–51.

Finally, both individual coin finds and hoards from future Pannonia Savia, with their almost complete lack of Republican coins, also suggest a pre-conquest date for the coin use they reflect;

3. Lastly, while it was previously possible to conjecture a late, post-conquest, date for the use of locally produced Celtic/Iron Age coins, drawing such inferences from the low dates attributed to their production, in light of new and archaeologically well-established dates for their production and use, it seems much more plausible to argue for their use during the pre-conquest period. Kos and Šemrov have indeed persuasively argued for the existence of a market-based monetary economy as early as the mid-2nd c. B.C. in the south-east Alpine region,¹¹⁹ and their conclusions can equally persuasively be applied to the adjacent region to the east that would much later be known under the name of Pannonia Savia. This is far from claiming that these particular coins were produced for and used only – or even predominately – in market exchange, but that one of their functions probably was indeed market exchange.¹²⁰

¹¹⁹ Kos and Šemrov 2003, 387, 390–391. However, there are no small bronze denominations in this region in this period, especially not in considerable numbers, which would certainly facilitate a market-based monetary economy, and make Kos and Šemrov's conclusion more convincing (Wigg-Wolf 2008, 36).

¹²⁰ For an overview of possible uses of coins traditionally referred to as Celtic, but now more often Iron-Age, see Howgego 2013, 26–31, who is rather sceptical of the idea of use of these coins in market exchange, although he does not exclude it completely. Harl (1996, 5–6, 293) is a bit more sympathetic. This work has been supported in part by the Croatian Science Foundation under project no. 1549. I would also like to thank M. Nađ for his help in preparing this article.

SAŽETAK

U radu se u prvom redu detaljno obrađuju svi predcarski pojedinačni nalazi novca (tj. novca iskovanog prije 31. pr. Kr.) s područja suvremene sjeverozapadne Hrvatske, što više ili manje odgovara području koje je u kasnijim razdobljima obuhvaćala rimska provincija Panonija Savija. Istovremeno se analiziraju i suvremene ostave novca, čiji sastav odgovara pojedinačnim nalazima, pronađene na istom području. Na bogatom nalazištu Segestici/Sisciji, suvremenom Sisku, pronađen je najveći broj kovanica, ali i druga, manje poznata nalazišta također pridonose općoj slici cirkulacije novca na ovom području, a ovaj se rad usredotočuje upravo na te nalaze. Velika većina nalaza predstavljaju slučajni pojedinačni nalazi (koji potpadaju pod Reeceovu kategoriju *coin supply*),¹²¹ dok je samo nekoliko nalaza pronađeno u arheološkim iskopavanjima (tj., potpadaju pod Reeceovu kategoriju *coin loss*).¹²² Najveći broj nalaza predstavljaju rimski republikanski novci, što je uvjetovano njihovim velikim brojem u Sisku, ali i keltski (željeznodobni) novac je zastupljen u nezanemarivom broju, osobito novac Tauriska. Novoobjavljeni podaci, kolikogod bili šturi, dozvoljavaju reviziju nekih trenutno važećih spoznaja o rasprostranjenosti nekih tipova novca, kao i balansiranu raspravu o cirkulaciji novca na ovom području u navedenom razdoblju.

¹²¹ Reece 2003, 141, 165, cf. 141–149.

¹²² Reece 2003, 141, 165, cf. 149–165.

Table 1: Individual pre-Imperial coin finds from north-west Croatia

No.	Type	Denomination	Date (B.C.)	Site	Weight (g)	Comment	Provenance
Central Italy							
1	" <i>ramo secco</i> " bar	Cu + Fe	6 th – 3 rd c.	Trošmarija	300,8	arch. exc.	AMZ A5738
2	<i>aes formatum</i> Bertol, Farac 2012 Type IIa	Cu + Fe	6 th – 3 rd c.	the Kupa near Karlovac (Vrlovka cave)	297,03	arch. survey	Croatian Conservation Institute
Sicily							
Mamertini							
3	SNG Cop. 458-462; SNG Öst, Dreer 1, 451-453	AE	after 288	Zagreb Upper Town – Grič Park	9,13	pierced; found in a mixed layer, arch. context indeterminate	City Museum Zagreb; Dukat, Mašić 2005
Syracuse – Hiero II							
4	SNG Cop. 844-856; SNG Öst, Dreer 1, 538-545	AE	274–216	Kiringrad	5,51		AMZ G1190
Numidia							
5	MAA 18a	AE	148–118	Glina	15,42		AMZ A5411
6	MAA 18	AE	148–118	Plešivica-sedlo	11,42		AMZ Class. ant. 9376; Dukat 2001
7		AE	148–118	Kiringrad		pierced	

No.	Type	Denomination	Date (B.C.)	Site	Weight (g)	Comment	Provenance
Apollonia							
8		dr	250-49/48	Brezova Ravna at Miljana near Klanjec			Mirnik 1990
Dyrrachium imitation							
9		AE dr		Bartolovec- Jažabet			AMZ G2309_2
Macedonia							
10	SNG De, Tübingen 2, 1218-1221; SNG Ost, Dreer 3, 645-649	AR	after 167-166 (Tübingen); 158-150 (Dreer)	Križevci area	16,58		AMZ A11235
Celtic/Iron Age							
Eastern Celtic							
11	early imitation of Philip II	tdr	1/II 3 rd c. Preda 1973, 441-442, 451	Zagreb	13,1		Forrer 1908, fig. 268
12	late imitation of Philip III (Alexander's type)	tdr	mid-to-late 2 nd c. Preda 1973, 330, 343, 448	Zagreb	15,1		Forrer 1908, fig. 336
13	late imitation of Philip III (Alexander's type)	tdr	mid-to-late 2 nd c. Preda 1973, 330, 343, 448	Modruš	12,44		OTA 590

No.	Type	Denomination	Date (B.C.)	Site	Weight (g)	Comment	Provenance
14	Baumreiter mit Bartkranzavers, group A (OTA 129 = Baumreiter) / Crišeni-Berchieš A	tdr	2/II 3 rd c. Preda 1973, 104	Brezova Ravna at Miljana near Klanjec			Mirnik 1990, 4
15	Baumreiter mit Bartkranzavers, group B2 (Pink 1939, no. 142) / Crišeni-Berchieš A	dr	2/II 3 rd c. Preda 1973, 104	Kraljevec near Đurđevac	3,36		Pink 1939, 60, 139 no. 150
16	Huši-Vovriešti	tdr	end of the 3 rd – mid 2 nd c.	Zagreb?	13,52		Pink 1939, 39-40, 134 no. 3, Abb. 36; Preda 1973, 122 no. 48
17	Zickzackgruppe (cf. OTA 459-461)	tdr	late 3 rd – 1 st half of the 2 nd c.	Kuzelin	10,1	arch. excavations, 1991	Museum of Prigorje Sesvete 166/94
Scordisci							
18	Syrmanian phase C?	AE tdr		Repušnica	6,57	heavily worn	AMZ G362
19	Syrmanian phase C?	AE dr		Samobor	1,9		Coll. Lanz 515 (Kostial 1997, 96)
20	Syrmanian phase C?	AE dr		Samobor	1,74		Coll. Lanz 516 (Kostial 1997, 96)
Imitations of staters of Alexander III							
21		AV	3 rd c.	Radoboj	8,46		AMZ A1188
22		AV	3 rd c.	?	8,34	probably NW Croatia	AMZ A1187

No.	Type	Denomination	Date (B.C.)	Site	Weight (g)	Comment	Provenance
23		AV	3 rd c.	Ludbreg	8,21		AMZ A4674
24		AV	3 rd c.	Varaždin area	7,84		AMZ A13427
Boii							
25	Muschelstater	AV	1 st half of the 2 nd – 1 st half of the 1 st c. (2 nd half of the 2 nd c.)	near Zagreb	5,89 or 6,89		Dessewffy 1910, no. 485
Norican							
26	Magdalensberg	scs	2 nd c. – before 16/15	Đurđevac			GR 50059
27	Magdalensberg	scs	2 nd c. – before 16/15	Đurđevac			GR 50060
Tauriscan							
28	Varaždin A	tdr		Kalnik	12,4		priv. coll.
29	Varaždin A/B	tdr		Vaganac (Ogulin)	10,42		AMZ A915
30	Varaždin B	tdr		Križevci	11,94		AMZ A909
31	early Tauriscan	obol	Lt C2, 200 – 150 B.C.	Zvonimirovo – Veliko polje	0,44	grave find	PN 1180
32	Samobor A	tdr		Croatia	11,14	probably NW Croatia	AMZ A8868

No.	Type	Denomination	Date (B.C.)	Site	Weight (g)	Comment	Provenance
33	Samobor A	tdr		Croatia	10,85	probably NW Croatia	AMZ A9582
34	Samobor A	AE tdr		Kuzelin	7,96	arch. exc.	Museum of Prigorje Sesvete
35	Samobor B (early) ¹	tdr		Osječenica		priv. coll.	Durman 1992, 127; 2009, 13
36	Samobor B, 7KN 45-109	tdr		Sv. Marija near Okić	11,1		AMZ A10436
37	Samobor B	(AE?) tdr		Kuzelin	10,54	arch. exc. 1983	Museum of Prigorje Sesvete 168/94
38	Đurđevac	tdr		Varaždin	10,42		BP/16/1955.69
39	Đurđevac	tdr		Bjelovar county	10,30		Nemzeti (Dessewffy 1910, no. 90)
40	Đurđevac	tdr		Kuzelin	9,6	arch. exc.	Museum of Prigorje Sesvete
41	Đurđevac	AE tdr		Kuzelin	9,45	arch. exc. 1981	Museum of Prigorje Sesvete 167/94
42	Đurđevac	tdr		Varaždin	8,84		priv. coll. (lost)
43	Đurđevac	AE tdr		Kuzelin	8,17	in the floor of a Celtic house, arch. exc. 1984	Museum of Prigorje Sesvete 169/94
44	Đurđevac	tdr		Veliki Kalnik	7,24		AMZ A917
45	Đurđevac	AE tdr		Šćitarjevo			Roman-period grave (SU 328, grave 2, quadrant a2, special find no. 493); Bilić 2012, 364

No.	Type	Denomination	Date (B.C.)	Site	Weight (g)	Comment	Provenance
46	Frontalgesicht	tdr		Tounj	7,59		AMZ A918
47	Brezelohr B	tdr		near Varaždin	9,83		
48	Augentyp-Stamm	tdr	2 nd /1 st c.	Kuzelin	8,67	arch. exc.	Museum of Prigorje Sesvete
49	Augentyp-Stamm	tdr		Đurđevac			Dembsky 1998, 92 no. 910
50	Wuschelkopf, TKN 85-173	tdr		Zagreb-Stenjevec	9,36		AMZ A10950; Pink 1937, 48; Klemenc 1938, 38 (both erroneously classified the coin as "Samobor")
51	Samobor C	AE (Škoberne 1994, 32) or AG ("poor silver", Mirmik 1998, 487) tdr		Zagreb Upper Town – the Town Museum of Zagreb site	7,88	arch. exc., late La Tène context	City Museum Zagreb
52	Samobor C (SC23)	tdr		Mahično near Karlovac			Čučković 2009, 16
53	Tauriscan? Samobor?	tdr		Osječenica		priv. coll.	Durman 1992, 127; 2009, 13; Ožanić 1998, 36
Celtic – undetermined							
54				Petrijanec		sole information: Celtic coin	Tkalčić's journal
55		tdr		Cerje Tužno near Ivanec	8,47	sole information: Celtic coin	AMZ archives

No.	Type	Denomination	Date (B.C.)	Site	Weight (g)	Comment	Provenance
Republican							
56	RRC 245.1	d	134	Drežnik			AMZ B678
57	RRC 335.1b	d	late 90s	Osječenica		arch. exc., mixed Roman and prehistoric material or a Roman layer	Durman 1992, 127; 2009: 11, 13; Ožanić 1998, 29, 36-37
58	RRC 400.1a	d	71	Kiringrad			AMZ B1404
59	RRC 403.1	d	70	Međimurje			AMZ B1405
60	RRC 422.1b	d	58	Končanica			AMZ B1015
61	RRC 443	d	49-48	near Prelog			Museum of Međimurje
62	RRC 494.9a	AV	42	the Lonja at Preloščica			AMZ B716
63	RRC 544	d	32-31	Ščitarjevo – Župna livada		arch. exc., unknown layer	Museum of Turropolje A-402
64	RRC 544	d	32-31	Ludbreg			
65	RRC?			Dubovac		information from a news portal	Čučković 2008

¹ Classified by P. Kos (*pers. comm.*).

Table 2: Pre-Imperial coin hoards from north-west Croatia

No.	Site	Composition	Date (B.C.)	Comment
			Macedonia	
1	Croatia	c. 10 AV staters of Alexander III	last 3 rd of the 4 th c.	undisclosed precise location
		Apollonia and Dyrrachium imitations		
2	Odra Sisačka	70 or 72 AE imitations of Apollonia and Dyrrachian drachms	end of the 1 st quarter of the 1 st c. or later	
		Barbaro-Celtic/Iron Age		
3	Narta	33 Huši-Vovriesti tdr, 3 original Macedonian coins (?)	end of the 3 rd – mid 2 nd c. or earlier	
4	Ribnjačka	112 imitations of tdr of Philipp II (44 Turnierreiter, 20 Dreieckhals, 6 Puppenreiter)	first half of the 2 nd c.	
5	Sveti Petar Orehovec near Križevci	>2 Kapostaler tdr	mid 2 nd c.–late 1 st c.	
6	Križovljan near Varaždin	109 tdr of Varaždin A and B + Augentyp-Stamm	end of the 1 st half of the 2 nd c.	the presence of Augentyp-Stamm coin questionable
7	Okić near Samobor	c. 1300 tdr of Samobor A and B type	early 2 nd half of the 2 nd c.	
8	Šemovec near Đurđevac	c. 400 tdr of Đurđevac type		perhaps also contained a specimen of Samobor A type

No.	Site	Composition	Date (B.C.)	Comment
9	Kozarevac near Koprivnica	7 tdr of Đurđevac type		perhaps part of the Đurđevac hoard (not included in Kos 2009) Pink 1939, 139 (7 pieces, but notes only 6); Dessewffy 1910, nos. 90, 477-480, 734; TKN, nos. 12, 60, 68, 70, 84, 103; the only possible correlation is Dessewffy 1910, no. 478/TKN, no. 84; BP 27A/1898/1-3, 31A/1898/1898/1, 3, R. I. 6062 + 31A/1898/2 (a letter from K. Biró-Sey of 11 th of July, 1988, AMZ archives)
10	Špišić Bukovica near Virovitica	12 AR, undisclosed no. of coins of Đurđevac type		the presence of Đurđevac coins questionable
11	Bartolovec-Jalžabet	12 AE tdr of Đurđevac type		possible presence of other types of coins; low quality metal and poor workmanship (irregular issues); two specimens silvered
12	Pokupsko	2 early Đurđevac tdr, 3 Samobor A tdr, 3 Samobor B tdr	140s	
13	Đurđevac 1905	1 Augentyp-Stamm		KHM Wien 26977
14	Baniščina near Varaždinske Toplice	>2 AR Celtic tdr: Varaždin or Ribnjačka (i.e., Turnierreiter?)		attribution by Zmajčić 1967, 24
			Roman Republican	
15	Sisak 1878	4 d	46	

ABBREVIATIONS

HNI = Rutter, N. K. (ed.), *Historia Nummorum. Italy*, London, British Museum Press, 2001.

MAA = J. Alexandropoulos, *Les monnaies de l'Afrique antique 400 av. J.-C. – 40 ap. J.-C.*, Toulouse, Presses universitaires du Mirail, 2007.

Price = M. J. Price, *The Coinage in the Name of Alexander the Great and Philip Arrhidaeus*, Volume I–II, Zurich, London, The British Museum, Swiss Numismatic Society, 1991.

OTA = R. Göbl, *Ostkeltischer Typen-Atlas*, Braunschweig, Klinkhardt & Biermann, 1973.

RRC = M. Crawford, *Roman Republican Coinage*, Volume I–II, Cambridge, Cambridge University Press, 1983.

SNG Cop. = *Sylloge nummorum graecorum. The Royal Collection of Coins and Medals. Danish National Museum, 1, Italy*, West Milford, Sunrise Publications, 1981.

SNG De, Tübingen 2 = *Sylloge nummorum graecorum Deutschland. Münzammling der Universität Tübingen, 2, Taurische Chersones – Korkyra*, Berlin, Mann, 1982.

SNG Öst, Dreer 1 = *Sylloge nummorum graecorum, Sammlung Dreer, Klagenfurt im Landesmuseum für Kärnten, 1, Italien – Sizilien*, Klagenfurt, Geschichtsverein für Kärnten, 1967.

SNG Öst, Dreer 3 = *Sylloge nummorum graecorum, Sammlung Dreer, Klagenfurt im Landesmuseum für Kärnten, 3, Thracien – Macedonien Páonien*, Klagenfurt, Landesmuseum für Kärnten, 1990.

TKN = R. Göbl, *Typologie und Chronologie der keltischen Münzprägung in Noricum*, Wien, Österreichischen Akademie des Wissenschaften, 1973.

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