

# DO UT DES – CULTIC COIN DEPOSITS AT THE DRAVA RIVER NEAR ROSEGG/ROŽEK IN CARINTHIA (AUSTRIA).

## Analysis of the find inventory in the Museum Archeo Norico, Deutschlandsberg (Styria, Austria)

**Ursula SCHACHINGER**

Institute of Classics, University of Graz,  
ursula.schachinger@uni-graz.at

---

**Abstract:** In 2017, two Roman bridges over the Drava river were discovered in the municipality of Rosegg (Rožek)/Emmersdorf in Carinthia (Austria). Although the existence of a bridge had been known for a long time it could only be identified as definitely Roman after further investigations. In addition, parts of Roman grave monuments and small finds, especially Celtic and Roman coins, have been found at the site within several years.

The coin finds are particularly important as witness for the passage and use of the bridges, as they not only provide a chronological framework for the crossing of the Drava river at this point, but they also offer cultural and socio-historical information. According to this, the coins found in the area of the ancient bridges can be interpreted as sacrifices for a safe river crossing. This custom began as early as the late Latène period and was maintained until late Roman times

**Keywords:** *ancient numismatics, coin finds, Celtic coins, Roman coins, Roman bridge.*

DOI: 10.14795/j.v7i4.554

ISSN 2360 – 266X

ISSN–L 2360 – 266X

In 2017, in the municipality of Rosegg/Rožek (community of Emmersdorf) in Carinthia the remains of two adjacent Roman bridges over the Drava river were discovered (Fig. 1). Although their existence had been known for a long time they could only be defined as Roman due to recent research activities.<sup>1</sup> They are situated between two historically witnessed river crossings at Frojach and St. Lambrecht.<sup>2</sup> For the eastern bridge a C14-dating between 128 and 258 AD was determined. In addition, fragments of Roman marble grave monuments had been found in 2003 on the northern bank of the Drava, which have already been published by G. Piccottini in 2010. According to Piccottini, the marble blocks which were lying one on top

<sup>1</sup> GLEIRSCHER 2017; GLEIRSCHER 2018; The present study was financed by the Austrian Federal Monuments Office (Bundesdenkmalamt) initiated by Bernhard Hebert.

<sup>2</sup> GLEIRSCHER 2018, 13.



Fig. 1. Topographical situation of Rosegg/Rožek (by S. Groh, Austrian Archaeological Institute/ÖAW).

of each other served as spolia for the foundation of the ramp of a wooden bridge. This bridge was assumed to be of post-antique origin. Its pilot trunks of larch wood and one iron pilot shoe were already known for some time.<sup>3</sup> Comparable marble spolia were also found at various sites along the Drava in and around the city of Villach. The origin of these fragments of grave monuments as well as two fragments of inscriptions was convincingly argued by Piccottini from Teurnia, probably from the cemetery of Faschendorf. Piccottini assumed that in later periods these marble blocks were transported on rafts down the river for construction work, such as for foundations of mills. In the course of the carriage one or the other vehicle probably sank; so, the marble blocks made their way into the riverbed in Villach.<sup>4</sup> In analogy to the finds from Villach, P. Gleirscher interprets the marble blocks from Rosegg/Rožek as the cargo of a sunken raft loaded with spolia from Teurnia or the cemetery of Faschendorf.<sup>5</sup>

<sup>3</sup> PICCOTTINI 2010, 20–22.

<sup>4</sup> PICCOTTINI 2010, 19f.; PICCOTTINI 2016, 46–48.

<sup>5</sup> GLEIRSCHER 2018, 11.

In 2015, further finds from this site were brought to the Museum of Carinthia (Landesmuseum für Kärnten); notably late Celtic and Roman coins which were picked up within 100 meters from the bridge(s).<sup>6</sup> Gleirscher interpreted these late Celtic and Roman coin finds as sacrifices for a safe river crossing. In the course of further research, particularly the coins and the small finds should clarify the exact dating of the bridge(s).<sup>7</sup> However, the period from the middle of the 2nd century BC to the end of the 2nd century AD was already assumed in advance for the use of the river crossing and the bridge(s), although – as Gleirscher states – the coin finds did not stop until the end of the 4th century.<sup>8</sup> But more precise object-related data are not yet available. There is no doubt that the coins are very important as witness for the use of the Drava crossing and the existence of the bridge(s). They not only provide a chronological framework for the crossing

<sup>6</sup> GLEIRSCHER 2017, D675; GLEIRSCHER 2018, 11f.; HINKER 2019.

<sup>7</sup> The small finds will be investigated at the Austrian Archaeological Institute/Austrian Academy of Sciences by Christoph Hinker, the coin finds will be analysed by Richard Drotleff at the Museum of Carinthia.

<sup>8</sup> GLEIRSCHER 2017, D676–D679.

of the Drava river at this point, but also offer cultural and socio-historical information.

There is a collection of coins from the same site in the Museum Archeo Norico in Deutschlandberg/Styria (Austria). It consists of 31 Celtic (Cat. No. 1-31) and 47 Roman (Cat. No. 33-78) coins as well as one Abbasid coin (Cat. No. 81), one presumably Roman gold ring (Cat. No. 32) and one bronze ring of uncertain date (Cat. No. 80). At first, a golden stater (Cat. No. 1) was found by a private finder during gold panning activity in the Drava river in the area of Emmersdorf; soon after he found numerous other small and large silver coins.<sup>9</sup> Thereupon, the remaining excavated earth from the Drava for the hydropower plant was examined by means of a metal detector. Though, much earth material had already been removed before. The same person investigated the area within 80 meters from the first coin find and recovered further coins. In 2014, he handed his collection of coin finds over to the Museum Archeo Norico. The above-mentioned coin finds from 2015 were made at a later time by the same finder who brought them to the Museum of Carinthia (Landesmuseum für Kärnten).

As part of the complete archaeological material the collection from the Museum Archeo Norico represents a good cross-section of the coin finds from the bridge area. It is to be examined in detail at this point. On the one hand, it will be investigated whether the coins found in the area of the ancient bridge(s) can be addressed as sacrifices for a safe river crossing; such customs have been attested since the late Latène period when crossing rivers or Alpine passes and have often been preserved until late Roman times. On the basis of supra-regional comparisons with sites, where coins were found as river sacrifices, common or different patterns are to be identified. In this regard, at first the chronological aspect is taken into account, i.e. for how long such customs were cultivated, and secondly in what way, i.e. which coins were sacrificed. Furthermore, whether this custom has been maintained without interruption, and how long it has been maintained. On the other hand, the chronological framework for the use of the river crossing and/or the bridge(s) is examined by means of detailed numismatic analysis. This raises the question of whether the crossing/bridge(s) was used continuously or whether there are temporary interruptions of use; furthermore, how long it was intact or whether there is a coincidence between the end of the river crossing/bridge(s) and the decline of coin finds. Additionally, the question arises how and in which context one or more bridges can be interpreted at this site, especially since the Norican main road to Virunum led along the north shore of the Wörthersee lake.

## THE CELTIC COINS

The Celtic coins found in the area of the river crossing/bridge(s) are composed of 18 "Norican" large silver coins – called tetradrachms according to their Greek original – and 9 small silver coins (obols), as well as 3 "Tauriscan" and one Boic coin. The oldest coins among them are of phase 2, which G. Gorini states as a transitional phase from 130 to 100/90

BC.<sup>10</sup> These are 9 tetradrachms, which is a considerable number of coin finds of the older phase considering that the frequency of finds does not increase in Carinthia until the 3rd phase, i.e. after 82/80 BC, when "Norican" coins are distributed more extensively and regularly. Therefore, it is not surprising that coins from the earliest minting period of the 1st half of the 2nd century are not present on site.

First of all, it should be noted that the old, misleading terms "Norican" and "Tauriscan" are now being discussed, as these terms simulate ethnic connections that did not exist in reality.<sup>11</sup> Also the terms "West Norican" and "East Norican", which R. Göbl already rejected,<sup>12</sup> do not fit entirely, since they imply a dominance of the Norici, which was in general not the case, as K. Strobel explained. Because the Norici appeared relatively late in the historical context; Strobel calls them the warrior elite of the Mokronog zone of northern Slovenia or descendants of the Taurisci who immigrated to Carinthia along the Drava river in the Latène C2 phase and spread on both sides of the Karavanke mountains after the first half of the 1st century.<sup>13</sup> Ancient historians often connect them to the Taurisci and call them "Norican Taurisci" or "formerly known as Taurisci".<sup>14</sup> For this reason, Strobel proposes the term "Carnic-North-Tauriscan" for the "Norican" or "West Norican" coinage of the earlier phase, which fits more to the ethnic distribution.<sup>15</sup> This term is used in the following; the term "Tauriscan" is still used for the "Tauriscan" or "East Norican" coinage, as it exactly describes the core area of the Taurisci in Slovenia and North-Croatia. "Norican" coinage is still used for the latest minting phase. However, the Carnic-North-Tauriscan region was the starting point for the coinage. Accordingly, a separate coinage of "Norici" and "Taurisci" did not exist at the beginning; they minted in common, which was already manifested by the Haimburg hoard, the earliest evidence of Carnic-Tauriscan coinage. It contained both Kugelreiter types formerly known as "Norican" and "Tauriscan" Varaždin types with the legend VES.

There are slightly different research opinions concerning the beginning of Carnic-Tauriscan coinage. While Gorini derives from the Enemonzo hoard a production period of the early Kugelreiter tetradrachms between 180 and c. 120/115 BC which he divides into 3 phases,<sup>16</sup> P. Kos argues for a beginning of the coinage in the last decades of the first half of the 2nd century BC.<sup>17</sup> A minting period of 60 years for the early Kugelreiter types is too long, since recent hoards had proven that the early Kugelreiter types were produced with only a few dies and they immediately came into hoards, i.e. they were not distributed by circulation. Only a few singular pieces are attested as single finds; they were produced with the same dies as the types represented by the hoards.<sup>18</sup> The

<sup>10</sup> GORINI 2008, 99; GORINI 2009, 121f.; GORINI 2015, 387.

<sup>11</sup> STROBEL 2012; STROBEL 2014, 70f.

<sup>12</sup> GÖBL 1989, 33-35.

<sup>13</sup> STROBEL 2012, 17; STROBEL 2014, 71f.; STROBEL 2015, 79-84.

<sup>14</sup> Strab. 4.6.12; Plin. n. h. 3.133.

<sup>15</sup> STROBEL 2012, 12-18.

<sup>16</sup> GORINI 2005; GORINI 2008, 98f.; GORINI 2009, 117f.; GORINI 2015, 387.

<sup>17</sup> KOS 2007, 60; KOS 2010, 80-82; KOS/MIRNIK 2011, 101; MIŠKEC 2012, 383.

<sup>18</sup> KOS/MIRNIK 2011, 103-106 list all known Varaždin A and B specimens.

<sup>9</sup> Kind information concerning the finding circumstances by A. Bernhard and A. Steffan, Museum Archeo Norico, Deutschlandberg.



**Table 1.** Single finds of TINCO/COPPO(V)/COPO types (130-100/90 BC) in Carinthia.

Findspot	Type	Spec.	Types / Dies	Citation	Weight
Gurina (municipality Dellach)	COPO	2	1 unknown C3b [3G-35]	Dembski 1977, A-6; Schmidt-Dick 1989, 63, No. 1; Dembski 1972, 47	? 9,50 g
	TINCO	1	unknown	Dembski 1972, 47 (old find)	?
Magdalensberg (municipality Maria Saal)	COPPO	3	A3b [1K-12/15]	Krmnicek 2010, No. 12-14	9,90 g 6,68 g 9,65 g
	COPO	2	C3c [3H2-35a/36]	Krmnicek 2010, No. 15-16 (No. 16 quartered)	7,79 g 2,92 g
Virunum (Zollfeld, municipality Maria Saal)	TINCO	1	A2c [1H-8]	Schmidt-Dick 1989, 90	10,28 g
	COPO	1	C3d [3K-39a]		8,02 g
	COPO	1	C3b [3H2-36]	Museum Archeo Norico, Deutschlandsberg	10,28 g

tetradrachms of the older minting period therefore were not intended for circulation. They were shifted in complete tranches, which can also be verified in southern Germany.<sup>19</sup> So, the Haimburg hoard contains the earliest coins of the Carnic-Tauriscan coinage at all. Although the hoard has been known since 1972,<sup>20</sup> it has had an eventful history. Parts of the stock have repeatedly appeared in auctions. Although the original quantity is unclear, the known specimens now have grown to 241 coins.<sup>21</sup> The hoard contains the earliest coin series, i.e. Kugelreiter A1 and B1 types, as well as the predecessors of the Varaždin types with the legend VES,<sup>22</sup> which mark the beginning of the minting process and locate it in the Carnic-Tauriscan region.<sup>23</sup> Furthermore, the hoard clearly testifies that in the older phase there was no separate coinage – as previously assumed – of the Norici and the Taurisci. Kos identified the VES types – incorrectly called FES by Göbl – as the earliest coin types. They occur exclusively in the Haimburg hoard.<sup>24</sup>

The early Varaždin A type is derived from the VES type and is therefore from a later time period.<sup>25</sup> The VES types immediately came into the hoard after being minted. According to P. Kos and I. Mirnik, a “travelling die-cutter” who received the order to produce the VES types minted them in southern Carinthia. Then he travelled along the Drava river to Križovljan (Varaždin) where he produced Varaždin A and later Varaždin B types. Since these early coin types are testified only with few dies, P. Kos speaks of „multiple singular occurrences, dictated by the monetary needs of the communities in question“, i.e. no regular minting process, and that “local tribal chieftains” initiated

the coin production which took place within the last decades of the first half of the 2nd century BC.<sup>26</sup>

The findspot on the hill of Haimburg in the district of Völkermarkt (Carinthia) lies exactly on the transit route between central Carinthia and Celeia, which was of supra-regional importance as a political and economic centre in the 2nd and 1st centuries BC. Celeia was an important mint of both the older and younger coinage. The older minting period, i.e. phases 1 and 2 according to Gorini which means the minting period before 82/80 BC is only documented in Carinthia by the hoards of Haimburg and “Malta”/Villach. The findspot Haimburg also indicates that the Taurisci were interested in the gold deposits in the Lavant valley. They began to develop the area economically coming from Celeia along the Drava river.<sup>27</sup>

The Enemonzo hoard confirms this assumption. Due to the presence of Kugelreiter B1 and C2 types, it is somewhat later than the Haimburg hoard.<sup>28</sup> An absolute dating is possible due to the presence of Roman republican *victoriati* that are the most numerous coin types within this hoard. They were issued in large numbers between 179 and 170 BC and occur only in Northern Italy and Slovenia sometimes together with Kugelreiter types.<sup>29</sup> In Carinthia they are not documented, since the area was obviously not of primary economic interest of the Romans in the 2nd century BC. It should also be noted that the hoard also includes Kugelreiter C2 types with the Venetian legend X or T.<sup>30</sup> The Venetian alphabet was used by the Carni because they traded with the Venetians and the Italics. And the trade with the Taurisci was controlled by the Carni. Since the earliest coins of the Carnic-North-Tauriscan region bear Venetian legends (VES, X or T), P. Kos assumes that at the beginning die-cutters came from

<sup>19</sup> NICK 2005.

<sup>20</sup> GÖBL 1989; DEMBSKI 1977, A-8.

<sup>21</sup> In addition to the known and already published 237 specimens, there are 4 unpublished coin finds that are inventoried at the Museum Archeo Norico in Deutschlandsberg/Styria (Austria); cf. catalogue No. H1-H4.

<sup>22</sup> KOS 2007, 60; KOS 2012.

<sup>23</sup> The Haimburg hoard apparently brought together 2 separate ensembles (VES types and Kugelreiter types), which makes STROBEL 2014, 74-76 think of a military context, and which speaks against a production and circulation in Southern Carinthia.

<sup>24</sup> KOS 2012. Singular specimens are produced with the same dies; KOS/MIRNIK 2011.

<sup>25</sup> KOS 2012, 355f.

<sup>26</sup> KOS/MIRNIK 2011, 102; KOS 2007, 63. The existence of mobile workshops which worked on demand in different places was verified by ZIEGAUS 2014.

<sup>27</sup> STROBEL 2012, 12. 25; STROBEL 2014, 71; STROBEL 2016, 43. Another hoard from St. Veit (Carinthia) is inventoried in the Museum Archeo Norico in Deutschlandsberg. It contained both Kugelreiter B1 types and TINCO/COPPO(V)/COPO types and is currently being published by the author.

<sup>28</sup> GÖBL 1998; KOS 2010, 74-77; STROBEL 2014, 73f.

<sup>29</sup> MIŠKEC 2012, 381f.; KOS/TRKMAN 2009; KOS/ŠEMROV 2003, 389; STROBEL 2014, 68f.; STROBEL 2015, 43f.

<sup>30</sup> GORINI 2009, 121, interpreted the letter T as „Teurnia“ and „Taurisci“, which soon was revised: KOS 2010, 82; STROBEL 2014, 73 f.

the Carnic Veneto.<sup>31</sup> The fact that the Taurisci issued mainly anepigraphic coins further indicates that they did not use the Venetian alphabet.

After the early Kugelreiter types (A1, B1 and C2, also with Venetian legends), which are documented in the Haimburg and Enemonzo hoards, coins with legends in Venetian and Latin letters, TINCO, COPPO(V) and COPO on the reverse occur in phase 2 (130-100/90 BC). These coin types are testified in a hoard which is known as the "Malta/Koschach" hoard, but which originates from Villach and originally comprised more than 600 coins.<sup>32</sup> Since prehistoric times Villach was a traffic hub that connected transport routes from Italy with those along the Sava valley. It became more and more important during the late Latène period and early Roman times and speaks witness for the economic development of the region north of the Karavanke mountains. So that the production of coins which had already been practiced in the Carnic-North-Tauriscan region became more widespread. There is a similar hoard from Novo Mesto containing about 700 coins of the same period with TINCO/COPPO(V)/COPO types. Novo Mesto could easily be reached along the Sava river and through Ljubljana directly on the way along the Krka river southeast of Ljubljana. Consequently, both hoards could have been produced by a single mobile workshop.<sup>33</sup> However, even in this period regular and continuous minting activity was not yet common practice. Coinage was rather demand-oriented and occurred singularly and independently. For this reason, it is possible that these early coin types were issued by one single travelling workshop. However, the quantity of coin production is likely to have increased, which is witnessed by several different variants of reverse legends on the coins. The use of the Venetian and Latin alphabet testifies continuously increasing contacts with Venetians and Italics.

To sum up, the early Kugelreiter types spread in different directions: Starting from the VES types, which was possibly produced in Southeast-Carinthia or North-Slovenia, coinage spread in the direction of Križovljan (Varaždin) with Varaždin A and B types. These types occur without a legend on the reverse because the Taurisci obviously did not need any legend on their coins. At the same time, the older Kugelreiter type of the Haimburg phase appeared and shortly after the younger one of the Enemonzo phase which again bore Venetian legends. All these types probably were issued in the Carnic core area. Afterwards, the Carni and the Taurisci issued at different sites successively within a short period of time. Small change was already included in the production programme.<sup>34</sup> This evidence is emphasized by the hoards of Villach ("Malta") and Novo Mesto, the latter of which includes similar quantities of TINCO/COPPO(V)/COPO types. They indicate increasing contacts with Italy and

Rome attested by Venetian-Latin legends on the reverses.

Only in the younger minting period after 82/80 BC did Carinthia see a more or less widespread distribution of coins with Latin legends such as CONGESTLVS, ADNAMATI, NEMET, ATTA, etc.<sup>35</sup> In this regard Strobel argues for an increasing importance of the Carinthian area from the phase Latène D1b onwards which is intensified in Latène D2a when the Magdalensberg was developed as an emporium. The foundation of Iulium Carnicum in 56 BC is to be considered in the same way, which points to the preparations for the annexation of the Alpine region already in Caesarian times.<sup>36</sup>

The coin finds from the Drava river near Rosegg/Rožek comprise 9 specimens of the TINCO/COPPO(V)/COPO type dated between c. 130 and 100/90 BC (Cat. No. 2-10; Fig. 2). In addition, there are 9 tetradrachms with Latin legends issued after 82/80 BC: CONGESTLVS (2 specimens), ADNAMATI (2 specimens), NEMET (1 specimen), SVICCA (1 specimen) and ECCAIO (2 specimens) (Cat. No. 11-19; Fig. 2).<sup>37</sup> According to what has been pointed out, the (single) finds of TINCO/COPPO(V)/COPO types in Carinthia as well as in the Carnic-Tauriscan region – except for the hoards from Villach ("Malta") and Novo Mesto – are not very numerous, since tetradrachms were not regularly used as circulating money in this phase; they mainly occur in hoards or closed complexes.

In Carinthia, coins of this phase (130-100/90 BC) appear as single finds in the settlements on the Gurina hill, the Magdalensberg and the Virunum/Zollfeld (see table 1). On the Gurina hill 2 specimens of the COPO type were found;<sup>38</sup> only one specimen is known by die-link which is published by Schmidt-Dick in 1989. It is identified as type TKN [3G-35], which also occurs in the Villach ("Malta") hoard as well as in Rosegg/Rožek (No. 7). Among the rest of the coin finds from the Gurina hill only the later tetradrachms with Latin legends of the phase after 82/80 BC appear. Furthermore, small silver of various types was found.

From a total of 746 Celtic coins from Magdalensberg only 5 date back to the phase from 130 to 100/90 BC. Significantly, all these types, i.e. the same die-links, are also represented in Rosegg/Rožek. The type COPPO A3b after Göbl appears in Rosegg/Rožek as die-link TKN [1K-13] with one specimen (No. 5), at Magdalensberg with 3 specimens. Furthermore, the type COPO C2c with the obverse TKN 3H2 (No. 9) appears in 2 specimens at Magdalensberg. The same die-link as in Rosegg/Rožek is also documented in the Villach ("Malta") hoard.<sup>39</sup> At Magdalensberg – as well as on the Gurina hill – tetradrachms with Latin legends of the last minting phase after 82/80 BC generally predominate those of the phase 130-100/90 BC. There are 35 specimens from

<sup>31</sup> KOS 1978 (Most na Soči hoard); KOS 2010; KOS 2012, 354f.

<sup>32</sup> GÖBL 1998; MARCER 2005a; MARCER 2005b; STROBEL 2012, 17; STROBEL 2014, 78f.

<sup>33</sup> Göbl already recognized early connections of "West Norican" and "East Norican" coinage. GÖBL 1998, 84f.

<sup>34</sup> KOS 2007, 62; KOS 2013; KOS 2015; KOS/ŠEMROV 2003 (hoard from the Ljubljana river with Samobor SC 13, 14 and 16 types that are typologically related to Varaždin B types). KOS/TRKMAN 2009 (Kobarid hoard with earliest small silver coins). SCHACHINGER 2001 (early small silver coins from the Frauenberg near Leibnitz/Styria (Austria) with Augentyp types).

<sup>35</sup> GORINI 2009, 121f. (after 90 v. Ch.); STROBEL, 2014, 72 (after 82/80 BC due to imitations of Roman *denarii* with horseman with lance, the so-called lancerider).

<sup>36</sup> STROBEL 2009; STROBEL 2012, 14, 21f.; STROBEL 2015, 64.

<sup>37</sup> The composition of the coin finds from Rosegg/Rožek in the Museum of Carinthia is very similar. DROTLEFF 2019, 135f.

<sup>38</sup> One single find is documented by SCHMIDT-DICK 1989, 63, No. 1; DEMBSKI 1972, 47. The second specimen comes from an obviously false hoard. RUSKE 2011, 72; DEMBSKI 1977, A-6.

<sup>39</sup> In addition, there is one single find with the same die-link from Lemberg. KOS 1977, 132; No. 68.

the period after 82/80 BC compared to 5 from the phase 130-100/90 BC,<sup>40</sup> which may indicate that the few early coins were lost (or deposited) on site in the later phase. The present quantity of coins from the earliest phase after 82/80 BC coincides with the expansion of the town on Magdalensberg. The older coins appear in Augustan and Claudian levelling layers, which clearly identifies them as money in secondary use. They probably came from a closed early coin complex or hoard. Only in the 1st century BC did they come to Magdalensberg as circulation money. This is supported by the fact that the same types and die-links are documented in the Villach ("Malta") hoard, in the finds from Rosegg/Rožek and from Magdalensberg. One specimen from Virunum/Zollfeld, which is inventoried in the Museum Arheo Norico in Deutschlandsberg, has the same die-link as Cat. No. 9 from Rosegg/Rožek.<sup>41</sup>

In addition, 3 coins of the COPPO(V) A3a type from Rosegg/Rožek show the same die-link TKN [1J-10] (Cat. No. 2-4; Fig. 2). Both dies, the obverse and the reverse die, are neither represented in the Villach ("Malta") hoard nor in the single finds from Carinthia. One single specimen occurs in the Bevke hoard east of Nauportus which only contains Tauriscan types. P. Kos remarked that this unique specimen might have been a remnant that had not been over stamped, since COPPO(V) types in Slovenia occur regularly over stamped by later types.<sup>42</sup>

It is therefore highly unlikely that the TINCO/COPPO(V)/COPO coins issued 130-100/90 BC from Rosegg/Rožek were in circulation contemporaneously. They were originally part of one or more complexes or hoards and had reached their site of loss/deposition in the later phase after 82/80 BC.<sup>43</sup> Thus, the beginning of the use of the river crossing/bridge(s) from the middle of the 2nd century BC onwards can be rejected;<sup>44</sup> this presumption can – if at all – only be verified in the context of the small finds.

In the 1st century BC Celtic coin finds increase strongly in Carinthia. This coincides with the expansion of the town on Magdalensberg, where almost exclusively coins of the latest minting phase are documented. Locally produced Norican small silver coins with an angular cross (Winkelkreuz type) make up the largest part.<sup>45</sup> Coin finds from the latest minting phase after 82/80 BC are generally more widespread in the Carnic-Norican-Tauriscan region than those from the early minting phase. Tetradrachms with names in Latin letters on the reverse, which probably refer to individuals or minting authorities, are typical for the Norican core area during this time. The reverse depicts the so-called lance-rider, a riding horseman to the right or left who swings a lance. In addition, there is regular small silver money of the Magdalensberg/Gurina type with an angular

cross on the reverse (Winkelkreuz type). Coins of this period occur both in hoards and as in single finds. The core area of their distribution is Carinthia, mainly Magdalensberg, Friuli and North-Slovenia; they also occur in Styria.<sup>46</sup>

They are spread as far as the Bohemian region and southern Bavaria and are also generously represented in the territory of Iuvavum/Salzburg (Austria).<sup>47</sup> The use of the Latin alphabet on the tetradrachms indicates intensified contacts between Romans and Noricans in the 1st century BC. The lance-rider on the reverse of the tetradrachms testifies an increased coinage among the Noricans, apparently due to Roman impulses. For its typological prototype was a Roman *denarius* from 82 BC, which appears in large numbers in northern Italy and was probably used for recruiting troops.<sup>48</sup> The main Tauriscan coin type in this phase is the horse (without rider) on the reverse of tetradrachms and obols; usually without legend. The main distribution area of Tauriscan coin types is Slovenia and North-Croatia, but they also occur in North-Italy and Carinthia; like Norican coins they are spread as far as Bohemia and Iuvavum/Salzburg. This denotes that the circulation behaviour of the coins of the latest minting phase differ significantly from that of the older phase. On the one hand, the quantity of coin finds generally increases strongly, on the other hand, their distribution expands. In addition, the production of small change, i.e. obols, obviously increased, which indicates an increasingly regular coin use. Although in the 1st century BC the Norican and the Tauriscan coins are typologically different, they are spread in a limited circulation area which includes Carinthia, Friuli, Slovenia and North-Croatia. Norican-Carnic coins are therefore spread in the Tauriscan region and Tauriscan types in the Norican core area. In addition, in the 1st century BC there was an increasing influx of "foreign money" such as Eastern Celtic types from Hungary and the Banat as well as gold coins from Bohemia.<sup>49</sup>

In Rosegg/Rožek a total of 21 coins of the younger Norican-Tauriscan minting phase are documented mainly consisting of Norican tetradrachms with names on the reverses (Cat. No. 11-19; Fig. 2) and small silver with angular cross motif (Winkelkreuz type) (Cat. No. 20-28; Fig. 3). In addition, there is one Tauriscan tetradrachm (Cat. No. 29; Fig. 3), 2 obols with a horse on the reverse (Cat. No. 30-31; Fig. 3) and one Bohemian Muschel type (Cat. No. 1; Fig. 2). Thus, the composition of the Celtic coins from the analysed coin find material from Rosegg/Rožek reflects a precise picture of the circulation volume of the 1st century BC.

To sum up the Celtic coin finds from Rosegg/Rožek: Of the total of 31 Celtic coins, 9 are from the early minting phase of 130-100/90 BC which Gorini describes as a transition period between the older and the younger phase and which is assigned to the Carnic-North-Tauriscan area. 21 coins can be attributed to the latest minting phase after 82/80 BC. The majority of coins from this period, which

<sup>40</sup> KRMNICEK 2010, 40-43; No. 17-51. The rest of the 746 Celtic coins from Magdalensberg are small silver mainly Winkelkreuz types.

<sup>41</sup> Inv. No. 1033/18. One of the two remaining coins from Virunum/Zollfeld shows the same die-link as one specimen from the Lemberg hoard. KOS 1977, 124; No. 7; SCHMIDT-DICK 1989, 90; No. 70.

<sup>42</sup> KOS 1983, 414f.; No. 1.

<sup>43</sup> This is also confirmed by the finds from 2015 in the Museum of Carinthia which contain 5 die-linked TINCO/COPPO(V)/COPO tetradrachms. DROTLEFF 2019, 135.

<sup>44</sup> Against GLEIRSCHER 2017, D678f.; GLEIRSCHER 2018, 12.

<sup>45</sup> KRMNICEK 2010, 38-43.

<sup>46</sup> CALLEGHER 2001, 292-296; 303; MIŠKEC 2007; SCHACHINGER 2006, 25-38.

<sup>47</sup> KOLNÍKOVÁ 1996; MILITKÝ 2016; PROKISCH 2011; SCHACHINGER 2017; SCHACHINGER 2019, 80-89.

<sup>48</sup> STROBEL 2012, 207.

<sup>49</sup> Bohemian 1/24 Stater from Virunum: Museum Arheo Norico, Deutschlandsberg Inv. No. 1033/24.



already show typological differences (Norican: horse with rider, Tauriscan: horse without rider), is made up of Norican tetradrachms with names of the minting authorities and obols with an angular cross (Winkelkreuz type). In addition, there are a few Tauriscan types as well as one Bohemian 1/3 stater. Concerning the coins of the early minting phase, it must be emphasised that they were originally part(s) of closed complexes or hoards and arrived at their place of loss at a later date. For in the 2nd century BC coins certainly did not circulate regularly. They were traded as objects of value and moved in closed contingents. In the 1st century BC contacts with the Romans intensified; their presence in North-Italy, Carinthia and the southeastern Alpine region increased in the course of recruitment and resource development. This apparently gave an impulse for increased minting activity in the Carnic-Norican-Tauriscan area, which is generally manifested in a growth of coin finds. Only from this time on regular coin circulation and coin use can be assumed, especially regarding small silver coins. There was also an increasing influx of “foreign” coins. Thus, the Celtic coin finds from Rosegg/Rožek provide a representative cross-section of the circulating money in Carinthia in the 1st century BC. Therefore, it can be concluded that the Celtic coins did not reach their place of loss – the Drava crossing at Rosegg/Rožek – until after 82/80 BC.

## THE ROMAN COINS

The Roman coins of the analysed part of coin finds from the Drava near Rosegg/Rožek consist of 42 specimens of Principate times up to the 2nd century (Cat. No. 33-74), one *antoninianus* from Aurelian of 270/275 (Cat. No. 75), one Constantinian type (Cat. No. 76) and 2 undefined late antique coins (Cat. No. 77 and 78).

The earliest coins are 2 Augustan silver *quinarii* of the transition period of 29/27 BC (Cat. No. 33 and 34; Fig. 3).<sup>50</sup> These “Asia Recepta” types are issued in large quantities and therefore they are widely distributed in finds. According to the “Roman Imperial Coinage” Vol. I, they were produced in Italy, i.e. in Rome, and not in Ephesus as was suspected due to the reverse motif of a *cista*. On Magdalensberg these coins do not occur. A single specimen of this type is documented in the Pörschach hoard on the northern shore of lake Wörthersee.<sup>51</sup> The hoard consists of republican *denarii* and *quinarii* from 125 BC onwards, mainly coins from the transition period. It probably ends in the years after 29/27 BC. So, it is contemporaneous to the Magdalensberg horizon and has to be assessed in the context of the preparation of the annexation of the Alpine arc. In addition, however, there are 2 *sestertii* of Claudius I and Nero belonging to this hoard. They certainly were added at a later date, i.e. possibly in the Neronian period. Whether the occurrence of “Asia Recepta” types at military settlements such as Novaesium or Noviomagus can generally be interpreted by military context, must remain open at this point.<sup>52</sup> Though military context

cannot be completely denied regarding the Pörschach hoard as well as concerning the coin finds from Rosegg/Rožek. The mentioned specimens from the Drava river show certain signs of wear indicating long circulation period. One specimen (No. 34) bears two later added punchmarks on the obverse. The practice of checking the fineness of the coins by striking punchmarks on them was mainly carried out on republican silver coins until the middle of the 1st century AD.<sup>53</sup> Augustan coins after the reform of 23 BC do not show any punchmarks. Their fineness did not need to be tested anymore as manipulations apparently were not undertaken so often as before. Republican coins circulated until Nero who reduced the fineness of the *denarii* which had the effect of driving out pre-Neronian silver coins of circulation. Therefore, it is obvious that the *quinarii* from Rosegg/Rožek were lost/deposited before the 60s of the 1st century AD. In any case they testify continuous use of the river crossing/bridge(s) up to the imperial period.

The coin finds from the Principate times are mainly composed of bronze coins, silver is scarce. Bronze coins were usually used for payments in everyday transactions; thus, they were lost more often. Silver and gold coins occur less frequently in single finds, since they were certainly looked for more thoroughly, when they got lost, due to their higher value. Therefore, the coin finds from Rosegg/Rožek consist – except for the silver *quinarii* mentioned above and few pieces of the 3rd and 4th century – of 35 *asses*, 4 *sestertii* and one *denarius*. In the 1st century AD, the most common denomination for daily purchases was the *as*. Only during the 2nd century AD did larger bronze coins, *sestertii* and *dupondii*, increase in finds. This evidence can be observed throughout the empire and is explained by economic changes, i.e. rising prices. They were quite moderate, however, regarding the long period of almost 200 years. There are 35 exactly identifiable coins of the Principate period and 7 not exactly determinable specimens. The high share of undeterminable coins is caused by strong corrosion due to the fact that the coins were in the water for a long time.

At least the denominations of the few undeterminable specimens could be identified for their size and weight. They are all *asses*. A predominance of *asses* could indicate stronger presence of coins of pre-Antonine times. However, continuous loss/deposit of coins in the first two centuries AD can be determined. In the time of Marcus Aurelius the coin finds from the Drava river near Rosegg/Rožek break off. There are no coins of the Severan period though Severan coins are widespread reflecting the development of the infrastructure under Septimius Severus and Caracalla.<sup>54</sup> This means that the river crossing/bridge(s) was no longer in use after Marcus Aurelius/Commodus – whether in the wake of the Marcomannic wars or the Antonine pandemic – and that the Severan road construction measures were not carried out here.

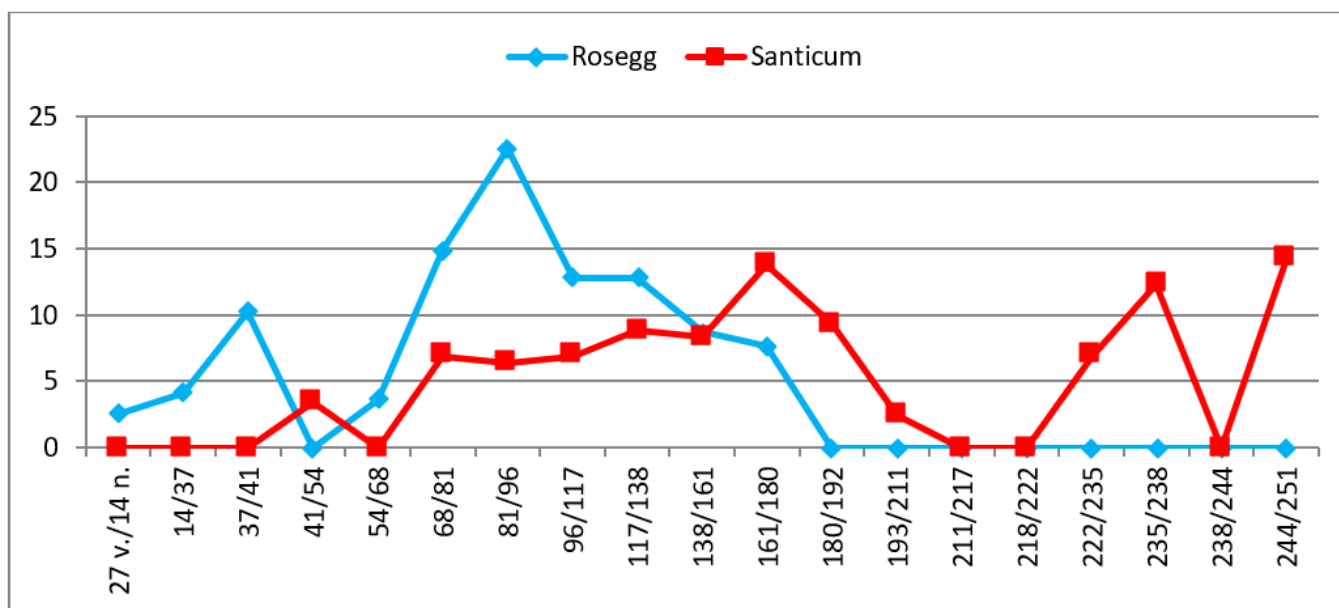
<sup>50</sup> 3 more coins were apparently found in the course of the investigations of the Museum of Carinthia in 2015. DROTLEFF 2019, 136.

<sup>51</sup> DEMBSKI 1977, B-5; SCHMIDT-DICK 1989, 3b/12 (1).

<sup>52</sup> Noviomagus: KEMMERS 2006, 71-74. Novaesium: CHANTRAINE 1982, 77.

<sup>53</sup> This practice was possibly only common from the post-Augustan period onwards. KEMMERS 2006, 36. Among the republican *denarii* and the coins from the transition period from Magdalensberg a share of 34 % bear punchmarks, mostly on the obverses. KRMNICEK 2010, 44f.

<sup>54</sup> This result is confirmed by the coin finds from 2015 of the Museum of Carinthia. DROTLEFF 2019, 136.



Phase-diagram: Percentage of coin losses (only exactly determinable coins) per year from 27 BC to 251 AD from Rosegg/Rožek (n=35) and Santicum/Villach (n=30)<sup>55</sup>; x-axis = minting periods, y-axis = percentages

**Table 2:** Coin finds along the Drava river from Santicum/Villach down-river, following SCHMIDT-DICK 1989.

Findspot	Denomination	Date	Citation
Neudorf	D	27 BC/14 AD	SCHMIDT-DICK 1989, 6/17 (1)
Frög	An	260/268	SCHMIDT-DICK 1989, 6/11 (1)
St. Jakob/Rosental	D	235	SCHMIDT-DICK 1989, 6/12 (4)
Hundsorf	Fol	300	SCHMIDT-DICK 1989, 3a/1 (15)
	Fol	295/296	
	Fol	297/298	
Ferlach	S	179	SCHMIDT-DICK 1989, 3a/2 (1)
	Fol	300	
	Fol	331/334	
	Fol	330/333	
Unterferlach	As	22/30	SCHMIDT-DICK 1989, 3a/2 (7)
	As	69/81	
	Dp	119/121	
	As	125/128	
	(D) imit.	(195/211)	
	Fol	341/348	
Schloss Rain	An	260/268	SCHMIDT-DICK 1989, 3b/2 (1)

### THE RIVER CROSSING OVER THE DRAVA IN THE CONTEXT OF THE COIN FINDS OF THE NEIGHBOURING REGION

The finds from the Drava river near Rosegg/Rožek will now be compared with the coin finds from Santicum/

<sup>55</sup> In order to enable the comparison of sites with highly differing quantities of coin finds, the percentage of coin finds within different periods is depicted in phase diagrams, taking into account the length of the individual reigns. Cf. KOS 2019, 12-14. This method shows the same curves as the formula from Casey/Ravetz, whereby – assuming that the losses of coins are always proportionally equal to the total amount in circulation – a loss per hypothetical 1000 coins is assumed and the quantity of losses are related to the years of the reign. CASEY 1988; RAVETZ 1964.

Villach and with other findspots along the Drava down-river in Carinthia. On the one hand, whether they are continuously documented from the late Latène period to the Roman imperial period, on the other hand, whether there are significant interruptions before the Severan period.

Santicum/Villach is strategically located and was already an important traffic junction in pre-Roman times at the confluence of the Gail into the Drava river. Already in the late Latène period the route along the Drava river was one of the most important after the Amber Road. Due to its favourable geographical position on the later Norican main road from Aquileia via Virunum to Ovilavis and Lauriacum,



a *vicus* soon developed at the crossroads, where roads to Aguntum and Teurnia as well as via Immurium and Cucullae to Iuvavum branched off. On this location, G. Piccottini suggested a bridge over the Drava river as well as a *statio* for the collection of the bridge toll within the *publicum portorium Illyrici*.<sup>56</sup> Furthermore, in Santicum there is a *beneficiarii* station with a small military garrison attested. This garrison most likely controlled the imperial road which led along the northern shore of lake Wörthersee to Virunum.<sup>57</sup>

Another important local connection was the “Iron Road” on the northern shore of Lake Ossiach into the upper Glan valley; another route branched off the Norican main road into the Görtscitz valley, the most important mining area.<sup>58</sup> However, the question of how the bridge at Rosegg/Rožek fits into this road system is still open. A precious metal hoard has been documented from Santicum, which consists of 161 *aurei* and 4 *denarii*.<sup>59</sup> The earliest specimens date from the Neronian post-reform period after 64/65 AD, the latest from the early years of Septimius Severus of 194/195 AD. As findspot, Piccottini cites an outgoing road where grave *tituli* were found. The single finds of Santicum start with a Claudian *as* and end with a *centenionalis* of Honorius. The scarce presence of Severan coins is striking. Though, money of the Severan period was present as is witnessed by the mentioned precious metal hoard. The single finds continue with Severus Alexander – although in remarkably low quantities – until the end of the 3rd century. The whole 4th century is continuously documented. The composition of the coin finds from Santicum and the analysed material from Rosegg/Rožek do not differ much until the Severan period; with the exception that there are no coins of the late Latène and the transition period in Santicum/Villach and that the single finds start with Claudius I. In Rosegg/Rožek the coin finds break off before the Severan period, in Santicum they do not break off.

Only a few single finds are documented at various sites along the Drava down-river. Though, it is not known whether they are definitely river finds. In general, the coin finds show a more or less continuous pattern in Roman times. But the main traffic route by land ran north of the Wörthersee lake. And maybe on the waterway over the Drava less coins were lost. Accumulations of finds indicating crossings (fords, bridges or ferries) are not known so far; but this may also be caused by an insufficient state of research. The absence of Celtic coins is not significant since the Drava river was certainly one of the most important connections to Celeia and the Amber Road in the late Latène period. Due to the small number of coin finds an absence of Severan coins cannot be noticed considerably. Coins of the 3rd century indicate at least an access to the region, as for example in the meandering Drava near Frög. In summary, the coin finds along the Drava down-river do not show any significant pattern, the coin curve of Santicum/Villach, by contrast, largely corresponds to that of Rosegg/Rožek. However, the break-off of the coin finds from Rosegg/Rožek

in the pre-Severan period is striking. Only after the whole archaeological small finds being analysed it will become completely clear whether this is a general pattern or not.

Concerning the imbedding of the bridge(s) at Rosegg/Rožek into the Roman road system in the area of Santicum/Villach or along the so-called Norican main road to Virunum neither the coin finds along the Drava nor ancient itineraries provide clear evidence. In the Tabula Peutingeriana 2 *stationes* are mentioned from Virunum to Aquileia: Saloca (XI) and Tasinemeti (VIII). Santicum is not listed. Saloca is 11 Roman miles (17.6 km) “a Virnuno”, Tasinemeti 20 miles (32 km) (i.e. 9 miles or 14.4 km from Saloca). Tasinemeti as *Genetivus singularis* of a place named Tasinemeton which is possibly derived from a sacred grove of a Celtic tree deity is identified with Velden at Wörthersee lake or with Fahrendorf.<sup>60</sup>

## FURTHER OBJECTS FROM THE DRAVA RIVER NEAR ROSEGG/ROŽEK IN THE MUSEUM ARCHEO NORICO

Two further objects are included in the collection from the Drava river in the Museum Archo Norico: one bronze ring of uncertain date (Cat. No. 80) and one Roman gold finger ring (Cat. No. 32). There was also one Abbasid silver coin found (Cat. No. 81).

The Roman finger ring made of gold wire (Cat. No. 32; Fig. 3) consists of a ring rail made of flat hammered woven band with wire edging on both sides.<sup>61</sup> The 4 ends of the wire end in a simple volute; the centre of which is formed by a gold granule. In the centre of the 4 volutes there is a cylindrical frame, the content of which – probably a glass or stone inlay – has not been preserved. Although the braided decoration seems to show Latène influences the round inlay box with soldered pellets at the 4 corners – here in a volute-like frame – is probably Roman.<sup>62</sup> Finger rings with shoulder pellets and a framed inlay are found from the 2nd to the 4th century all over the provinces of the empire. E. Riha assumes an origin from the Near East; therefore the term Syrian type is common.<sup>63</sup> The rime of such rings, however, is mostly round bar-shaped, sometimes band-shaped. Typical for late Roman rings of this type is a wire-shaped band with a round or angular frame box for a stone or glass inlay. Rings with ribbon-shaped rails of gold wires in the form of a woven band between two pearl bars and with 4 pellets around the inlay box are common especially in the 4th and 5th centuries.

The Abbasid coin is a *dirhem* of Caliph Harun al-Rashid (786-809) with a three-line inscription in a circumscription on obverse and reverse (Cat. No. 81; Fig. 3). It is noteworthy that this specimen is not a unique find from the Drava near Rosegg/Rožek because there is another coin of this kind which again underlines the urgency of a contextual analysis of the complete find material of the Museum of Carinthia.<sup>64</sup>

<sup>56</sup> PICCOTTINI 2016, 26-29.

<sup>57</sup> PICCOTTINI 2016, 35-38.

<sup>58</sup> ALFÖLDY 1974, 12.

<sup>59</sup> DEMBSKI 1977, D-11; SCHMIDT-DICK 1989, 34-41; PICCOTTINI 2016, 20f.

<sup>60</sup> DE BERNARDO STEMPEL/HAINZMANN 2020, 90; DERINGER 1949, 211; DERINGER 1950, 190; MILLER 1916, 452f.

<sup>61</sup> I would like to thank A. Bernhard, Museum Archo Norico, for determining the gold ring.

<sup>62</sup> Cf. DUVAL 1989, 23; 82f.

<sup>63</sup> RIHA 1990, 32.

<sup>64</sup> DROTLEFF 2019, 137.

These coins could have come to the Drava near Rosegg/Rožek in the course of diplomatic contacts or the exchange of legations between Charlemagne and Harun al-Rashid for the purpose of cooperation against their common political opponents, i.e. the Umayyads and the Byzantine Empire.<sup>65</sup> However, the presence of these coins testifies that the Drava crossing at this point or the bridge(s) at Rosegg/Rožek were in use in the 8th/9th century AD.

The bronze ring (Cat. No. 80; Fig. 3) is of unknown date; it could probably be a Celtic ring or wheel money. But the fact that it is grooved on one side and that it has a regular lens-shaped profile suggests a post-antique or modern provenance.<sup>66</sup> Celtic ring money or "rouelles" shows a different surface; it occurs in a great variety of designs and shapes as for example with one or more pellets at the inner or outer side, plain, thick and thin as well as open or curled. Rouelles often occur in the late Latène period together with coins in hoards, such as the hoard of Lauterach near Brigantium (Bregenz)/Vorarlberg (Austria) which was sacrificed by a woman around 100 BC. The hoard was discovered in the moor and contained 23 republican *denarii*, 3 Celtic coins as well as silver jewelry and one bronze ring.<sup>67</sup> Rings are often depicted on Celtic coins themselves as marks and symbols, which is possibly related to their function as ingots. However, bronze rings are already documented in early Celtic tombs, as for example in a girl's tomb from the Eislfeld on the Dürrenberg near Hallein/Salzburg (Austria) dating between 430 and 400 BC (tomb No. 71/2).<sup>68</sup> The ring and the other objects that were placed inside the tomb probably served as amulets. This custom continued into the late Latène period; bronze rings were placed inside the tombs either as amulets – sometimes attached by animal figures or other objects – or as object of value such as ring money. Accordingly in a man's tomb from Sutton Courtenay/Oxfordshire (UK) one bronze ring was placed next to 5 *fibulae*.<sup>69</sup>

### THE COIN FINDS FROM THE DRAVA RIVER NEAR ROSEGG/ROŽEK AS PASSAGE SACRIFICES

In antiquity rivers as well as mountain passes were considered sacred places. This phenomenon can be traced back to animistic concepts in which unexplainable or dangerous phenomena were attributed a divine power. In the sense of "do ut des" people made sacrifices to these divine powers at particular locations in order to protect their own lives and tune the divine powers peacefully. According to this rivers were also attributed a divine power; their unpredictability is manifested in torrential floods. The same applies to mountain passages where unpredictable storms could break out. As anthropomorphic concepts of gods developed rivers were worshipped as human-like deities. Bridges or river crossings were sacred places because they were considered to belong to the sphere of the associated deity.<sup>70</sup> Therefore sanctuaries were often erected at bridges and sacrifices were

made before crossing the river.<sup>71</sup> There is a great variety of offerings to the gods as for example libations, coin offerings, throwing in statuettes, lead plates, vessels, weapons, devices and tools of daily life. However, losses during the river crossing and intentional sacrifices have to be distinguished. The latter can be detected as accumulations of objects at certain places near bridges or fords. Losses of objects which happen during the river crossing show a different pattern.<sup>72</sup> They are completely different to intentionally buried objects concerning quality and function. Intentional deposits in the river or on its bank show similar patterns as sacrificial finds in temples or spring sanctuaries.<sup>73</sup> This also includes precious and valuable objects that hardly occur as losses in settlements, such as ceremonial weapons and helmets or precious tableware.<sup>74</sup> Weapons from pre-Roman times that were rendered unusable are often documented.

Coins are both the most common objects for sacrificial use and the most common everyday losses. A distinction between sacrifice and loss can only be derived from the finding context which is obviously difficult to determine in rivers. Accumulations in and on the banks of rivers clearly indicate sacrificial behavior. Coins found in these contexts consist of either single objects of high quality and closed coin hoards or money of daily use. Their composition is similar to that of temples and spring sanctuaries. They usually include coins from different times and cover a longer period of time which matches the sanctuary's period of use. In Roman times mainly bronze coins occur; silver and gold coins, irregular issues or perforate coins that were used as amulets are not that abundant.<sup>75</sup> Occasionally, closed coin hoards were also sunk.<sup>76</sup>

Large bulks of Roman "small change" appear at the old bridge over the Moselle river in Augusta Treverorum. This wooden bridge was built in 18/17 BC, but probably dates back to a much older river crossing.<sup>77</sup> In the middle of the 2nd century, i.e. between 144 and 152 AD, a new stone bridge was built further upstream. More than half a million Roman coins have been found in the area of these bridges together with a few Celtic and modern coins.<sup>78</sup> A share of 75 % of the Roman coin finds are of late antique times, 70 % of which were issued at the mint of Augusta Treverorum. These are without exception bronze coins, i.e. money of

<sup>65</sup> CLOT 2001, 133-155.

<sup>66</sup> Kind information by A. Bernhard and A. Steffan, Museum Archo Norico, Deutschlandsberg.

<sup>67</sup> DEMBSKI 1977, A-10; RUSKE 2011, 65.

<sup>68</sup> KELTEN 1980, 252f.

<sup>69</sup> WHIMSTER 1979, Fig. 51.

<sup>70</sup> HAUPT 2015, 46f. referring to Caius, institutiones II.9.

<sup>71</sup> At the end of the 1st century AD a temple for Asclepius was built in Augusta Treverorum on the banks of the Moselle river where at the same time a bridge was erected. CÜPPERS 1982. Cf. the sanctuary of Asclepius on the island in the river Tiberis. The coin finds from the Tiberis island: VON KAENEL 1999; KAPPESSER 2012, 102-105.

<sup>72</sup> HAUPT 2015, 48f.

<sup>73</sup> KAPPESSER 2012, 122-126.

<sup>74</sup> BONNAMOUR/WIRTH 2001, 13f.

<sup>75</sup> KAPPESSER 2012, 87: mainly bronzes, only a few precious metal coins in the investigated area of the Rhine. The healing springs of Aquae Sulis/Bath (UK): CUNLIFFE/DAVENPORT 1988. Cf. The coin finds from the Roman healing springs in Bad Gleichenberg/Styria (Austria). SCHACHINGER 2006, 168f.

<sup>76</sup> The „Alamanni treasure“ from Naupotz: KAPPESSER 2012, 109-121. Further witnesses from *Germania magna*: BURSCHE 2005. On the Norican main road in Styria (Austria) a coin hoard from the times of Constantius II. had been found at a spot where an ancient bridge over the Enns river is assumed. SCHACHINGER 2006, 57.

<sup>77</sup> CÜPPERS 2001; CÜPPERS 1969, 145-159.

<sup>78</sup> CÜPPERS 2001; GILLES 2001; HAUPT 2015, 47; KAPPESSER 2012, 106-108.

daily use. In addition, 4 coin-dies have been found as well as irregular issues and clay moulds.<sup>79</sup> There are also numerous small finds and particular objects of high quality which were clearly identified as river sacrifices. In addition, there are 2,500 Roman lead seals which testify lively trade activity. Trade goods were unsealed, and the seals were thrown into the river as waste.

Similar accumulations of sacrifices were also documented on several places in the Saône where the river could be crossed.<sup>80</sup> From the numismatic point of view the coin finds from the Ljubljanica river in Slovenia are particularly interesting: a hoard of Celtic coins was found consisting mainly of Tauriscan types of the later minting period and Roman republican coins.<sup>81</sup> In addition, many weapons, ceramics, coins and *fibulae* from Roman times were found there, which certainly are cultic deposits.<sup>82</sup>

On September 10<sup>th</sup>, 2018, the Teesdale Mercury reported a “treasure” found in the river Tees which had been collected by “treasure-seeking” divers over a period of 30 years.<sup>83</sup> The private treasure-seekers recovered a total of approximately 5000 mainly Roman artefacts in the river Tees in Piercebridge/County Durham where a Roman bridge was located which was monitored by a fort (Magis or Morbium). This fort existed from 70 AD up to the 5th century. The illustration of the coin finds attached to the report shows that the spectrum of coins is very heterogeneous concerning chronological periods and denominations. There are highly worn bronze coins of Principate times and some silver *denarii* and *antoniniani* from Trajan to the middle of the 3rd century which show different degrees of wear. The majority of these coins certainly are sacrificial offerings thrown into the river for a safe crossing.

The finds from the Drava river near Rosegg/Rožek can therefore be interpreted in a similar way. Even if the small finds are not investigated in detail – whether they consist of Latène and/or Roman objects, which kind of finds are represented or whether they include weapons, tools, jewellery, vessels and objects of high quality – concerning the investigated coin finds can be concluded that both the Latène and the Roman coins are intentional deposits in connections with ritual actions. The accumulation of coin finds clearly shows that there was already a river crossing at this site in the late Latène period. The custom of sacrificing coins to the river deity was maintained continuously. Though the quality of the buried coins varied according to the degree of monetisation. The value of each sacrificed coin was much higher in the Latène period than in Roman times when mainly small change was offered. It is unclear if the value of the offered coins corresponds to different religious concepts over the time. However, the structure and content

of the numismatic finds from the Drava is very similar to many other investigated river finds.

The Celtic coins found in Rosegg/Rožek date from the early respectively the transition phase of 130-100/90 BC. In this phase coins were merely used as objects of value and not as circulation money.

They were originally parts of closed complexes or hoards and certainly did not come into the river until the 1st century BC. The majority of the Celtic coins was issued in the latest minting phase after 82/80 BC. In this period the production of small silver coins was intensified due to the increasing use of coins as means of payment. This chronological focus coincides exactly with the settlement on Magdalensberg. Therefore the river crossing near Rosegg/Rožek was in use contemporarily to the settlement on Magdalensberg. It started shortly before the middle of the 1st century BC which coincides with the expansion of the Magdalensberg settlement. The presence of Roman republican *quinarii* of the transition period could possibly point to a military connexion concerning the preparation of the integration of the Alpine arc into the Roman empire. These coin types are documented at numerous military sites; they are also included in the hoard of Pörschach which is located on the later Norican main road. The Drava crossing near Rosegg/Rožek was regularly used during the Principate period. The chronological composition of the coin finds corresponds to the finds from the nearby traffic hub Santicum/Villach. In Roman times merely money for daily use, i.e. small change, was thrown into the river for sacrificial purpose; sometimes coins of special type or quality were also sunk into the water. Many other known river finds, such as from the Rhine, Saône and Tiberis as well as from Switzerland (Zihl and Thur) and the finds from the Moselle bridge in Augusta Treverorum show the same structure and content.<sup>84</sup> Thus, the coin finds from Rosegg/Rožek can be interpreted as offerings in advance (*do ut des*) to the god Dravus who is asked for a safe passage. The Drava river was worshipped as a deity like the Rhine or the Tiberis, which is witnessed by an inscription from Poetovio: an altar was donated to “Dravus Augustus” by one or more unknown persons gratefully *pro salute*.<sup>85</sup> In Rosegg/Rožek this custom was maintained at least until pre-Severan times; the fact that it was abandoned could possibly be connected to an interruption in the use of the Drava crossing. The reason why the crossing was no longer in use remains unclear. Singular coin finds from the 3rd and 4th centuries do not indicate a regular use of the river crossing/bridge(s).

<sup>79</sup> Coin-die: CÜPPERS 1969, 124.

<sup>80</sup> BONNAMOUR/DUMONT/WIRTH 2001; BONNAMOUR 2011; KAPPESSER 2012, 97-100. The archaeological find material from the rivers in Switzerland: EBNETER 2005, who interprets the Celtic coin finds as washed up from the settlement. WYSS/REY/MÜLLER 2002 investigated the finds from the Zihl river.

<sup>81</sup> KOS/ŠEMROV 2003.

<sup>82</sup> KAPPESSER 2012, 100f.; cf. GASPARI/KREMPUŠ 2002; ISTENIČ 2002.

<sup>83</sup> <https://www.teesdalemercury.co.uk/news/hoard-of-roman-finds-from-the-river-tees-declared-treasure> [06.05.2020, 19:00].

<sup>84</sup> The sanctuaries on the Alpine passes as for example the Hochtör, Mallnitzer Tauern, Piller Sattel (Austria) or Großer Sankt Bernhard (Switzerland), show the same characteristics as the river finds. Cf. DEMBSKI 2001; DEMBSKI 2014; DEMBSKI/LIPPERT 2000; DEMBSKI/LIPPERT 2013.

<sup>85</sup> F. and O. Harl, Ubi Erat Lupa, <http://lupa.at/8809>.



# CATALOGUE OF COIN FINDS (AND RINGS) FROM THE DRAVA RIVER IN THE MUSEUM ARCHEO NORICO IN DEUTSCHLANDSBERG (STYRIA, AUSTRIA)

The abbreviations in the catalogue are based on FMRÖ and TNRB.

## I. CELTIC COINS

No.	Denom.	Citation	Weight; Axis; Diameter	Technicals	Inventory No. Museum Archeo Norico
-----	--------	----------	------------------------	------------	------------------------------------

### COINS OF THE BOII

#### Muschel type

1.	St	Flesche No. 478, Dembski No. 517	6,70; -; 15		Inv.-No.: 1421/22
----	----	----------------------------------	-------------	--	-------------------

### COINS OF THE CARNI AND TAURISCI, OLDER PHASE (130-100/90 BC)

#### Kugelreiter type A3a COPPO

2.	Tetr	TKN [1J – 10]	9,63; 9; 22,8	die defective (Obv)	Inv.-No.: 1421/2
3.	Tetr	TKN [1J – 10]	9,55; 9; 21,7	die worn (Obv)	Inv.-No.: 1421/4
4.	Tetr	TKN [1J – 10]	9,16; 10; 22,7	die worn (Obv and Rev)	Inv.-No.: 1421/6

#### Kugelreiter type A3b COPPO

5.	Tetr	TKN [1K – 13]	9,17; 7; 20,9	corroded	Inv.-No.: 1421/3
----	------	---------------	---------------	----------	------------------

#### Kugelreiter type B2 Tinco

6.	Tetr	TKN [2E – 18/19/20?]	9,04; 9; 23,6		Inv.-No.: 1421/7
----	------	----------------------	---------------	--	------------------

#### Kugelreiter type C3b COPO

7.	Tetr	TKN [3G – 35]	8,56; 0; 22,3	die worn (Obv and Rev)	Inv.-No.: 1421/9
8.	Tetr	TKN [3H1 – 35]	9,48; 3; 22,6	plated	Inv.-No.: 1421/5

#### Kugelreiter type C3c COPO

9.	Tetr	TKN [3H2 – 36]	9,65; 7; 23,3		Inv.-No.: 1421/8
----	------	----------------	---------------	--	------------------

#### Kugelreiter type A3 or B2

10.	Tetr		9,54; 1; 23,3	die worn (Obv and Rev)	Inv.-No.: 1421/10
-----	------	--	---------------	------------------------	-------------------

### COINS OF THE NORICI, YOUNGER PHASE (80-50/15 BC)

#### COGESTLVS D1a

11.	Tetr	TKN [6 – 41]	9,63; 3; 22,8		Inv.-No.: 1421/17
-----	------	--------------	---------------	--	-------------------

#### CONGESA D1b

12.	Tetr	TKN [6a – 42]	9,32; 1; 22,2	corroded (Obv and Rev)	Inv.-No.: 1421/14
-----	------	---------------	---------------	------------------------	-------------------

#### ADNAMATI Ea1

13.	Tetr	TKN [8 – 47]	9,01; 6; 22,5	corroded (Obv and Rev)	Inv.-No.: 1421/16
-----	------	--------------	---------------	------------------------	-------------------

14.	Tetr	TKN [8 – 47]	7,91; 1; 23,6	corroded (Obv and Rev)	Inv.-No.: 1421/15
-----	------	--------------	---------------	------------------------	-------------------

## ADNAMATI Ec

15.	Tetr	TKN [9a – 49a]	8,01; 12; 20,9	corroded (Obv and Rev)	Inv.-No.: 1421/18
-----	------	----------------	----------------	------------------------	-------------------

## NEMET Fb2

16.	Tetr	TKN [10b – 55]	9,03; 12; 22,7	corroded (Obv and Rev)	Inv.-No.: 1421/19
-----	------	----------------	----------------	------------------------	-------------------

## SVICCA H1c

17.	Tetr	TKN [14 – 64]	8,84; 9; 24,1	die defective (Obv)	Inv.-No.: 1421/12
-----	------	---------------	---------------	---------------------	-------------------

## ECCAIO H2c

18.	Tetr	TKN [19a – 73]	9,50; 6; 22	die worn (Obv)	Inv.-No.: 1421/13
-----	------	----------------	-------------	----------------	-------------------

## ECCAIO/SVICCA H1a

19.	Tetr	TKN [12 – 62] (type SVICCA H1a)	9,18; 8; 23,9	Rev.-Leg: ECCAIO	Inv.-No.: 1421/11
-----	------	---------------------------------	---------------	------------------	-------------------

## Magdalensberg/Gurina type (Winkelkreuz type)

20.	Ob	type I Ab	0,49; -; 9,4	Obv.: Convex	Inv.-No.: 1421/24
21.	Ob	type I Ab	0,44; -; 8,4	Obv.: Convex	Inv.-No.: 1421/28
22.	Ob	type I Ad	0,73; -; 11,2	Obv.: Convex	Inv.-No.: 1421/33
23.	Ob	type I Ae	0,49; -; 9,2	Obv.: Convex	Inv.-No.: 1421/30
24.	Ob	type I Ae1	0,21; -; 6,1	Obv.: Convex	Inv.-No.: 1421/29
25.	Ob	type I Af	0,51; -; 9,6	Obv.: oval design (head?)	Inv.-No.: 1421/32
26.	Ob	type I Af	0,50; -; 9	Obv.: oval design (head?)	Inv.-No.: 1421/26
27.	Ob	type II g	0,29; -; 9,2	Obv.: oval design (head?), frgm.	Inv.-No.: 1421/34
28.	Ob	TKN Tb. 45, No. DD 1	0,64; -; 9,1	Obv: head r.	Inv.-No.: 1421/31

## COINS OF THE TAURISCI, YOUNGER PHASE (80-50/15 BC)

### Brezelohr/A type

29.	Tetr	TKN [81 – 157a]	9,19; 6; 21,5	die worn (Obv)	Inv.-No.: 1421/1
-----	------	-----------------	---------------	----------------	------------------

### Type Karlsteiner Art (Horse type)

30.	Ob	type I Aa <sup>86</sup>	0,53; -; 7,6		Inv.-No.: 1421/25
31.	Ob	type I Da	0,66; -; 8,8		Inv.-No.: 1421/27

## II. ROMAN COINS (and rings)

### Roman finger ring

32.	ring/AV		2nd-5th century AD	Cf. RIHA 1990, No.102; No. 104	Inv.-No.: 1421/23
-----	---------	--	--------------------	--------------------------------	-------------------

<sup>86</sup> Typology according to Kos 1977

No.	Denom.	Mint	Date	Citation	Weight; Axis; Diameter; Preservation	Inventory No. Museum Archeo Norico
-----	--------	------	------	----------	--------------------------------------	------------------------------------

## Augustus (27 BC – AD 14)

33.	Qui	Brundisium/ Rome	29/27 BC	RIC 276	1,57; 3; 15,1; 3	Inv.-No.: 1421/36
34.	Qui	Brundisium/ Rome	29/27 BC	RIC 276	1,45; 8; 13,5; 3-4; 2 punch-mark (Obv)	Inv.-No.: 1421/35

## Tiberius for Divus Augustus

35.	As	Rome	16/22	RIC 81; MIR 29-6	5,65; 8; 27,1; 0	Inv.-No.: 1421/50
36.	As	Rome	36/37	RIC 82; MIR 61-6	5,45; 0; 25; 0; frgm.	Inv.-No.: 1421/74

## Caius for Germanicus

37.	As	Rome	37	RIC 35; MIR 7-6	7,96; 6; 26,7; 0	Inv.-No.: 1421/64
-----	----	------	----	-----------------	------------------	-------------------

## Nero (54 – 68)

38.	As	mint ?	54/68	RIC ?	7,65; 6; 27,2; 0	Inv.-No.: 1421/44
-----	----	--------	-------	-------	------------------	-------------------

## Vespasian (69 – 79)

39.	As	mint ?	69/79	RIC ?	7,86; 6; 25,8; 0	Inv.-No.: 1421/52
-----	----	--------	-------	-------	------------------	-------------------

## Vespasian or Titus

40.	As	mint ?	69/81	RIC ?	6,38; 6; 25,1; 0	Inv.-No.: 1421/39
41.	As	mint ?	69/81	RIC ?	5,16; 6; 25; 5	Inv.-No.: 1421/49

## Domitian (81 – 96)

42.	S	mint ?	81/96	RIC ?	18,80; 12; 34,3; 0	Inv.-No.: 1421/40
43.	As	mint ?	81/96	RIC ?	8,41; 6; 25,2; 0	Inv.-No.: 1421/67
44.	As	mint ?	81/96	RIC ?	6,47; 7; 24,5; 0	Inv.-No.: 1421/41
45.	As	mint ?	81/96	RIC ?	5,40; 6; 28; 5	Inv.-No.: 1421/61
46.	As	mint ?	81/96	RIC ?	4,60; 0; 27,2; 0	Inv.-No.: 1421/54
47.	As	mint ?	81/96	RIC ?	3,71; 0; 24,4; 0	Inv.-No.: 1421/58

## Flavian period (69 – 96)

48.	As	mint ?	69/96	RIC ?	4,20; 0; 23,6; 0	Inv.-No.: 1421/73
49.	As	mint ?	69/96	RIC ?	3,90; 0; 26,4; 0	Inv.-No.: 1421/62

## Nerva (96 – 98)

50.	S	Rome	96/98	RIC ?	18,13; 0; 32,9; 5	Inv.-No.: 1421/48
51.	As	mint ?	96/98	RIC ?	5,71; 0; 25,8; 0	Inv.-No.: 1421/63
52.	As	mint ?	96/98	RIC ?	3,70; 0; 26,3; 0; frgm.	Inv.-No.: 1421/77

## Trajan (98 – 117)

53.	D	Rome	108/109	MIR 282b	3,12; 7; 19; 2-3	Inv.-No.: 1421/37
54.	As	mint ?	98/117	RIC ?	9,74; 6; 27,3; 0	Inv.-No.: 1421/46

## Hadrian (117 – 138)

55.	As	Rome	125/128	RIC 678(c)	9,38; 6; 27; 3	Inv.-No.: 1421/59
-----	----	------	---------	------------	----------------	-------------------



56.	As	mint ?	117/138	RIC ?	8,04; 0; 24,5; 0	Inv.-No.: 1421/43
57.	As	mint ?	117/138	RIC ?	7,09; 0; 25,9; 0	Inv.-No.: 1421/56
58.	As	mint ?	117/138	RIC ?	6,53; 0; 24,6; 0	Inv.-No.: 1421/68
59.	As	mint ?	117/138	RIC ?	3,02; 0; 24,7; 0	Inv.-No.: 1421/71

## Trajan or Hadrian

60.	As	mint ?	98/138	RIC ?	4,01; 0; 25,4; 0	Inv.-No.: 1421/65
-----	----	--------	--------	-------	------------------	-------------------

## Antoninus Pius (138 – 161)

61.	As	Rome	140/144	RIC 703a or 730	7,52; 6; 26,2; 0	Inv.-No.: 1421/51
62.	As	mint ?	138/161	RIC ?	7,33; 0; 24,7; 0	Inv.-No.: 1421/75
63.	As	mint ?	138/161	RIC ?	5,87; 0; 25,2; 0	Inv.-No.: 1421/57
64.	As	mint ?	138/161	RIC ?	3,84; 6; 25,9; 0	Inv.-No.: 1421/42

## Mark Aurel (161 – 180)

65.	S	Rome	161/180	RIC ?	19,72; 6; 29,2; 0	Inv.-No.: 1421/38
66.	S	Rome	161/180	RIC ?	7,22; 0; 29,3; 0	Inv.-No.: 1421/55
67.	As	mint ?	161/180	RIC ?	3,89; 0; 25,4; 0	Inv.-No.: 1421/72

## Indeterminable: 1st-2nd century AD

68.	As	mint ?	23 BC/AD 192	RIC ?	9,76; 0; 26,2; 0	Inv.-No.: 1421/69
69.	As	mint ?	23 BC/AD 192	RIC ?	6,87; 0; 26,7; 0	Inv.-No.: 1421/53
70.	As	mint ?	23 BC/AD 192	RIC ?	5,58; 0; 26,4; 0	Inv.-No.: 1421/60
71.	As	mint ?	23 BC/AD 192	RIC ?	5,66; 0; 27,6; 0	Inv.-No.: 1421/70
72.	As	mint ?	23 BC/AD 192	RIC ?	5,31; 0; 24,6; 0	Inv.-No.: 1421/45
73.	As	mint ?	23 BC/AD 192	RIC ?	3,85; 0; 22,1; 0	Inv.-No.: 1421/76
74.	As	mint ?	23 BC/AD 192	RIC ?	2,61; 0; 22,4; 0	Inv.-No.: 1421/79

## Aurelian (270 – 275)

75.	An	mint ?	270/275	RIC ?	2,33; 9; 21,4; 5	Inv.-No.: 1421/81
-----	----	--------	---------	-------	------------------	-------------------

## Constantius II. (337 – 361)

76.	Mai	mint ?	348/355	RIC ?	3,53; 0; 19,9; 0	Inv.-No.: 1421/66
-----	-----	--------	---------	-------	------------------	-------------------

## Indeterminable: 3rd-4th century AD

77.	An/Fol	mint ?	275/310	RIC ?	2,91; 0; 21,7; 5	Inv.-No.: 1421/80
-----	--------	--------	---------	-------	------------------	-------------------

## Indeterminable: 4th century AD

78.	Fol	mint ?	330/340	RIC ?	1,14; 0; 15,3; 5	Inv.-No.: 1421/82
-----	-----	--------	---------	-------	------------------	-------------------

## Indeterminable

79.	coin?				2,21; 0; 23,3; 0; bended; frgm.	Inv.-No.: 1421/78
80.	ring/AE				1,69; 23,7/18	Inv.-No.: 1421/21

### III. ORIENTAL COINS

Abbasids: Harun al-Raschid (786-809)

81.	Dirhem	Al-Abbasiyah	788/789	Mitchiner No. 181	2,73; 0; 25,8; 0	Inv.-No.: 1421/20
-----	--------	--------------	---------	----------------------	------------------	-------------------

### SUPPLEMENTS TO THE HAIMBURG HOARD

Kugelreiter type A1b

H1.	Tetr	Göbl 1989, 6 [IIC-6]	11,85; 9; 25,9	Inv.-No.: 1423/1
H2.	Tetr	Göbl 1989 8 [IId-8]	11,96; 10; 25,4	Inv.-No.: 1423/2
H3.	Tetr	Göbl 1989 8 [IId-8]	11,82; 11; 24,3	Inv.-No.: 1423/3
H4.	Tetr	Göbl 1989 8 [IId-8]	11,58; 11; 24	Inv.-No.: 1423/4

### REFERENCES

ALFÖLDY 1974

Alföldy, G., *Noricum* (London: Routledge & Kegan).

BANNERT/PICCOTTINI 1972

Bannert, H./Piccottini, G., Die Fundmünzen vom Magdalensberg. *Die Fundmünzen der römischen Zeit in Österreich, Kärnten 1* (Klagenfurt: Landesmuseum für Kärnten).

BONNAMOUR 2011

Bonnamour, L., Chalon-sur-Saône, Saône-et-Loire, Grand pont de Saône, pont Saint-Laurent. In: Barrauol, G./Fiches, J.-L. (eds.), *Les ponts routiers en Gaule romaine. Actes du colloque tenu au Pont du Gard du 8 au 11 octobre 2008* (Montpellier: Éditions de l'Association de la revue archéologique de Narbonnaise), 91-98.

BONNAMOUR/WIRTH 2001

Bonnamour, L./Wirth, S., Die Saône. Ein Glücksfall für die Flussarchäologie in Europa. In: Kuhnen, H.-P. (ed.), *abgetaucht, aufgetaucht. Flussfundstücke aus der Geschichte mit ihrer Geschichte* (Trier: Rheinisches Landesmuseum), 13-30.

BONNAMOUR/DUMONT/WIRTH 2001

Bonnamour, L./Dumont, A./Wirth, S., L'Archéologie de la Saône. Von der Erforschung vor- und frühgeschichtlicher Flussfunde zu einer „Archéologie fluviale“, *Nachrichtenblatt Arbeitskreis Unterwasserarchäologie* 8, 33-40.

BURSCHE 2005

Bursche, A., Münzen der römischen Kaiserzeit aus Flüssen. Ein Beitrag zur Quellenkritik. In: Von Carnap-Bornheim, C./Friesinger, H. (eds.), *Wasserwege, Lebensadern – Trennungslinien, 15. Internationales Symposium „Grundprobleme der frühgeschichtlichen Entwicklung im mittleren Donauraum“*, Schleswig, 30.11.-04.12.2002 (Neumünster: Wachholtz), 307-317.

CALLEGHER 2001

Callegher, B., Dracme veneti d'imitationemassaliota e oboli del Norico nel territorio centro-orientale del Veneto e dal Friuli-Venezia Giulia: alcuni considerazioni. In: Cuscito, G. (ed.), *I Celti nell'Alto Adriatico* [Antichità Altoadriatiche 48] (Triest: Editreg), 277-308.

CALLEGHER 2010

Callegher, B., *Ritrovamenti monetali di età Romana nel Friuli Venezia Giulia, Provincia III: Gorizia, Provincia IV: Trieste* (Trieste: Edizioni Università di Trieste).

CASEY 1988

Casey, J., The interpretation of Romano-British site finds. In: Casey, J./Reece, R. (eds.), *Coins and the Archaeologist*, 2<sup>nd</sup> edition (London: British Archaeological Reports), 39-56.

CHANTRAINE 1982

Chantraine, H., *Novaesium VIII. Die antiken Fundmünzen von Neuss. Gesamtkatalog der Ausgrabungen 1955-1978* [Limesforschungen 29] (Berlin: Mann).

CLOT 2001

Clot, A., *Harun al-Raschid. Kalif von Bagdad* (München: Artemis & Winkler).

CUNLIFFE/DAVENPORT 1988

Cunliffe, B./Davenport, P., *The Temple of Sulis Minerva at Bath 2, The finds from the sacred spring* (Oxford: Oxford University School of Archaeology).

CÜPPERS 1969

Cüppers, H., *Die Trierer Römerbrücken* [Trierer Grabungen und Forschungen 5] (Mainz: Von Zabern).

CÜPPERS 1982

Cüppers, H., Der Tempel des Asklepios an der Moselbrücke zu Trier, *Funde und Ausgrabungen im Bezirk Trier* 14, 7-13.

CÜPPERS 2001

Cüppers, H., Die Römerbrücken. In: Kuhnen, H.-P. (ed.), *Das römische Trier, Führer zu archäologischen Denkmälern in Deutschland* 40 (Stuttgart: Theiss), 158-165.

DE BERNARDO STEMPEL/HAINZMANN 2020

De Bernardo Stempel, P./Hainzmann, M., *Fontes epigraphici religionum Celticarum antiquarum I, Provincia Noricum* [Mitteilungen der Prähistorischen Kommission 89] (Wien: Österreichische Akademie der Wissenschaften).

DEMBSKI 1972

Dembski, G., Die keltischen Fundmünzen Österreichs, *Numismatische Zeitschrift* 87./88., 37-73.

DEMBSKI 1977

Dembski, G., Die antiken Münzschatzfunde aus Österreich, *Numismatische Zeitschrift* 91, 3-64.

DEMBSKI 2001

Dembski, G., Die Fundmünzen vom Mallnitzer Tauern – Norische und Tauriskische Obbole, *Numismatische Zeitschrift* 108/109, 33-52.

DEMBSKI 2014

Dembski, G., Die Fundmünzen. In: Harl, O., *Hochtor und Glocknerroute. Ein hochalpines Passheiligtum und 2000*

- Jahre Kulturtransfer zwischen Mittelmeer und Mitteleuropa* [Sonderschriften des Österreichischen Archäologischen Instituts 8] (Wien: Österreichisches Archäologisches Institut), 89-98.
- DEMBSKI/LIPPERT 2000  
Dembski, G./Lippert, A., Keltische und römische Passopfer am Mallnitzer Tauern, *Archäologisches Korrespondenzblatt* 30, 251-268.
- DEMBSKI/LIPPERT 2013  
Dembski, G./Lippert, A., Ein weiterer keltischer Münzopferplatz am Mallnitzer Tauern (Salzburg/Kärnten), *Archäologisches Korrespondenzblatt* 43/4, 523-534.
- DERINGER 1949  
Deringer, H., Die römische Reichsstraße Aquileia-Lauriacum, *Carinthia I* 139, 193-211.
- DERINGER 1950  
Deringer, H., Die römische Reichsstraße Aquileia-Lauriacum, *Carinthia I* 140, 171-228, 1017-1026.
- DROTTLEFF 2019  
Drotleff, R., Die Fundmünzen aus dem Bereich zweier (spätkeltisch-)römischer Holzbrücken über die Drau in Emmersdorf bei Rosegg (Kärnten). Ein Vorbericht. In: Stermitz, M. (ed.), *Sammlungen und Sammler, Tagungsband zum 8. Österreichischen Numismatikertag* [Kärntner Museumsschriften 86] (Klagenfurt: Landesmuseum für Kärnten), 133-139.
- DUVAL 1989  
Duval, A., *L'art celtique de la Gaule au Musée des antiquités nationales* (Paris : Réunion des Musées Nationaux).
- EBNETER 2005  
Ebnetter, I., Verloren, geopfert, entsorgt. Flussfunde aus der Thur bei Schwarzenbach und Unterbazenheid (Kanton St. Gallen), *Jahrbuch der Schweizerischen Gesellschaft für Ur- und Frühgeschichte* 88, 255-281.
- GASPARI/KREMPUŠ 2002  
Gaspari, A./Krempuš, R., Bronze "donor" from the votive site in the River Ljubljana. In: Giumlia-Mair, A. (ed.), *I bronzi antichi : produzione e tecnologia, Atti del XV Congresso internazionale sui bronzi antichi, organizzato dall'Università di Udine, sede di Gorizia, Grado-Aquileia, 22-26 maggio 2001* (Montagnac: Mergo), 446-449.
- GILLES 2001  
Gilles, K.-J., Zeit im Strom. Römerzeitliche und nachrömerzeitliche Funde von der Römerbrücke in Trier. In: Kuhnen, H.-P. (ed.), *abgetaucht, aufgetaucht. Flussfundstücke aus der Geschichte mit ihrer Geschichte* (Trier: Rheinisches Landesmuseum), 87-92.
- GLEIRSCHER 2017  
Gleirscher, P., Draubücke bei Rosegg 2017, Prospektion, Maßnahme Nr. 75304.17.01, *Fundberichte aus Österreich* 56, digitaler Teil, D675-D680.
- GLEIRSCHER 2018  
Gleirscher, P., Zwei römerzeitliche Holzbrücken über die Drau in Emmersdorf bei Rosegg, *Rudolfinum, Jahrbuch des Landesmuseums für Kärnten* 2017 (Klagenfurt: Landesmuseum für Kärnten), 11-13.
- GÖBL 1989  
Göbl, R., *Der norische Tetradrachmenfund 1972 aus Haimburg in Kärnten: Versuch einer Gesamtrekonstruktion* [Österreichische Akademie der Wissenschaften, Philosophisch-historische Klasse Sitzungsberichte 522, Veröffentlichungen der Numismatischen Kommission 21] (Wien: Österreichische Akademie der Wissenschaften).
- GÖBL 1998  
Göbl, R. (+), *Der norisch-keltische Münzfund von Malta/Koschach 1997, Carinthia I* 188, 69-86.
- GORINI 2005  
Gorini, G., *Il ripostiglio monetale di Enemonzo e la monetazione del Norico* [Numismatica Patavina 6] (Padova: Esedra).
- GORINI 2008  
Gorini, G., Aspetti della monetazione autonoma della Gallia Cisalpina e del Norico, *Numismatische Zeitschrift* 116./117, Festschrift für Günther Dembski, 95-101.
- GORINI 2009  
Gorini, G., Norican silver coinage: a reappraisal. In: Van Heesch, J./Heeren, I. (eds.), *Coinage in the Iron Age. Essays in Honour of Simone Scheers* (London: Spink), 117-122.
- GORINI 2015  
Gorini, G., Preroman an Roman Coinage in North Eastern Italy (II-I cent. BC). In: Lafer, R./Strobel, K. (eds.), *Antike Lebenswelten. Althistorische und papyrologische Studien* (Berlin: De Gruyter), 386-394.
- HAUPT 2015  
Haupt, P., Die Kognition von Heiligem und ihre sozio-biologischen Aspekte in der Vor- und Frühgeschichte. In: Quack, J. F./Luft, D. Ch. (eds.), *Erscheinungsformen und Handhabungen Heiliger Schriften* [Materiale Textkulturen 5] (Berlin: De Gruyter), 39-52.
- HINKER 2019  
Hinker, C., On Iron Construction Elements of Roman Bridges: Finds from the River Drau near Emmersdorf in Carinthia (AT), *Instrumentum* 50, 29 – 33.
- ISTENIČ 2002  
Istenič, J., Bronze statuette of Apollo from the River Ljubljana. In: Giumlia-Mair, A. (ed.), *I bronzi antichi : produzione e tecnologia, Atti del XV Congresso internazionale sui bronzi antichi, organizzato dall'Università di Udine, sede di Gorizia, Grado-Aquileia, 22-26 maggio 2001* (Montagnac: Mergo), 450-455.
- KAPPESSER 2012  
Kappesser, I., *Römische Flussfunde aus dem Rhein zwischen Mannheim und Bingen. Fundumstände, Flusslaufrekonstruktion und Interpretation* [Universitätsforschungen zur prähistorischen Archäologie 209] (Bonn: Habelt).
- KELTEN 1980  
*Die Kelten in Mitteleuropa. Kultur, Kunst, Wirtschaft. Salzburger Landesausstellung 1. Mai – 30. September 1980 im Keltenmuseum Hallein, Österreich* (Salzburg: Amt der Salzburger Landesregierung, Kulturabteilung).
- KEMMERS 2006  
Kemmers, F., *Coins for a legion. An analysis of the coin finds from Augustan legionary fortress and Flavian canabae legionis at Nijmegen* [Studien zu Fundmünzen der Antike 21] (Mainz: Von Zabern).
- KOLNÍKOVÁ 1996  
Kolníková, E., Norische Münzen im Oppidum Bratislava und in seinem Hinterland, *Slovenská Numizmatika* 14, 9-57.
- KOS 1977  
Kos, P., *Keltski novci Slovenije. Keltische Münzen Sloweniens* [Situla 18] (Ljubljana: Narodni muzej).
- KOS 1978  
Kos, P., Ein Schatzfund westnorischer Großsilbermünzen in Most na Soči, *Arheološki vestnik* 29, 122-125.
- KOS 1983  
Kos, P., Der Schatzfund norischer Großsilbermünzen aus Bevke, *Arheološki vestnik* 34, 411-417.



- KOS 2007  
Kos, P., The Beginnings of the Coinage of Celtic Tribes in the Southeastern Alps, *Slovenská Numizmatika* 18, 59–68.
- KOS 2010  
Kos, P., Celtic Tetradrachms of the Kugelreiter Type, *Revue Belge de Numismatique et de Sigillographie* 156, 73–102.
- KOS 2012  
Kos, P., The VES Group – the earliest Tauriscan tetradrachms, *Vjesnik Arheološkog Muzeja u Zagrebu*, 3. S., 45, 351–358.
- KOS 2013  
Kos, P., Silver fractions of the “Kugelreiter” tetradrachms, *Arheološki vestnik* 64, 353–366.
- KOS 2015  
Kos, P., Die Kleinsilbermünzen des Typs Kugelreiter – neue Belege, *Mitteilungen der Österreichischen Numismatischen Gesellschaft* 55/1, 1–8.
- KOS 2019  
Kos, P., *Das spätrömische Kastell Vermania bei Isny III., Auswertung der Fundmünzen* [Münchner Beiträge zur Vor- und Frühgeschichte 65] (München: Beck).
- KOS/MIRNIK 2011  
Kos, P./Mirnik, I., Coin Hoards from Croatia: XVII. The Križovljan (Varaždin) hoard of Celtic tetradrachms (1843), *Vjesnik Arheološkog Muzeja u Zagrebu*, 3. S., 44, 77–110.
- KOS/ŠEMROV 2003  
Kos, P./Šemrov, A., Skupna najdba keltskih in rimskih novcev v reki Ljubljanici Doprinos h kronologiji novcev plemena Tavriskov, A hoard of Celtic and Roman coins from the Ljubljana River. A contribution to the chronology of the coinage of the Taurisci, *Arheološki vestnik* 54, 381–395.
- KOS/TRKMAN 2009  
Kos, P./Trkman, B. Ž., A Hoard of Roman Republican and Norican coins from the vicinity of Kobarid, *Arheološki vestnik* 60, 271–282.
- MARCER 2005a  
Marcer, J., Neues zum keltischen Schatzfund von Malta (Kärnten), *Mitteilungen der Österreichischen Numismatischen Gesellschaft* 25/2, 87–91.
- MARCER 2005b  
Marcer, J., Zu neuen Münzlegenden der ersten norischen Tetradrachmenserie, *Numismatische Zeitschrift* 113./114., 77–83.
- MILITKÝ 2016  
Militký, J., The Coins of the Taurisci and Norici found in Bohemia and Moravia, *Mitteilungen der prähistorischen Kommission der Österreichischen Akademie der Wissenschaften* 85, 89–113.
- MILLER 1916  
Miller, K., *Itineraria Romana. Römische Reisewege an der Hand der Tabula Peutingeriana dargestellt*, Stuttgart: Strecker und Schröder).
- MIŠKEC 2007  
Miškec, A., Monetary Circulation in the Posočje Region in the Antiquity. In: Chiabà, M./Maggi, P./Magrini, C. (eds.), *Le valli del Natisone e dell'Isonzo tra Centroeuropa e Adriatico* (Roma: Quasar), 275–281.
- MIŠKEC 2012  
Miškec, A., Hoards of the Roman period in Slovenia from the 2nd century BC to the 2nd century AD. *Vjesnik Arheološkog Muzeja u Zagrebu*, 3. S., 45, 379–393.
- NICK 2005  
Nick, M., Am Ende des Regenbogens. Ein Interpretationsversuch von Hortfunden mit keltischen Goldmünzen. In: Haselgrove, C./Wigg-Wolf, D. (eds.), *Iron Age Coinage and Ritual Practices* [Studien zu Fundmünzen der Antike 20] (Mainz: Von Zabern), 115–155.
- PICCOTTINI 2010  
Piccottini, G., Römerzeitliche Grabbauspolien aus der Drau bei Rosegg, *Carinthia I* 200, 19–42.
- PICCOTTINI 2016  
Piccottini, G., Römerzeit in und um Villach – Probleme und Erkenntnisse. In: Museum der Stadt Villach (ed.), *Neues aus Alt-Villach*, 53. Jahrbuch (Villach: Stadt Villach), 9–51.
- PROKISCH 2011  
Prokisch, B., Die Fundmünzen aus den im Zusammenhang mit dem Bau der Umfahrungsstraße der Ortschaft Neubau (MG Hörsing, VB Linz-Land OÖ) durchgeführten archäologischen Untersuchungen der Jahre 2005/2008, *Numismatische Zeitschrift* 118, 7–51.
- RAVETZ 1964  
Ravetz, A., Fourth century inflation and Romano-British coin finds, *Numismatic Chronicle* 15, 201–231.
- RIHA 1990  
Riha, E., *Der römische Schmuck aus Augst und Kaiseraugst* [Forschungen in Augst 10] (Augst: Römermuseum).
- RUSKE 2011  
Ruske, A., Die Fundregesten der antiken Münzhorte aus Österreich, *Numismatische Zeitschrift* 118, Festschrift für Günther Dembski, 53–181.
- SCHACHINGER 2001  
Schachinger, U., Die keltischen Münzen aus einem spätlatènezeitlichen Heiligtum am Frauenberg bei Leibnitz/Steiermark, *Numismatische Zeitschrift* 108./109., 17–32.
- SCHACHINGER 2006  
Schachinger, U., *Der antike Münzumlauf in der Steiermark. Die Fundmünzen der römischen Zeit in Österreich, Abteilung VI Steiermark* (Wien: Österreichische Akademie der Wissenschaften).
- SCHACHINGER 2017  
Schachinger, U., Die keltischen und römischen Fundmünzen aus dem vicus von Schwarzach im Pongau, Land Salzburg (mit Beiträgen von Waltraud Moser-Schmidl, Raimund Kastler und Günther Dembski), *Bayerische Vorgeschichtsblätter* 82, 57–94.
- SCHACHINGER 2019  
Schachinger, U., Die antiken Fundmünzen vom Georgenberg. In: Lang, F. (ed.), *Castellum Cucullis. Der Georgenberg bei Kuchl in römischer Zeit, Band 1* [Archäologie in Salzburg 11] (Salzburg: Salzburg Museum), 79–118.
- SCHALLMAYER 2000  
Schallmayer, E., Unterlagen zur römischen Rheinbrücke von Köln im Archiv des Saalburgmuseums, *Saalburg Jahrbuch* 50, 205–211.
- STROBEL 2009  
Strobel, K., Augustus und die Annexion des Alpenbogens. Die Einrichtung der Provinzen Raetien und Noricum, *Germania* 87/2, 437–509.
- STROBEL 2012  
Strobel, K., Das Regnum Noricum, die sogenannte Norische Münzprägung und Rom: Frühe Kontakte als Vorspiel von Annexion und Romanisierung – Fiktion oder Realität? Mit einem Appendix zur Noreia-Frage, *Archaeologia Austriaca* 96, 11–34.
- STROBEL 2014  
Strobel, K., Vorrömischer und frühromischer Geldverkehr in Noricum: Fragen und Tendenzen. In: Alram, M./Emmerig,

H./Harreither, R. (eds.), *Akten des 5. Österreichischen Numismatikertages, Enns, 21.-22. Juni 2012* [Forschungen in Lauriacum 15] (Enns-Linz: Museumsverein Lauriacum), 67-99.

## STROBEL 2015

Strobel, K., Das frühe Stammesreich der keltischen Noriker in Kärnten – Ein Konstrukt der Wissenschaftsgeschichte. In: Lafer, R./Strobel, K. (eds.), *Antike Lebenswelten. Althistorische und papyrologische Studien* (Berlin: De Gruyter), 28-152.

## VON KAENEL 1999

Von Kaenel, H.-M., Zum Münzumlauf im augusteischen Rom anhand der Funde aus dem Tiber – mit einem Nachtrag zur geldgeschichtlichen Bedeutung der Münzfunde in Kalkriese. In: Schlüter, W./Wiegels, R. (eds.), *Rom, Germanien und die Ausgrabungen von Kalkriese, Internationaler Kongress Osnabrück 1996* (Osnabrück: Rasch), 363-379.

## WHIMSTER 1979

Whimster, R. P., *Burial practices in iron age Britain*, Durham theses, Durham University. Available at Durham E-Theses Online: <http://etheses.dur.ac.uk/7999/>

## WYSS/REY/MÜLLER 2002

Wyss, R./Rey, T./Müller, F., *Gewässerfunde aus Port und Umgebung, Katalog der latène- und römischen Funde aus der Zihl* [Schriften des Bernischen Historischen Museums 4] (Bern: Bernisches Historisches Museum).

## ZIEGAUS 2014

Ziehaus, B., Die Werkzeuge der keltischen Münzmeister – Funde und Forschungen, in: Alram, M./Emmerig, H./Harreither, R. (eds.), *Akten des 5. Österreichischen Numismatikertages, Enns, 21.-22. Juni 2012* [Forschungen in Lauriacum 15] (Enns-Linz: Museumsverein Lauriacum), 3-29.

## NUMISMATIC CITATION REFERENCES

### DEMBSKI

Dembski, G., *Münzen der Kelten* (Wien: Kunsthistorisches Museum, 1998).

### FLESCHE

Ziehaus, B., *Kelten Geld, Münzen der Kelten und angrenzender nichtgriechischer Völkerschaften, Sammlung Christian Flesche* (München: Staatliche Münzensammlung, 2010).

### MIR

Woytek, B., *Die Reichsprägung des Kaisers Traianus, Moneta Imperii Romani 14* [Denkschriften der philosophisch-historischen Klasse der Österreichischen Akademie der Wissenschaften 387] (Wien: Österreichische Akademie der Wissenschaften, 2010).

### MITCHINER

Mitchiner, M., *Oriental coins and their values, The world of Islam* (London: Hawkins, 1977).

### RIC I

Sutherland, C. H. V., *The Roman Imperial Coinage, Vol. I, Revised Edition, from 31 B.C. to AD 69* (London: Spink, 1984).

### RIC II

Mattingly, H./Sydenham, E. A., *The Roman Imperial Coinage, Vol. II, Vespasian to Hadrian* (London: Spink, 1926).

### TKN

Göbl, R., *Typologie und Chronologie der keltischen Münzprägung in Noricum* [Denkschriften der philosophisch-historischen Klasse der Österreichischen Akademie der Wissenschaften 113] (Wien: Österreichische Akademie der Wissenschaften, 1973).



**Fig. 2.** Celtic coins from Rosegg/Rožek (Cat. No. 1-19)





**Fig. 3.** Celtic, Roman and Oriental coins and rings from Rosegg/Rožek (Cat. No. 20-34; 53; 32; 80; 81) and tetradrachms from the Haimburg hoard (Cat. No. H1-H4)