

A GOLD COIN OF THE ROMAN EMPEROR ANTHEMIUS (467 – 472 AD) FROM ČRNOMELJ

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During construction work in the centre of Črnomelj in 2019, archaeologists discovered a gold coin from the period of Late Antiquity. This tremissis of the Roman emperor Anthemius was minted in Rome 467–472. It has two special features: a lower weight than the average for tremisses, and graffiti on the reverse of the coin. The great variety of the types and quantities of the minted solidi of Anthemius is partially reflected in the hoard finds discovered in Italy and northern Europe. In terms of the published coins, it can be established that there are few single finds of the coins of Anthemius, and among them tremisses are especially rare.

Key words:

numismatics, Slovenia, Roman coins, gold coins, 5th century, coin hoards, coin finds

Investigation of the distribution of single-coin finds outside and inside the Empire has shown that tremisses of Anthemius are very rare. The monetary circulation on the territory of present-day Slovenia in the second half of the 5th century almost ceased, and the small number of coins could well indicate a transition to a barter system. Gold coins otherwise predominate in the circulation; they must be connected, most probably, either to the military or to the work of the provincial administration.

Circumstances of discovery

Archaeological excavations under the direction of A. Jovanović and S. Olič were performed in 2018 and 2019 because of renovations to Miran Jarc Street in Črnomelj. The archaeologists excavated the area from the church of St Peter, where they discovered, at the site of the former local graveyard, graves from the Middle and Modern Ages,¹ all the way to the square in front of the Church of the Holy Spirit, where they discovered finds from

the period of Late Antiquity. Among the finds, a gold coin from Late Antiquity particularly stands out, found while studying the destruction strata from Late Antiquity on the 20th of May, 2019.² The new finds additionally supplemented knowledge of the fortified settlement of Late Antiquity, which had been discovered in archaeological excavations in 1988–1997 at three large sites in the centre of the town.³

1 Stanković 2019.

2 The find of the gold coin was reported by numerous internet sites; cf. Gačbričan 2019.

3 Mason 1998.



MAP 1. Map of the centre of Črnomelj (OpenStreetMap).

Description of the coin

Denomination: Tremissis

Obverse: D N ANTHEMI - VS P F AVG; Bust of Anthemius, pearl-dia-demed, draped, cuirassed, right.

Reverse: COMOB; no legend, cross within a wreath.

Mint: Rome

Date: 467–472

Reference: RIC 2848; Lacam 126

Weight: 1.34 g; Diameter: 13 × 12.5 mm; Axis: 5.

The scratched graffiti 'X' on the reverse

On the reverse, to the right of the cross, a scratched item of graffiti was incised in the form of the letter X, made in three strokes. The deeper horizontal line was incised first, from left to right. It was followed by an incision in the form of the letter V; first the right, then the left arm, both from the bottom upwards.⁴

Graffiti are often scratched / incised on gold coins from the fourth century to the seventh: from crosses or Christograms, through letters or a combination of letters, to one or several seemingly meaningless strokes. We can only speculate about their significance. For the symbols of the cross or Christogram, which most often appear on coins from the period of the transition from paganism to Christianity, it can be presumed that they gave coins with a pagan theme a Christian significance. On the coin in question, which already bears a Christian symbol, it is necessary to seek another reason; perhaps it represents a mark of ownership or a guarantee of authenticity or quality.⁵ One of the possible reasons that the incision X (and also the incision V) would not represent a letter, but rather merely an incision to “test the material” – with which, in addition to stabbing and biting a coin, the softness of the metal was tested – was that a softer coin would indicate a higher gold content and exclude the possibility that it was a suberat (copper-centred) or fake coin.⁶ An “X” mark, similarly placed to the right of the cross, also appeared on a tremissis of Anthemius (RIC 2847) which was offered for sale at the auction of Dr. Busso Peus Nachfolger, Auction 420, Lot 539, 1 Nov. 2017.⁷

4 The coin was photographed under microscope by N. Nemeček, MA (National Museum of Slovenia), whom I sincerely thank.

5 Grierson, Mays 1992, 35. Cf. Vojvoda, Redžić 2020, 221.

6 Baldus, Khanoussi 2014, 25.

7 <http://www.peus-muenzen.de/> (1 November 2017).



FIGURE 1. Obverse and reverse of the gold coin (photo by M. Pavlovec).

Denomination and weight

The tremissis, or “one third”, was a gold coin with the lowest value, which, unlike the solidus⁸ and semissis, came into use in the late 4th century (383 or soon after that), and it began to be used massively under Theodosius II and Valentinianus III; from then it was minted in comparable quantities with solidi, as it began to fill a gap caused by the lack of coinage of smaller denominations, i.e. silver siliquae.⁹

The theoretical weight of the solidus is relative to the Roman pound; the weight of the former is suggested differently by various modern researchers, somewhere between 4.49 and 4.55 g (or 1/72 of a Roman pound)¹⁰, while the tremissis would be a third of a solidus (or 1/216), weighing between 1.49 and 1.52 g; the weight of the gold coins remained almost unchanged up to the second half of the 13th century.¹¹

As on other gold coins, the iconography on the tremisses changed: at first (tremisses of Magnus Maximus) they depicted Victoria, advancing to the left, holding a wreath and a palm. This image was replaced in the Western part of the Empire at the end of 425 AD by the depiction of a cross in a wreath (in the Eastern part of the Empire, this image was on the gold coins of empresses), which remained almost unchanged to the end of the 5th century.¹²



FIGURE 2. Enlargement of the graffiti on the reverse of the coin (photo by N. Nemeček).

Purity of gold and weight

XRF analysis¹³ at four measuring points on the coin, two on each side, showed a composition of gold with a low percentage of silver and traces of copper. Silicon, aluminium, and a little iron were also present, which usually appear on the surface of archaeological artefacts; it most probably represents the migration of elements from the surroundings. If the impurities from the surroundings are excluded, all four measurements correspond very well: the gold coin was composed of 97.35% gold, 2.5% silver and 0.15% copper.

8 The coin of the highest value, the solidus, was introduced in the West by Constantine I in 309, and after the defeat of Licinius in 324 it spread throughout the entire empire; cf. Grierson, Mays 1992, 32–35; Kos 2000, 108.

9 Grierson, Mays 1992, 33; Kent 1994, 12.

10 The range of estimates of the Roman pound varies between 322.56 and 327.45 g; cf. Grierson, Mays 1992, 29–30.

11 Morrisson *et al.* 1985, 164–168.

12 Grierson, Mays 1992, 33; Kent 1994, 12.

13 The analysis was carried out by Dr. E. Menart (National Museum of Slovenia), whom I sincerely thank.

Measurement	Au (%)	Ag (%)	Cu (%)
1 (obverse)	97.38	2.47	0.15
2 (reverse)	97.32	2.52	0.16
3 (obverse)	97.29	2.56	0.15
4 (reverse)	97.37	2.48	0.15

TABLE 1. Normalized content of the elements Au, Ag and Cu without noting Si, Al and Fe (made by E. Menart).

RIC							
2841	1.46 g HA 3042	1.44 g RN 9	1.43 g CNG Triton XIV	1.43 g EVG 2018	1.44 g NAC 67		
2842	1.4 g CNG el. 56	1.48 g NAC 78	1.46 g NAC 92	1.39 g NAC 49, 92			
2844	1.44 g NAC 64	1.455 g ANS					
2845	1.48 g NAC 67						
2847	1.39 g Künker 136, Elsen 127	1.43 g Künker 273, CNG el. 428, HA 3076	1.48 g Peus 420	1.4 g Peus 422	1.45 g CNG VI	1.43 g Künker 62	1.42 g MHS 1108
	1.42 g FM	1.46 g BM	1.39 g BM				
2848	1.41 g HA 296	1.41 g Künker 288	1.44 g G & M 114				
2849	1.38 g HA 3049	1.41 g G & M 142, CNG 72	1.45 g Elsen 85, CNG 72, CNG 109	1.39 g Künker 111	1.52 g Künker 193	1.37 g Rauch 2011	
2850	1.44 g G & M 155 and 176	1.46 g Künker 89					
2852	1.45 g ANS						
2900	1.43 g KM 109	1.45 g CNG 96					
2901	1.39 g Peus 409	1.43 g Lanz 148					
2902	1.44 g UBS 78	1.43 g Künker 312	1.43 g HA 3076	1.44 g HA 3011			
2903	1.45 g RN 18	1.48 g EVG 2018	1.45 g NAC 72, Hess 336	1.45 g CNG 105			

TABLE 2. Review of the weights of coins taken from auctions; the coins are arranged according to determinations from RIC 2841–2903. Abbreviations for auction houses: CNG = Classical Numismatic Group, Inc.; Elsen = Jean Elsen & ses Fils S.A.; EVG = Editions V. Gadoury; G & M = Gorny & Mosch Giessener Münzhandlung; HA = Heritage Auctions, Inc.; Hess = Hess Divo AG; KM = Kölner Münzkabinett Tyll Kroha Nachfolger; Künker = Fritz Rudolf Künker GmbH & Co. KG; Lanz = Numismatik Lanz München; MHS = Marti Hervera and Soler & Llach; NAC = Numismatica Ars Classica NAC AG; Peus = Dr. Busso Peus Nachfolger; Rauch = Auktionshaus H. D. Rauch GmbH; RN = Roma Numismatics Limited; UBS = UBS Gold & Numismatics.

ANS = American Numismatic Society, BM = British Museum; FM = Fitzwilliam Museum

(made by A. Miškec).

The results of the measurement also correspond to the otherwise rare measurements taken previously, which indicates that, from as early as the end of the 4th century, after the division of the Roman Empire into Western and Eastern parts, the solidi in the West contained somewhat less gold than in the East, where they contained almost 99% pure gold. This difference became even more pronounced from approximately the middle of the reign of Valentinianus III; his later coins contained, on average, somewhat more than 96% pure gold.¹⁴ The mark COMOB on the reverse of the coinage in the exergue is also related to the purity of the gold. Gold coins which were theoretically made from metals of the highest quality bore the letters OB along with the mint's identity, as an abbreviation for *obryzum* (pure gold).¹⁵

Even if the gold coin from Črnomelj contains very pure gold, it does not reach the standard weight, as it weighs only 1.34 g. According to investigations of the weight of 46 coins of the same type,¹⁶ whose data was taken from auction catalogues and the online database of the coins of the Roman Empire, OCRE,¹⁷ and have a determination according to RIC from 2841–2852 (mint of Rome) and 2900–2903 (mint of Mediolanum), the average weight was 1.434 g, the coin with the least weight measuring 1.37 g, and the greatest 1.52 g. A lower weight, or a weight ranging from 1.13–1.55 g. was found for the coins of an unknown Gallic mint (RIC 2906), although stylistically the coin in question does not belong to that group. One of the possible explanations for the reduced weight of the coin would be that the edge of the coin had been cut,¹⁸ although detailed microscopic examination of the coins did not confirm this.

The period of the second half of the 5th century and the reign of Anthemius

In the last two decades of the decline of the Western Empire, when nine emperors ascended to the throne, an important role in the West at that time was played by the all-powerful supreme military commander and patrician Ricimer (457–472), as he placed several emperors on the throne, and also deposed them.¹⁹ Other centres of political power and influence also appeared in a less pronounced form, such as the Roman Senate, the Italic and Gallic elites, and among external forces particularly the Vandals in Africa, and in the West the Visigoths and Burgundians. In such uncertain conditions, Procopius Anthemius ruled the Western Empire from 467 to 472. He came from a very prominent Constantinople family. He was married to Euphemia, the daughter of the Eastern Emperor Marcian (451–457). Marcian's successor, Leo I (457–474), chose him as the Emperor in the West, as he wanted aid in attacking the Vandals. He was proclaimed emperor a few miles from Rome on the 12th of April 467.²⁰ After his arrival in Rome, Anthemius was supplied with generous quantities of

gold from the mint in Constantinople. They sent an entire auxiliary mint to Rome, along with die-cutters. They produced numerous very similar dies that they used for minting new coins to pay for military expenses.²¹ As early as the autumn of 467, Anthemius attempted reconciliation with the powerful Ricimer, who accepted him under the condition that he marry Anthemius' daughter Alypia. Anthemius was unpopular in many circles because of his eastern origins, and the catastrophic failure of his expedition against the Vandals in 468 further damaged his reputation.²² In the end, Ricimer also turned against him. By early autumn 471, Ricimer advanced against Anthemius in Rome, and in October 471 he blocked the River Tiber all the way to Ostia and isolated the city. Rome fell to Ricimer's army on the 2nd of July 472, and several days later, on the 11th of July, Anthemius was killed.

Anthemius mostly minted solidi; they are exceptional in terms not only of the large quantities, but also of the new types. His coinage was minted at three mints: Ravenna, Rome and Mediolanum (Milan). The coins vary greatly in quality, some were manufactured with precision and feature a good style, while others were coarsely made with strangely deformed letters.²³ In contrast to the various types of solidi, the tremisses are all of the same type, with a cross in a wreath and the legend COMOB below. Distinguishing the mint is based on the legend, the letters, and the form of the wreath. The legend can be continuous or discontinuous, it can contain PERPET AVG or P F AVG, and the wreaths were of various forms. Most of the coins are attributed to the mint in Rome, four different ones to the mint in Mediolanum, and only one to the mint in Ravenna.²⁴

Anthemius's gold coins within the Empire and outside it

The short reign of Anthemius – a good five years – is reflected within the Empire in rare single-coin finds. Two gold coins of Anthemius have been found on the territory of present-day Slovenia: a solidus from Hajdina, near Ptuj,²⁵ and the tremissis from Črnomelj, along with a bronze coin from Svete Gore, above Bistrica ob Sotli.

14 Kent 1994, 5.

15 Kent 1956, 200; Kent 1994, 4; Grierson 1982, 20–21; Guest 2008, 299.

16 Reverse: cross within a wreath, no legend.

17 <http://numismatics.org/ocre/> (10 April 2020).

18 Cf. Baldus, Khanoussi 2014, 25.

19 Bratož 2014, 118.

20 Kent 1994, 193.

21 Fischer 2014, 108.

22 Kent 1994, 193.

23 Grierson 1982, 255–256.

24 Kent 1994, 414, 418–419.

25 FMRSI 2 434/7–342 (today lost).

Similarly small numbers of gold coins of Anthemius have been found in other parts of the Western part of the Empire, although it is generally the case that Roman single gold coins from the second half of the 5th century are rare.²⁶ From Britannia, a solidus from Piercebridge (County Durham)²⁷ and a solidus from Suffolk Coastal²⁸ are known; from Hispania, a solidus from Menorca;²⁹ from Gaul, a tremissis from Avignon or the vicinity³⁰ and a solidus from Ramasse;³¹ from Sardinia, a gold coin from Sassari;³² from the territory of *Noricum Ripense*, 3 solidi: from Linz, Wels³³ and Enns;³⁴ from *Noricum Mediterraneum*, a solidus from Augsburg,³⁵ and the one previously mentioned from Ptuj; from Upper Pannonia, the tremissis from Črnomelj and one from Sisak (Siscia);³⁶ from *X regio – Venetia et Histria*, 4 examples: a solidus each from Aquileia³⁷ and Poreč,³⁸ and a tremissis each from Cividale del Friuli³⁹ and Ca' Turcata.⁴⁰

In contrast to the individual finds, coins of Anthemius appear in large quantities in hoards; almost without exception, solidi predominate in them.⁴¹ Further, detailed studies of the dies show that the five years of Anthemius's reign represented the greatest production of solidi in the Roman West in the entire second half of the 5th century.⁴² Solidi of Anthemius appear in buried hoard finds from the end of the 5th century and in the first half of the 6th. They survive in two regions: Italy and Scandinavia. The largest finds, which also contain the greatest number of Anthemius's solidi, are hoards from Italy.

Seven relatively large hoards are known: the largest among them is a recently-discovered find from Como; among 1000 solidi, there are 240 of Anthemius, which amounts to 24 %. A similar proportion of Anthemius' solidi (about 17 %) is also found in a find from San Mamiliano. The largest share of Anthemius's solidi is in the famous find from Rome (Casa delle Vestali); it contained 345 solidi of Anthemius among the 397 discovered, meaning almost 87 %. The

finds from Gernetto and the vicinity of Naples can easily be considered large, although both contain a smaller proportion of solidi of Anthemius. According to the data gathered to the present, only the find of Bavay, in France, contained tremisses only. (Cf. Tab. 3.)

Outside the Empire, Roman gold coins of the 5th and 6th centuries have appeared in large quantities on the southwestern shores of the Baltic Sea (especially in Pomerania),⁴³ on the Baltic islands,⁴⁴ and on the southern coasts of Scandinavia.⁴⁵ They appear as single finds, in hoards that contain only solidi, and in hoards that also contain gold jewellery in addition to solidi.⁴⁶ On the Baltic Sea islands of Bornholm (Denmark), Öland and Gotland (Sweden), single gold coins of Anthemius were found, as well as those in hoards (Cf. Tab. 3). On Bornholm, 6 coins of Anthemius were discovered,⁴⁷ on Öland 7 examples,⁴⁸ and on Gotland 1 example.⁴⁹ Two were discovered in continental Sweden,⁵⁰ none in Denmark other than on the island of Bornholm, and two single solidi of Anthemius in Pomerania.⁵¹ The first solidi perhaps arrived in this area at the beginning of the 5th century; the main influx began around 450, and continued for around one hundred years. The appearance of these coins has been interpreted in various ways: as payments received by the Ostrogoths from the Roman emperors (tribute), as proof of trade in fur or wool,⁵² or as payments to barbarians in the imperial services.⁵³

Large quantities of gold coins from the 5th century also appear in the Carpathian basin and indicate the varied relationships between the Roman Empire and the peoples living there. In the first quarter of the 5th century, coins of the Western Empire predominated (Honorius), while, with the domination of the Huns in this area, the share of coinage from the Eastern Empire increased sharply. Only one solidus of Anthemius was found in this region (Ömböly, in Hungary).⁵⁴

26 Cf. Kos 2019, 127 for Raetia, and Bland 2009, 43 for Britannia.

27 Bland, Lorient 2010, 51, 132; although the authors place it in the context of the 6th century.

28 http://numismatics.org/ocre/id/ric.10.anth_w.2835?lang=en (12 February 2021).

29 Bost et al., 1983, 162; 1992, 54, 83.

30 Callu, Lorient 1990, 187.

31 Callu, Lorient 1990, 250.

32 Satta 1955, 121.

33 Hahn 1987, 459.

34 Lorient 1988, 70, footnote 52.

35 FMRÖ 2/3 6/15(1)–11.

36 Sv. Kvirin / St Quirinus, Sisak; this information was kindly provided by M. Nad of the Archaeological Museum in Zagreb.

37 Gorini 1992, 185.

38 FMRHr 18 59–41.

39 Gorini 1992, 185.

40 RMR Ve 6/2, 1/1, 31.

41 Similarly also in hoards from the 6th and 7th centuries in the Balkans and Asia Minor, where there are fewer tremisses than solidi, although more than semisses; Morrisson, Ivanišević 2006, 45–47.

42 Fisher 2014; Burgess 2007.

43 Ciołek 2009.

44 Fagerlie 1967; Horsnæs 2009.

45 Talvio 2009, 272.

46 Ciołek 2009, 218–219.

47 Fagerlie 1967, 210, 212; Horsnæs 2009, 247–248, 253, 255.

48 Fagerlie 1967, 181, 184, 192, 196.

49 Fagerlie 1967, 200.

50 Fagerlie 1967, 179, 181.

51 Ciołek 2009, 220.

52 Talvio 2009, 272; Metcalf 1988, 67–68. The payment of tributes in solidi represented one of the different levels of exchange between the Romans and the Barbarians outside the boundaries of the Empire; cf. Guest 2008, 296–298.

53 Fagerlie 1967, 99.

54 Prohászka 2009b, 101.

State / region	Hoard	Solidi / tremisses	Anthemius	Publication
Italy	Como	1000	243	Facchinetti 2019, 208.
Italy	San Mamiliano	498	83	Fisher 2014, 116. Arslan 2015. López Sánchez 2015.
Italy	Rome: Casa delle Vestali	397	345	Ungaro 1985.
Italy	Gernetto	272	1	Prohászka 2009a.
Italy	Naples	255	14	Kent 1994, cv.
Italy	Zeccone	49	15	Kent 1994, cxvi. Grierson, Mays 1992, 295.
Italy	Monasterolo di Brembio	25	1	Panvini Rosati 1985, 8.
Belgium	Vedrin	69	5	Lallemand 1965.
France	Bellignies	7	1	Kent 1994, xci.
France	Bavay	4 tre	1	Lafaurie, Morrisson 1987, 65.
Switzerland	Merlingen	4	1	Lafaurie, Morrisson 1987, 86.
Denmark	Bornholm – Kåsbygård	14	1	Fagerlie 1967, 208. Horsnæs 2009, 240–241.
Denmark	Bornholm – Soldatergård	36	1	Fagerlie 1967, 211. Horsnæs 2009, 243–245.
Denmark	Bornholm – Dalshøj	17	1	Horsnæs 2009, 251–252. Fagerlie 1967, 209.
Sweden	Öland – Åby	80	3	Fagerlie 1967, 191–192.
Sweden	Öland – Övetorp	22	1	Fischer 2014, 116.
Sweden	Öland – Spångebro	13	1	Fagerlie 1967, 189.
Sweden	Öland – Präststommen	11	1	Fagerlie 1967, 184.
Sweden	Öland – Bostorp	6	1	Fagerlie 1967, 190.
Sweden	Öland – Ingelstad	6	1	Fischer 2014, 116.
Sweden	Öland – Sandby i Högby	4	1	Fagerlie 1967, 187.
Sweden	Öland – Ekelunda	3	1	Fagerlie 1967, 192.
Sweden	Öland – Stenåsa	3	1	Fischer 2014, 116.
Sweden	Gotland – Botes	84	1	Fagerlie 1967, 198–199.
Sweden	Gotland – Harkvie	11	1	Fischer 2014, 116.
Sweden	Gotland – Övede	11	1	Fagerlie 1967, 198.
Sweden	Gotland – Norrkvie	8	1	Fischer 2014, 116.
Sweden	Gotland – Sigvards	5	1	Fagerlie 1967, 198.
Poland	Pomerania – Radostowo	23	1	Ciołek 2007, 197–198.
Poland	Pomerania – Puck (Putzig)	6	2	Ciołek 2007, 195–196.
Poland	Pomerania – Elbląg	6	2	Ciołek 2007, 40–42, 44.

TABLE 3. View of hoard finds that contain gold coins of Anthemius; hoard finds from India and North Africa are not included (made by A. Miškec).

	Sol	Sem	Tre	Sil	AE 2	AE 3	AE 4	AE ?
Honorius (393–423)	10		4	1		432	82	11
Galla Placidia (421–450)	1							
Valentinian III (425–455)	7	1	1				2	
Honorina			1					
Anthemius (467–472)	1		1				1	
Iulius Nepos (474–475)			1					
Arcadius (382–408)	4		1	1	3	53	461	14
Theodosius II (402–450)	5					3	5	
Leo I (457–474)	2						3	
Zeno			6					

TABLE 4. Overview by denomination of coinage of the 5th century from sites in present-day Slovenia (taken from FMRSI 1–6).

Site	Valentinian III 425–455	Anthemius 467–472	Iulius Nepos 474–475	Leo I 457–474	Zeno (second reign)
Kobarid-Tonovcov grad					Odovacar, Tre; FMRSI 5 4–1
Ulaka (Stari trg pri Ložu)					Tre; FMRSI 4 42–132
Kranj			Tre; FMRSI 1 113–7		
Hrastje, near Polje (Ljubljana)					Tre, FMRSI 1 180–1
Sv. Lambert (Pristava nad Stično)				AE 4; FMRSI 5 79–44.	
Šentjurij, near Grosuplje				Sol; FMRSI 4 104–1	
Gradec, near Velika Strmica					Tre; FMRSI 1 248–11
Črnomelj		Tre (unpublished)			
Svete gore (Bistrica ob Sotli)		AE 4; FMRSI 5 109–48		AE 4; FMRSI 5 109–49	
Gradec, near Prapretno					Odovacar, Tre; FMRSI 5 141–55
Tinje, above Loka pri Žusmu					Odovacar, Tre; FMRSI 2 383–11
Hajdina-Ptuj		Sol; FMRSI 2 434/7–342			
Ptuj	Sem; FMRSI 2 434/20–111				
Vičava-Ptuj				AE 4; FMRSI 3 200–449	
Styria (Štajerska)				Sol; FMRSI 2 467/1–67	

TABLE 5. Overview of coinage in the second half of the 5th century from sites in present-day Slovenia (made by A. Miškec).

The monetary circulation in the second half of the 5th century in Slovenia

It can be established for the first decades of the 5th century in terms of the numerous coins found on the territory of present-day Slovenia that the monetary circulation took place without any major disturbances, as there was a large quantity of coins of various denominations in circulation (cf. Tab. 4).⁵⁵ Coin finds from the second half of the 5th century are, however, extremely rare, and gold coins predominate. Three coins were preserved in Poetovio, but none at Emona or Celeia, as the inhabitants, in the period of Late Antiquity, had begun to move to more secure areas; these could have been fortified outposts, most often in remote and hard-to-reach places. They could also have remained in the settlements in the low-land world that were naturally protected because of their prominent position and were additionally protected with strong walls.⁵⁶ Of the numerous upland fortifications discovered, coins from the second half of the 5th century appear at only six: Tonovcov grad (near Kobarid), Pristava nad Stično, Gradec (near Velika Strmica), Svete gore (above Bistrica ob Sotli), Gradec (near Prapretno) and Tinje (above Loka pri Žusmu) (cf. Tab. 5). Tremisses of the emperor Zeno appeared at five upland fortifications, in at least three cases minted at Mediolanum during the rule of Odovacar. The objects discovered with military characteristics at Tonovcov grad and Svete gore, above Bistrica ob Sotli mean that they are considered to have complemented the network of military stations, and in addition to their strategic importance they also carried out signalling tasks.⁵⁷ A military character, according to several military finds and also a coin (tremissis of Zeno), is similarly presumed also for the settlement of Ulaka, which would have been involved, according to several authors, in the defence system for Italy.⁵⁸ In fact, finds of gold coins from the 5th century are connected, by several authors, with the army, or military units composed primarily of hired barbarian soldiers, foederati. The gold coins could well represent military wages or *donativa* for the soldiers/officers.⁵⁹ In terms of the defensive system *Clastra Alpium Iuliarum*, the coin finds indicate that the monetary circulation had been interrupted throughout most of the system as early as the end of the 4th century; at the forts of *Ad Pirum* and *Tarsatica* the regular influx of coinage ceased in 402/403, and among the last to survive was *Castra*, where settlement was documented up to the first decades of the 5th century.⁶⁰ Several other settlements, particularly in the western part of Slovenia, in addition to control and security, may have also performed the task of provincial administration. Three coins were found in lowland settlements: at Hrastje, near Polje on the eastern outskirts of Ljubljana, in Kranj and in Črnomelj. The latter two feature excellent natural defences; they are located on heights above the influx of a river, and are additionally secured with powerful ramparts.⁶¹

Conclusion

For the tremissis of Anthemius from Črnomelj, attention must be drawn to two particular features: its weight, lower than the average weight of tremisses, and the graffiti on the reverse of the coin. For the lower weight, no satisfactory explanation has been found. A very exact weight is otherwise characteristic of coins in Late Antiquity; any deviations were repaired by cutting off part of the rim of the coin. However, microscopic analysis of the coin in question did not confirm any trimming. For the graffiti, similar examples lead to the explanation that it was an incision made to check the quality of the metal, i.e. a “test of the material”.

The great variety of the types and quantities of the minted solidi of Anthemius is partially reflected in the hoard finds discovered in Italy and northern Europe. In terms of the published coins, it can be established that there are few single finds of the coins of Anthemius, and tremisses are especially rare among them. They appear in Italy and the provinces closest to it, such as Noricum and Pannonia, while they are lacking in the eastern part of the Empire.

In studying the distribution of gold coinage in Late Antiquity, hence from the 5th and 6th centuries, it is necessary to distinguish between coins found within and outside the borders of the Empire. As we have seen, large hoards of solidi found outside the Empire can reflect the payment of tribute, the payment of salaries (mercenaries), or battle loot. Hoards of gold coins within the Empire are related to donations given at the accession of an emperor, anniversaries of a reign, and other occasions when enormous quantities of solidi were issued.

The monetary circulation on the territory of present-day Slovenia in the second half of the 5th century almost ceased, and the small number of coins could well indicate a transition to a barter system. Gold coins otherwise predominate in the circulation; they must be connected, most probably, either to the military or to the work of the provincial administration. Gold coins of Anthemius appear in Poetovio and Črnomelj and nearby Siscia. At that time, it was the centre of southern Savia (*Pannonia Savia*), to which Črnomelj also belonged.

55 Cf. Kos 2000, 110.

56 Ciglencečki 1999, 306.

57 Ciglencečki 2011, 273–274; Ciglencečki 1992, 67–70.

58 Gaspari 2020, 168.

59 Ciglencečki 2011, 270 (with citations of other authors). Cf. Jovanović, Lalović 1993, 69–70 and Guest 2008, 304.

60 Kos 2012, 282–284; for *Castra* in particular, Kos 2017, 303; cf. Bratož 2014, 195.

61 Ciglencečki 1999, 306.

BIBLIOGRAPHY

- Arslan 2015 – E. A. Arslan, Alla fine dell'Imperio romano d'Occidente, Il ripostiglio di San Mamiliano a Sovana (GR), 498 solidi da Onorio a Romolo Augusto, in Arslan, E. A., Turchetti, M. A. (eds.), *Il ripostiglio di San Mamiliano a Sovana (Sorano - GR), 498 solidi da Onorio a Romolo Augusto*, Studi e Ricerche di Archeologia e Storia dell'Arte 39, 2015, 61–122.
- Baldus, Khanoussi 2014 – H. R. Baldus, M. Khanoussi, *Der Spätantike Münzschatz von Simitthus/Chimtu*, Simitthus 4, Reichert Verlag Wiesbaden, 2014.
- Bland 2009 – R. Bland, Roman gold coins in Britain, ICOMON e-Proceedings (Utrecht, 2008) 3, 2009, 31–43, <http://icomon.mini.icom.museum/old-webpages/publications/e-proceedings-since-2006/issue-3-utrecht-2008/> (25 January 2021).
- Bland, Lorient 2010 – R. Bland, X. Lorient, *Roman and Early Byzantine Gold Coins found in Britain and Ireland with an appendix of new finds from Gaul*, Special Publications 46, Royal Numismatic Society, 2010.
- Bost, Campo, Gurt 1983 – J.-P. Bost, M. Campo, J. M. Gurt, Hallazgos de aurei y solidi en la Península Ibérica: introducción a su circulación en época imperial, *Numisma* 33, núms. 180–185, 1983, 137–176.
- Bost, Campo, Gurt 1992 – J.-P. Bost, M. Campo, J. M. Gurt, Trouvailles d'aurei et de solidi dans la Péninsule Ibérique, in Brenot, C., Lorient, X. (eds.), *Trouvailles de monnaies d'or dans l'Occident Romain*, Cahiers Ernest-Babelon 4, Centre de Recherches Archéologiques du C.N.R.S., 1992, 33–89.
- Bratož 2014 – R. Bratož, *Med Italijo in Ilirikom. Slovenski prostor in njegovo sosedstvo v pozni antiki*, Zbirka Zgodovinskega časopisa 46, Znanstvena založba Filozofske fakultete, Zveza zgodovinskih društev Slovenije, Slovenska akademija znanosti in umetnosti, 2014.
- Burgess 2007 – R. W. Burgess, The solidi of Anthemius, in *Towards a Revision and New Edition of RIC 10: The Western Gold, 425–476*, 2007, <http://aix1.uot-tawa.ca/~rburgess/> (20 April 2021).
- Callu, Lorient 1990 – J.-P. Callu, X. Lorient, *L'or monnayé II. La dispersion des aurei en Gaule romaine sous l'empire*, Cahiers Ernest-Babelon 3, Centre de Recherches Archéologiques du C.N.R.S., 1990.
- Ciglencčki 1992 – S. Ciglencčki, *Pólis Norikón, Poznoantične višinske utrdbe med Celjem in Brežicami*, Zavod Spominski park Trebče, 1992.
- Ciglencčki 1999 – S. Ciglencčki, Results and problems in the Archaeology of the late Antiquity in Slovenia, *Arheološki vestnik* 50, 1999, 287–309.
- Ciglencčki 2011 – S. Ciglencčki, Vloga in pomen naselbine Tonovcov grad, in Ciglencčki, S., Modrijan, Z., Milavec, T. (eds.), *Poznoantična utrjena naselbina Tonovcov grad pri Kobaridu [Elektronski vir]. Naselbinski ostanki in interpretacija = Late antique fortified settlement Tonovcov grad near Kobarid. Settlement remains and interpretation*, Opera Instituti Archaeologici Sloveniae 23, Inštitut za arheologijo ZRC SAZU, Založba ZRC, 2011, 257–287.
- Ciołek 2007 – R. Ciołek, *Die Fundmünzen der römischen Zeit in Polen*, Collection Moneta 67, 2007.
- Ciołek 2009 – R. Ciołek, Der Zufluss von Solidi in die südlichen Ostseegebiete, in Woloszyn, M. (ed.), *Byzantine Coins in Central Europe between the 5th and 10th Century, Proceedings from the conference organised by Polish Academy of arts and Sciences and Institute of Archaeology University of Rzeszow under the patronage of Union Académique Internationale (Programme No. 57 Moravia Magna) Krakow, 23–26 IV 2007*, Polska akademia umiejętności, 2009, 217–229.
- Facchinetti 2019 – G. Facchinetti, Una emissione di solidi della zecca di Mediolanum a nome di Anicio Olibrio, *Quaderni Ticinesi di Numismatica e Antichità Classica* 48, 2019, 205–228.
- Fagerlie 1967 – J. M. Fagerlie, *Late Roman and Byzantine Solidi Found in Sweden and Denmark*, American Numismatic Society, 1967.
- Fischer 2014 – S. Fisher, The solidus hoard of Casa delle Vestali in context, *Opuscula, Annual of the Swedish Institutes at Athens and Rome* 7, 2014, 107–127.
- FMRHr 18 – A. Miškec, *Die Fundmünzen der römischen Zeit in Kroatien 18. Istrien*, Kommission für Geschichte des Altertums der Akademie der Wissenschaften und der Literatur Mainz, 2002.
- FMRSI 1–2 – P. Kos, *Die Fundmünzen der römischen Zeit in Slowenien 1–2*, Kommission für Geschichte des Altertums der Akademie der Wissenschaften und der Literatur Mainz, Slovenska akademija znanosti in umetnosti Ljubljana, 1988.
- FMRSI 3 – P. Kos, A. Šemrov, *Die Fundmünzen der römischen Zeit in Slowenien 3*, Kommission für Geschichte des Altertums der Akademie der Wissenschaften und der Literatur Mainz, Narodni muzej Slovenije, 1995.
- FMRSI 4 – A. Šemrov, *Die Fundmünzen der römischen Zeit in Slowenien 4*, Kommission für Geschichte des Altertums der Akademie der Wissenschaften und der Literatur Mainz, Narodni muzej Slovenije, 1998.
- FMRSI 5 – A. Šemrov, *Die Fundmünzen der römischen Zeit in Slowenien 5*, Kommission für Geschichte des Altertums der Akademie der Wissenschaften und der Literatur Mainz, Narodni muzej Slovenije, 2004.
- FMRSI 6 – A. Šemrov, *Die Fundmünzen der römischen Zeit in Slowenien 6*, Moneta, Narodni muzej Slovenije, 2010.
- FMRÖ 2/3 – F. Schmidt-Dick, *Die Fundmünzen der römischen Zeit in Österreich 2/3, Kärnten*, Österreichische Akademie der Wissenschaften, 1989.
- Gabrijan 2019 – P. Gabrijan, *Arheologi v Črnomlju izkopali poznoantični zlatnik*, MMC RTV SLO, STA 21. 5. 2019, <https://www.rtvlo.si/kultura/dediscina/arheologi-v-crnomlju-izkopali-poznoantichni-zlatnik/488713> (17 March 2020).
- Gaspari 2020 – A. Gaspari, Ulaka, in Horvat, J., Lazar, I., Gaspari, A. (eds.), *Manjša rimska naselja na slovenskem prostoru = Minor Roman settlements in Slovenia, Opera Instituti Archaeologici Sloveniae 40*, Založba ZRC, 2020, 141–171.
- Grierson 1982 – P. Grierson, *Byzantine Coins*, Methuen & Co, University of California Press, 1982.
- Grierson, Mays 1992 – P. Grierson, M. Mays, *Catalogue of Late Roman Coins in the Dumbarton Oaks Collection and the Whittemore Collection-From Arcadius and Honorius to the Accession of Anastasius*, Dumbarton Oaks Research Library and Collection, 1992.
- Gorini 1992 – G. Gorini, Trouvailles de monnaies d'or de la X Regio : Venetia – Histria (Ier s. av J.-C. – Vlle s. ap J.-C.), in Brenot, C., Lorient, X. (eds.), *Trouvailles de monnaies d'or dans l'Occident Romain*, Cahiers Ernest-Babelon 4, Centre de Recherches Archéologiques du C.N.R.S., 1992, 155–214.
- Guest 2008 – P. Guest, Roman Gold and Hun Kings: the use and hoarding of solidi in the late fourth and fifth centuries, in A. Bursche, R. Ciołek, R. Wolters (eds.), *Roman Coins Outside the Empire: Ways and Phases, Contexts and Functions*, Moneta, 2008, 295–307.
- Hahn 1987 – W. Hahn, Die Fundmünzen des 5.–9. Jahrhunderts in Österreich und den unmittelbar angrenzenden Gebieten, in Wolfram, H. (ed.), *Die Geburt Mitteleuropas. Geschichte Österreichs vor seiner Entstehung: 378–907*, Siedler, 1987, 453–464.
- Horsnæs 2009 – H. W. Horsnæs, Late Roman and early Byzantine coins found in Denmark, in Woloszyn, M. (ed.), *Byzantine Coins in Central Europe between the 5th and 10th Century, Proceedings from the conference organised by Polish Academy of arts and Sciences and Institute of Archaeology University of Rzeszow under the patronage of Union Académique Internationale (Programme No. 57 Moravia Magna) Krakow, 23–26 IV 2007*, Polska akademia umiejętności, 2009, 231–270.
- Jovanović, Lalović 1993 – A. Jovanović, A. Lalović, Ostava solidi iz Gamzigrada (Romuliana), *Numizmatičar* 16, 1993, 61–78.
- Kent 1956 – J. P. C. Kent, Gold Coinage in the Late Roman Empire, in Carson, R. A. G., Sutherland C. H. V. (eds.), *Essays in Roman Coinage. Presented to Harold Mattingly*, Oxford University Press, 1956, 190–204.
- Kent 1994 – J. P. C. Kent, *The Roman imperial coinage 10, The Divided Empire and the fall of Western parts: AD 395–491*, Spink and Son, 1994.
- Kos 2000 – P. Kos, The numismatic evidence for the period from the 5th to the 10th centuries in the area of modern Slovenia, in Bratož, R. (ed.), *Slovenija in sosednje dežele med antiko in karolinško dobo. Začetki slovenske etnogeneze = Slowenien und die Nachbarländer zwischen Antike und karolingischer Epoche. Anfänge der slowenischen Ethnogenese*, Situla 39, Narodni muzej Slovenije, Slovenska akademija znanosti in umetnosti, 2000, 107–118.

- Kos 2012 – P. Kos, The construction and abandonment of the Claustra Alpium Iuliarum defence system in light of the numismatic material = Gradnja in opustitev obrambnega sistema Claustra Alpium Iuliarum v luči numizmatičnega gradiva, *Arheološki vestnik* 63, 2012, 265–300.
- Kos 2017 – P. Kos, Ajdovščina (Castrum) – novčne najdbe iz naselbinskih plasti zunaj obzidja. Pomen novcev za interpretacijo najdišča = Ajdovščina (Castrum) – coin finds from the extra muros settlement. The significance of the coins for the interpretation of the site, *Arheološki vestnik* 68, 2017, 295–323.
- Kos 2019 – P. Kos, *Das spätrömische Kastell Vemania bei Isny*. 3, *Auswertung der Fundmünzen und Studien zum Münzumschlag in Raetien im 3. und 4. Jahrhundert*, Münchner Beiträge zur Vor- und Frühgeschichte 65, C. H. Beck, 2019.
- Lacam 1983 – G. Lacam, Le fin de l'empire romain et le monnayage or en Italie, 455–493, 2 vols., Hess, 1983.
- Lafaurie, Morisson 1987 – J. Lafaurie, C. Morisson, La pénétration des monnaies byzantines en Gaule mérovingienne et visigotique du VI^e au VIII^e siècle, *Revue numismatique* 29, 1987, 38–98.
- Lallemand 1965 – J. Lallemand, Vedrin: Sous d'or de Magnus Maximus à Anastase, *Études numismatiques* 3, 1965, 109–144.
- López Sánchez 2015 – F. López Sánchez, El tesoro de 498 Solidi de San Mamiliano (Sovana, Toscana) y las Scholae Palatinae italianas del siglo V, in Arslan, E. A., Turchetti, M. A. (eds.), *Il ripostiglio di San Mamiliano a Sovana (Sorano - GR). 498 solidi da Onorio a Romolo Augusto*, Studi e Ricerche di Archeologia e Storia dell'Arte 19, 2015, 145–162.
- Loriot 1988 – X. Loriot, Trouvailles isolées de monnaies d'or romaines dans la province de Retie (I^{er}-V^e siècles), in Kos, P., Demo, Ž. (eds.), *Studia numismatica Labacensia: Alexandro Jeločnik oblata*, Situla 26, Narodni muzej, 1988, 53–98.
- Mason 1998 – P. Mason, Late Roman Črnomelj and Bela krajina, *Arheološki vestnik* 49, 1998, 285–313.
- Metcalf 1988 – D. M. Metcalf, The minting of gold coinage at Thessalonica in the fifth and sixth centuries and the gold currency of Illyricum and Dalmatia, in Hahn, W., Metcalf, W. E. (eds.), *Studies in early Byzantine Gold coinage*, Numismatic studies 17, The American Numismatic Society, 1988, 65–109.
- Morisson et al. 1985 – C. Morisson, C. Brenot, J.-P. Callu, J.-N. Barrandon, J. Poirier, R. Halleux, *L'or monnayé I, Purification et altération de Rome à Byzance*, Cahiers Ernest-Babelon 2, Centre de Recherches Archéologiques du C.N.R.S., 1985.
- Morisson, Ivanišević 2006 – C. Morisson, V. Ivanišević, Les émissions des VI^e-VII^e siècles et leur circulation dans les Balkans, in Morisson, C., Popović, V., Ivanišević, V. (eds.), *Les Trésors monétaires byzantins des Balkans et d'Asie Mineure (491-713)*, Réalités Byzantines 13, Lethielleux, 2006, 41–73.
- Panvini Rosati 1985 – F. Panvini Rosati, Osservazioni sulla circolazione in Italia nel V secolo d.C. di monete d'oro romane, *Bollettino di Numismatica* 4, gennaio-giugno 1985, 7–14.
- Prohászka 2009a – P. Prohászka, Der Solidusfund von Gernetto (1818) unter den numismatischen Denkmälern der ostgotischen Herrschaft in Italien, *Acta Archaeologica Carpathica* 44, 2009, 205–217.
- Prohászka 2009b – P. Prohászka, Ost- und weströmische Goldmünzen des 5. Jahrhunderts im Karpatenbecken, in Woloszyn, M. (ed.), *Byzantine Coins in Central Europe between the 5th and 10th Century*, Proceedings from the conference organised by Polish Academy of arts and Sciences and Institute of Archaeology University of Rzeszow under the patronage of Union Académique International (Programme No. 57 Moravia Magna) Krakow, 23–26 IV 2007, Polska akademia umiejętności, 2009, 83–115.
- RIC 10 – J. P. C. Kent, *The Roman imperial coinage 10, The Divided Empire and the fall of Western parts: AD 395–491*, Spink and Son, 1994.
- RMR Ve 6/2 – M. Asolati, C. Crisafulli, *Ritrovamenti monetali di età romana nel Veneto. Provincia di Venezia 2, Venezia, Altino 2*, Editoriale Programma, 1994.
- Satta 1955 – G. P. Satta, Rinvenimenti in Sardegna di monete dell'Impero Romano e dell'Impero Romano d'Occidente. II – Rinvenimenti sporadici e Indice generale per Imperatori, *Annali, Istituto Italiano di Numismatica* 2, 1955, 101–146.
- Stanković 2019 – D. Stanković, Izkopana okostja prednikov bodo pokopali v kostnici, *Dnevnik* 5. 8. 2019, <https://www.dnevnik.si/1042894288>, (17 March 2020).
- Talvio 2009 – T. Talvio, Solidus finds in the Northern lands, in Woloszyn, M. (ed.), *Byzantine Coins in Central Europe between the 5th and 10th Century*, Proceedings from the conference organised by Polish Academy of arts and Sciences and Institute of Archaeology University of Rzeszow under the patronage of Union Académique International (Programme No. 57 Moravia Magna) Krakow, 23–26 IV 2007, Polska akademia umiejętności, 2009, 271–275.
- Ungaro 1985 – L. Ungaro, Il ripostiglio della Casa delle Vestali, Roma, 1899, *Bollettino di Numismatica* 4, gennaio-giugno 1985, 47–160.
- Vojvoda, Redžić 2020 – M. Vojvoda, S. Redžić, A hoard of solidi from a hypogeum at the Viminiacum necropolis – Pećine (Serbia), *Arheološki vestnik* 71, 2020, 217–231.