

THE ROMAN LAW AGAINST COUNTERFEITING BETWEEN THEORY AND PRACTICE: THE CASE OF ROMAN *DACIA*

During the archaeological excavations from 1998 at the site of Partos from Alba Iulia, a coin of particular interest was found¹.

On the obverse is depicted the radiate, draped and cuirassed bust of the emperor Gordian III to right. The obverse legend is: **IMP [caes] M ANT GORDIANVS AVG**. On the reverse is depicted Aequitas standing facing, head turned left, holding scales and cornucopiae. The legend is partially damaged but can be restored as: **AE[qvit]A[s/ ti] [p]V[b]LIC[a/ae]** (see Plate, no. 1).

If the obverse of the coin is a regular one of the third issue of the mint of Rome, the reverse represents a new type. Until now the image of this reverse was not been found together with this legend on coins of any metal or medallions. The representation of Aequitas² is the ordinary type for the coins in all metals minted during the reign of Gordian III³ but also for those issued before and after this emperor⁴. This image is always joined by one of the following legends: *AEQVIT AVG TR P COS II*, *AEQVITAS AVG TR P COS II*, *AEQVITAS P P*, *AEQVITAS II*, *AEQVITAS AVG*, *AEQVITAS AVGG*, *AEQVITATI AVG(G)*⁵. At the same time the reverse legend of this coin (*AEQVITAS PVBLICA*) is characteristic mainly for the coins of the empresses from the reigns of Elagabalus and Severus Alexander or for the later emperors Philip I, Gallienus⁶ for the prices Caracalla and Geta during the reign of Septimius Severus (*AEQVITATI PVBLICAE*)⁷. No coins or medallion with this legend have been found until now for Gordian III. Indeed, in the case of these two legends the image is always the same on both coins and medallions: the three Monetae standing left, each holding scales and cornucopia, with heaps of metal or coins at their feet⁸.

Another peculiar feature of this coin is its style of manufacture. The images on both sides are crudely depicted. The shape of letters is irregular as well as their arrangement in the coin's field, especially on the reverse.

¹ Coin inv. no. 177/ 1998. We are grateful to Mr. Cristian Roman and Mr. Karoly Török from the National History Museum of Transylvania Cluj-Napoca for their help in the digital processing of the photo of this coin as well as for other illustrative material included in this article. Also we would like to thank to Alan Dearn (University of Oxford) with whom we had very fruitful discussions on this subject and who kindly helped us with the linguistic corrections of this paper.

² It should be noted here that since Nerva substituted on his coins the spear (*pertica*) of Aequitas with cornucopia, Aequitas had the same attributions as *Moneta*. The only way to identify the personification in each case is the legend, see F. Gneccchi, *The Coin Types of Imperial Rome*, London 1908, 37.

³ RIC IV.2, 19 ff.

⁴ See the volumes of RIC from the reign of Nerva onwards.

⁵ Ibidem.

⁶ For the legend *Aequitas publica* on the coins of the empresses from the reigns of Elagabal and Severus Alexander see RIC IV.2, p. 45, no. 209, p. 58, no. 378 (Julia Paula); p. 59, no. 388 (Aquililla Severa); p. 61, no. 409 (Julia Maesa); p. 97, no. 328 (Julia Mamaea). For the emperor himself see RIC IV.2, p. 56, no. 344 (Elagabal) and RIC V.1, p. 130, no. 1.

⁷ RIC IV.1, p. 229, no. 114 (Caracalla); p. 319, no. 39 (Geta).

⁸ For coins see RIC IV.1, 2, 3, the type of "*Aequitas publica*". For medallions see W. Fröhner, *Les médailles de l'empire Romain depuis le regne d'Auguste jusqu'à Priscus Attale*, Paris 1878, 159 (Julia Domna); 162 (Geta); 166 (Julia Soaemias); 174 (Julia Mamaea); F. Gneccchi, *I medaglioni Romani*. Vol. I. Oro ed argento, Milano 1912, 6 and tav. 2, no. 6 (Gallienus - gold); 45 ff; tav. 22, no. 3, 5, 7, 8; tav. 23, no. 6, 7 (Julia Domna, Caracalla, Geta, Julia Paula, Julia Soaemias, Julia Mamaea - silver); RIC V.1, 109f, for the silver medallions of Salonina.

Moreover, after restoration, this coin proved to be a plated one, with a very thin foil of poor silver content over a copper core⁹.

On the basis of these arguments it can be considered that this piece represents a crude plated copy of an *antoninianus* if not even a spoilt coin (see Plate, no. 1).

Owing to its status as an ancient imitation, the date of the obverse upon which it is modelled (post AD 240) may only be ragded as a *terminus post quem* for its production. The archaeological context in which this coin was found does not offer for the moment more information about the date when this coin was dropped/ lost. Another coin, which was found in the same archaeological context, is a plated *denarius* depicting Septimius Severus on the obverse¹⁰.

The study of this coin provides an opportunity to extend the research on the frequency of Roman coin copies in the province of *Dacia*. Were these copies regarded as counterfeit coins according to the Roman legislation?

The first law concerning the counterfeiting of coinage of which we are aware is the *edictum cum poena et iudicio* of Marius Gratidianus of c. 84 BC¹¹. According to Grierson this law did not survive "the return of Sulla and the praetor's execution"¹². The basis of the Roman law of counterfeiting is considered by the same author as a section in Sulla's *lex Cornelia de falsis* (c. 81 BC)¹³, also known as *Lex Cornelia testamentaria nummaria*¹⁴. The original text is lost, although some of its clauses survived in Ulpian's summary quoted in the *Digestae*: "*Lege Cornelia cavetur, ut, qui in aurum vitii quid addiderit, qui argenteos nummos adulterinos flaverit, falsi crimine teneri. Eadem poena adficitur etiam is qui, cum prohibere tale quid posset, non prohibuit.*"¹⁵. It can be seen that counterfeiting and conniving at counterfeiting of the silver coinage was considered a crime. At the same time, the buying and selling of coins made of tin and lead, which were mistaken for silver, was also prohibited. There were no specifications about the gold coins, as apart from emergency issues no other gold was issued by the mint of Rome during the Republic. Outside Rome, fairly large issues were struck by military commanders, owing to their *imperium*¹⁶. In the context of this law gold is addressed in the context of controlling the quality of metal used by the goldsmiths¹⁷.

The punishments for counterfeiting the silver coinage are described in the *Institutiones*¹⁸ and consist of death for slaves and banishment for free men: "...*Legis poena in servos ultimum supplicium est, quod et in lege de sicariis et veneficis servatur, liberos vero deportatio*"¹⁹.

It can be observed that according to this law counterfeiting was considered a form of fraud and not an offence against the state. This situation was profoundly changed under the Principate.

⁹ We would like to express our gratitude to Mrs. D. Boroş from the Restauration and Conservation Laboratory of the National History Museum of Transylvania Cluj-Napoca who kindly agreed to do the restoration work for this coin.

¹⁰ C. Gâzduc, The coin finds from the archaeological excavations in Partos 1998-2001 (forthcoming).

¹¹ T. Mommsen, *Histoire de la monnaie romaine* II, Paris 1870, 82-84.

¹² P. Grierson, *The Roman Law of Counterfeiting*, in *Essays in Roman Coinage* presented to Harold Mattingly, Oxford 1956, 242, n. 1.

¹³ Ibidem, 242.

¹⁴ Cicero, *In Verrem*, II, I, 42; P. Grierson (n. 12), 242, n. 2.

¹⁵ *Digeste* 48.10. 9.

¹⁶ P. Grierson (n. 12), 242, n. 4.

¹⁷ Ibidem.

¹⁸ Due to the late date of the *Institutiones*, Grierson has expressed doubts about the accuracy of this source concerning the punishments in the original version of the *lex Cornelia de falsis*, see Ibidem, 242, n. 3.

¹⁹ *Instit.* 4, 18, 7-8.

The sources which give information about the content of the *lex Cornelia* under the principate are the replies of the emperors to some provincial governors through manuals of law such as Gaius' *Libri ad edictum provinciale*, Ulpian's *Libri de officio proconsulis* and Paul's *Sententiae*. The most detailed source on this aspect is given in Paul's *Sententiae*. Dating to the 3rd century AD, the text reflects the practice during the reigns of the Antonines²⁰: "*Lege Cornelia [...] qui nummos aureos argenteos adultaverit, lavaverit, conflaverit, raserit, corruerit, vitiaverit, vultuque principum signatam monetam, praeter adulterinam, reprobaverit: honestiores quidem in insulam deportantur, humiliores autem aut in metallum dantur aut in crucem tolluntur; servi autem postve manumissi capite puniuntur.*"²¹.

The law was extended to cover the gold coinage as well as the silver. The definitions of what constitutes abusing the gold and silver coinage are given in great detail: falsifying, washing, melting, clipping, injuring. The punishments were connected to the social status of those found guilty of counterfeiting of the silver coinage: exile for *honestiores*, work in mines or crucifixion for *humiliores* and capital punishment for slaves. For those guilty of counterfeiting the gold coinage, the measures were even more severe: free men were to be condemned to the beasts in the amphitheaters and slaves were to be tortured to death: "*Quicumque nummos aureos partim raserint, partim tinxerint vel finxerint: si quidem liberi sunt, ad bestias dari, si servi, summo supplicio adfici debent.*"²².

The lack of any legislation against the counterfeiting of bronze coinage has been explained by Grierson as being due to the fact that the issue of bronze by the state "was not formally imperial at all, but senatorial"²³. As the same author has demonstrated, the laws of Tacitus (AD 275-276) on the adulteration of metals and the Lex Iulia on peculation refer to metalworkers in general and the public treasury and not counterfeiters and coinage²⁴.

The argument that gold and silver was seen as coinage became "imperial money" may be reflected in the clause of Paul's *Sententiae*, in which the refusal to accept gold or silver coins with the imperial portrait was also considered an offence. This is confirmed also by a passage from Arrian's *Comentarii de Epicteti Disputationibus*, in which that the bankers and the greengrocers are not legally allowed to refuse *Caesaris moneta*²⁵. In fact the gold and silver coinages were treated as sacrosanct items depicting the emperor²⁶. If we give credence to Suetonius, during the reign of Tiberius it was considered treason to "*nummo vel annulo effigiem [Augusti] impressam latrinae vel lupanari intulisse*"²⁷. This statement was still active during the reign of Caracalla when a young knight carried a coin bearing the imperial portrait into a brothel. For this he was at the time imprisoned and awaited execution²⁸.

The Roman laws on counterfeiting coin also underwent further modifications from the reign of Constantine I onwards, but they are beyond the chronological frame of this study.

At the first sight, the Roman legislation seems to be very strictly concerned with the counterfeiting of gold and silver coinage.

How effective was this law in Roman *Dacia*?

²⁰ P. Grierson (n. 12), 243.

²¹ Paul, *Sententiae* 5. 25. 1.

²² *Digeste* 48. 10. 8.

²³ P. Grierson (n. 12), 245.

²⁴ *Ibidem*, 244, n. 4.

²⁵ Arrianus, *Comentarii de Epicteti Disputationibus* III, 3. 3, *apud ibidem*, 243, n. 3.

²⁶ P. Grierson (n. 12), 245.

²⁷ Suetonius, *Tiberius*, 58; *ibidem*, 246.

²⁸ Dio Cassius, 78, 16, 5. We would like to thank Dr. Oliver Hekster (University of Oxford) who has indicated this reference.

The recent analyses of the numismatic material from different sites of this province attest very often to the presence of ancient imitations and copies: hybrids, "barbarous", plated and cast coins²⁹.

In the case of the gold, no mistreated coins have been recorded for *Dacia*. This is a general pattern for the Roman Empire that beside the heavy punishment by law, the gold coinage was not regularly used in the daily transactions as the silver coinage was³⁰.

For this study we take into account only those maltreated silver coins, which bear the portraits of emperors starting with Trajan. There is no certainty that similar coins depicting earlier emperors were all struck after the transformation of *Dacia* into a Roman province in AD 106.

The most common ancient imitations are plated denominations. Concerning the coin finds from the Roman towns of *Dacia* at *Ulpia Traiana Sarmizegetusa* the plated *denarii* represent 17.3% of the aggregate number of *denarii* found at this site and 7.1% of the *antoninianii* finds are also plated (see comparative tables).

At *Apulum*, 6.8% of the *denarii* finds are plated. It should be noted that the incidence of plated coins may be higher than is often recorded, due to their misidentification as genuine coins. The excavations from the site of Partos demonstrate that 45.4% of the silver denominations are plated *denarii*³¹ (see comparative tables).

At *Potaissa*, 4.8% of *denarii* and 2.7% of *antoninianii* are plated³² (see comparative tables).

At *Drobeta*, 29.1% of *denarii* are plated. It has to be noted that all the plated *denarii* were found on the territory of the auxiliary forts where they represent 63.6% of this denomination finds (see comparative tables).

At *Napoca*, *Tibiscum* and *Dierna*, the plated *denarii* represent 20%, 21.6%, respectively 11.1% of the total number of finds from these sites. Owing to the state of archaeological research and the publication of the numismatic material, the figures for these urban settlements should be seen as provisional (see comparative tables).

Plated coins are also found in the best researched and published auxiliary forts from Roman *Dacia*: at Buciumi: 22.6% of the *denarii* are plated; Romita, 11.5% of *denarii* and 1 out of 3 *antoninianii* are plated; Ilișua, 56.4% of *denarii* and 3 out of 9 *antoninianii* are plated; Gherla, 9.2% of *denarii* and 1 out of 11 *antoninianii* are plated; Mehadia, 12.1% of *denarii* are plated (see comparative tables).

The number of rural settlements from Roman *Dacia* with well-published material is even smaller than in the case of the auxiliary forts. From this point of view only two sites were available for this study. At Micăsasa and Orlea, 28.4% and 37.7% of *denarii* are plated. At Orlea, also 2 out of 21 *antoninianii* are plated (see comparative tables).

At the first sight, it seems that the imitative *denarii* have a very high incidence in the countryside, but it must be emphasized that these two sites should be regarded as unusual rural sites. Micăsasa was a well-developed pottery center while Orlea was an

²⁹ C. Găzdac, Monetary circulation in Dacia in the period from Trajan to Constantine I (AD 106-337), DPhil thesis, University of Oxford (2001), manuscript.

³⁰ Information Dr. Cathy King.

³¹ C. Găzdac, The coin finds from the archaeological excavations in Partos 1998-2001 (forthcoming). The coins from this excavation are not taken into account for this study.

³² At *Potaissa* many of the coins found on the territory of the Roman town and legionary fort were part of the collections of Tégla and Kemény, thus it can be supposed that the owners of these collections have preferred to collect only the 'fine' silver coins and tried to avoid plated coins, for the private collections from *Potaissa* see A. Hopârtean, I. Winkler, Moneda antică la Potaissa, Cluj 1973, 27 ff (Kemény), 43 ff (Téglás).

important place near the Danube with a bridge³³ over the River, and was also in the close neighbourhood of the quasi-urban settlement of *Sucidava*. Therefore both sites could be considered as ones with a high intensity of monetary circulation. Until more information from other rural sites of *Dacia* becomes available, it is difficult to say whether the incidence of imitative coinage from these two sites represents a pattern of the rural sites from this province as a whole or specific characteristic owing to their particular position.

At *Porolissum*, 29.5% of *denarii* and 20% of *antoniniani* are plated. As in the case of *Apulum*, at *Porolissum* some parts of the site provide a much larger quantity than the average of the site as a whole (see comparative tables).

In the case of the custom's house (*statio portorii*) 63.04% of the *denarii* finds are ancient copies, mainly plated (23 plated and 6 billon *denarii*)³⁴. This very high percentage of copies has been hypothetically explained by some scholars as a result of using such coins to pay the custom taxes³⁵. Due to the large quantity of the coins found at the site, as well as their quality, it has been suggested that these coins could be passed as genuine ones, at least for a while³⁶. However, it may also be that the incidence of these coins reflects the discarding of coins without value. It is known that the money from custom taxes was considered in the Roman Empire as one of the most important income sources for the treasury³⁷. Some authors have suggested that the role of this income was at least equal if not superior to the *tributa* and *stipendia* provided by provinces and most important amongst the *vectigalia*³⁸. In this case, does it not seem likely that the quantity of copies is not a result of a deliberate withdrawn of money from circulation by the custom office staff to avoid faked coins entering into the *aerarium*? Unfortunately, the only written information about a staff in charge to check the quality and the quantity of coins transported by traders come from AD 356: "*Portos enim litoraue divers, quo facilius esse navibus consuevit accessu, et itineris tramites statuimus custodiri per idoneos officials ac praepositos a praesidiis et nonnullis praeditis dignitate, ut cognita veritate provinciarum rectores obnoxios legibus puniant.*"³⁹.

At the same time another explanation for such a strong presence of imitative coins in the *statio portorii* from *Porolissum* could be the military presence there. The analysis of the numismatic evidence from the auxiliary fort from *Porolissum* indicates that from the total number of the *denarii* found at this site, 53.08% are copies (plated, billon, barbarous pieces)⁴⁰. The close values of the two parts of the site of *Porolissum*, the custom and the auxiliary fort, indicate that this large number of copies may have a common explanation: daily losses or discarded coins from the military personnel⁴¹ on duty at the *statio portorii*⁴².

³³ D. Tudor, *Podurile romane de la Dunărea de Jos*, București 1971, 17 ff; it should be mentioned here that this bridge probably built for the expedition of Cornelius Fuscus into *Dacia* (AD 87) (28), may have also been used by the Romans during the period of the province of *Dacia*, especially since apart from the bridges from *Dierna* and *Drobeta* there were no other links between these two provinces. Moreover, the bridge from Orlea could have been the best connection between Moesia Inferior and *limes alutanus*.

³⁴ N. Gudea, *Porolissum. Un complex daco-roman la marginea de nord a Imperiului Roman. II. Vama romană. Monografie arheologică. Contribuții la cunoașterea sistemului vamal din provinciile dacice*, Zalău 1997, 69.

³⁵ Ibidem.

³⁶ Ibidem; E. Chirilă, *Cîteva date despre circulația monetară la Porolissum*, *ActaMP* 14-15, 1990-1991, 169 ff.

³⁷ RE s.v. *portorium*; DA, s.v. *portorium*; R. Cagnat, *Le portorium chez les Romains*, Paris 1880, 162.

³⁸ S. de Laet, *Portorium. Étude sur l'organisation douanière chez les Romains surtout à l'époque du haut-empire*, Brugge 1949, 448.

³⁹ *Cod.Theod.* 9, 23, 1.

⁴⁰ N. Gudea (n. 34), 70.

⁴¹ On the basis of the archaeological evidence, it has been suggested that a *vexillatio* of *cohors V Lingonum* stationed in the *statio portorii*, N. Gudea (n. 34), 76.

⁴² For similar opinion see ibidem, 68; E. Chirilă (n. 36), 172.

Until further evidence becomes available none of these criteria can be exclusively considered or totally ignored as a possible explanation for the strong presence of copies at the custom building from *Porolissum*. Moreover, it is also plausible that the situation at this place to result from a combination of all these factors.

At this stage of research, the general situation of isolated coin finds from Roman *Dacia* indicates that 23.6% of the *denarii* bearing the portraits of the emperors from Trajan to Maximinus I Thrax are plated. In the case of the *antoninianus*, 6.3% of this denomination depicting emperors of the period AD 238-253 are plated.

Is this percentage of the plated silver coin finds from *Dacia* a characteristic of this province or is a general pattern of the Roman Empire?

An analysis on the monetary circulation in the provinces adjacent to *Dacia* revealed the following results⁴³. The plated *denarii* depicting the emperors of the period AD 98-238 represent 11.8% of the finds in *Pannonia Superior* and 7.3% of those in *Pannonia Inferior* for this denomination. Due to the state of research and publication, plated *antoniniani* revealed significant results for this study only in the province of *Pannonia Superior*⁴⁴. The plated *antoniniani* (illustrating portraits of the emperors from the period AD 238-253) represents 13.2 % of the aggregate number of this denomination.

The hybrids and "barbarous" coins, which may be described generally as were found in much smaller quantity at different sites of Roman *Dacia*. Apart from the coin from *Apulum* discussed above, other ancient imitations of silver coins were identified in a large number at *Porolissum*⁴⁵. The real number of these imitations is much higher, but in many cases the analyses were not carried out with accuracy.

The argument for a larger number of ancient imitations can be supposed by the hoard recently found at *Apulum*, which contained 232 *denarii* bearing the portraits of the emperors from Vespasian to Elagabal. All pieces are ancient imitations⁴⁶. Such hoards have been occasionally found in the Empire at places such as Gurnard⁴⁷, St. Swithins Lane⁴⁸ (Britain) and Athens⁴⁹. The number of hoards containing only imitations is much larger for the period after 260 (radiates) but no such hoard has been found in *Dacia* to date⁵⁰.

In the case of the bronze coinage, the Roman law seems not to regard the imitative pieces as counterfeits until the fourth century⁵¹. For the period of the Roman administration in *Dacia* (2nd- 3rd centuries) the so-called *Limesfalsa* are well known. These coins are light-weight *aes* casts with a small thin flan, often composed of low-quality metal⁵². Some authors consider these bronze issues as a local currency⁵³. This coinage usually comprises issues in the name of the emperors from Augustus to

⁴³ C. Găzdac (n. 29), chap. 4.

⁴⁴ In the absence of accurate analyses of this denomination no plated *antoninianus* was noted in the publication of numismatic material from different sites of *Pannonia Inferior*. For the provinces of *Moesia Superior* and *Inferior* the scarcity of the published material has led to irrelevant results. For the discussion of all these aspects, see C. Găzdac (n. 29).

⁴⁵ Ibidem, the catalogue of isolated finds in *Dacia* - *Porolissum*; N. Gudea, *Porolissum, III, Sanctuarul zeului Iupiter Optimus Maximus Dolichenus*, Zalău 2001 (The Coins by R. Ardevan), the catalogue of coin finds.

⁴⁶ V. Suci, *Quelques considérations sur les trésors monétaires de la Dacie romaine*, in *Army and Urban Development in the Danubian Provinces of the Roman Empire*, Alba Iulia 2000, 328.

⁴⁷ R. Bland, *Cowell, A forger's hoard from Gurnard, Isle of Wight*, in *Coin Hoards from Roman Britain*, vol. 6 (eds. A. Burnett, R. Bland), London 1986, 31 ff.

⁴⁸ L. Lawrence, *On a hoard of plated Roman denarii*, in *NC*, 5th series, 20, 1940, 185 ff; U. Zwickler et alii, *Roman techniques of manufacturing silver-plated coins*, in *Metal Plating and Patination* (eds. S. La Niece, P. Craddock), Oxford 1993, 223 ff.

⁴⁹ M. Caramessini-Oecomminides, *On a hoard of plated Roman coins*, *ANSMUSN* 12, 1966, 71 ff.

⁵⁰ For the bibliography of hoards of radiate imitations, see C. King, *Roman copies*, *SFMA* 10, 1996, 247 ff.

⁵¹ C. King (n. 50), 246.

⁵² G. Boon, *Light-weight and 'Limesfalsa'*, *NC* 1965, 161.

Severus Alexander, but the coin types provide only a *terminus post quem* for the date of casting. Up to the beginning of the reign of Septimius Severus, this coinage has a low find-frequency but then begins to rise steadily until the reign of Severus Alexander, and then became very rare under Gordian III⁵⁴. It should be mentioned that cast coins were common in the 3rd century AD, and many probably were connected with the military camps. Such cast coins, including moulds and spoilt casts, have been found in military sites, namely: *Carnuntum*⁵⁵, *Brigetio* (see Plate, no. 3), *Caerleon*⁵⁶, but also at a civilian site at Pachten (Saarland, Germany) (see Plate, no. 2)⁵⁷, *Saint-Mard*⁵⁸ and *Rumst* (Belgium)⁵⁹. The date of issue of the casts presents a problem, because at some sites they were “clearly moulded at a fairly late date”⁶⁰. Similarly, moulds depicting obverses and reverses of different emperors have been found together (see Plate, no. 2)⁶¹.

At this stage of research we can confirm the presence of such coins also in *Dacia*. Spoilt casts of bronze coins have been found at auxiliary forts in *Dacia*. One of them, a *sestertius*, depicting Antoninus Pius was found in the auxiliary fort of *Ilişua*⁶² (see Plate, no. 4). Another three similar coins bearing the portrait of the emperor Philip I (2) and his wife, Otacilia Severa (1) were found at the auxiliary fort of *Hoghiz*⁶³. To date, the last three spoilt bronze casts are the “latest” found in the area of the Lower Danube.

Bronze cast bronze coins (3) were found in the excavations from the *forum vetus* of *Ulpia Traiana Sarmizegetusa*⁶⁴. The first 2 cast coins are both *asses* bearing the portrait of the emperor Hadrian⁶⁵. The 3rd one is a copy of a Gordian *sestertius*⁶⁶. As in the case of silver copies, the lack of accurate analyses on previous finds does not allow us to have an accurate picture of the number of cast bronze coins found in Roman *Dacia*.

In conclusion, it can be suggested that despite severe legislation against counterfeiting, around a quarter of the isolated silver Roman coin finds in Roman *Dacia* are ancient copies of some kind of mistreated silver content. The majority of these copies have been found in the auxiliary forts, which could indicate that they were used for the payments of the troops, as has already been suggested for the similar finds from

⁵³ K. Kränzle, Versuch einer Rekonstruktion des Münzumlaufes des Prinzipats bis zum Ende der Antoninianprägung in Noricum - eine Auswertung des FMRÖ, SFMA 10, 1996, 268.

⁵⁴ G. Boon (n. 52), 166 has mentioned one *limesfalsum* of Gordian III at Carnuntum, but until now there are no records of such coins for this emperor.

⁵⁵ FMRÖ III/1, Wien, 1976, *passim*.

⁵⁶ Ibidem; J. Casey, R. Reece, *Coins and the archaeologist*, BAR 4, 1974, 107.

⁵⁷ M. Alföldi, *Die Gußformen und gegossenen <Fälschungen>, kaiserzeitlicher Münzen*, Chiron 1, 1971, 354 ff.

⁵⁸ J. Lallemand, *Les moules monétaires de saint-Mard (Virton, Belgique) et les moules de monnaies impériales en Europe: essai de répertoire*, in Un quartier de l'agglomération Gallo-Romaine de Saint-Mard (Virton), Leuven 1994, 141 ff.

⁵⁹ J. Van Heesch, *The Roman coin moulds of Rumst (Belgium)*, AAL 26-27, 1988, 29 ff.

⁶⁰ J. Casey, R. Reece (n. 56), 107; also U. Zwickler et alii, *Roman techniques of manufacturing silver-plated coins*, in Metal Plating and Patination, (eds. S. La Niece, P. Craddock), Oxford 1993, 224.

⁶¹ M. Alföldi (n. 57), Tafel V.

⁶² D. Protase, C. Gaiu, *Castrul roman de la Ilişua*, Bistriţa 1997, 165, no. 163; pl. LXXXVII/ 162.

⁶³ R. Ardevan, C. Ionescu, *Atelierul de contrafaceri monetare de la Hoghiz*, in Al XV-lea Simpozion naţional de numismatică, Bârlad, 1998 (forthcoming). We would like to express our gratitude to Prof. R. Ardevan who allowed us to use this unpublished information.

⁶⁴ The coins are kept in the Museum of Sarmizegetusa, Inv. no: 34282, 34268, 34269. We would like to express our gratitude to the director of the museum, Mr. Gică Băieştean, who kindly allowed us to study these coins.

⁶⁵ The genuine coin for these casts (inv. no. 34282, 34268) was minted at Rome in AD 121-122, cf. RIC II, p. 420, no. 616(a).

⁶⁶ Museum of Sarmizegetusa, inv. no. 34269. The genuine coin is a *sestertius* minted at Rome in AD 238-239, see RIC IV.3, p. 43, no. 258.

*Augusta Raurica*⁶⁷. In this case these coins probably played the role of what was called “monnaie de nécessité” or “Notgeld”, which A. Kunisz has defined as monetary series “produced without official authorization in order to supplement a short-term insufficiency of circulating coin which had inhibited commercial exchanges”⁶⁸ and G. Boon added that these false coins “continue until, eventually good new coin was provided”.⁶⁹

In this light it may be considered that even the legislation offered some measure of support. In the *lex Cornelia de falsis* it is mentioned that: “*Eadem legem exprimitur, ne quis nummos stanneos plumbeos emere vendere dolo malo vellet.*”⁷⁰. According to some authors this could indicate that it was considered an offence to counterfeit, sale or buy such coin with intent to defraud⁷¹. Moreover, according to Dio Cassius, the plated coins were sometimes furnished to the people even by the official mint. Thus, Caracalla was blamed to have manufactured a coinage of a lead core plated with silver and a coinage of a copper core plated with gold⁷².

In this situation, a possible period of shortage of official coin in Roman *Dacia* could have created an occasion when a “legitimate trade in such coins” was temporarily carried out.

If these copies were accepted, for a while, in daily transactions or payments, they were very rarely considered to be worth keeping. Apart from the hoards entirely consisting of copies⁷³, which probably had a special destination, the imitative coins are very rarely found in other hoards from the area of the Lower Danube. In the hoards from Roman *Dacia*, coin copies are seldom found, and only in very small numbers⁷⁴. As King suggested “the false coin in any metal was unpopular and discarded at the earliest opportunity”⁷⁵.

Beside the imitative silver coinage, a bronze cast coinage completes the general picture of Roman coin copies in *Dacia*. Furthermore, the cast bronze produced in *Dacia* seems to have a longer existence than the similar issues found in *Pannonia*. In *Pannonia* the minting of the cast bronze coins, the so-called *Limesfalsa*, ceased the mint from *Viminacium* was opened in AD 239⁷⁶. In Roman *Dacia* this type of coins are still produced even after the opening of the mint of the province in AD 246 as the spoilt cast coins from Hoghiz proved. The explanation could be a way to fill the need for a hypothetical scarce production and supply of bronze coinage during the reign of Philip I and especially after.

The outbreak of copying Roman coinage in *Dacia* may suggest that this province was amongst those who suffered in some period(s) a shortage of official coin, mainly

⁶⁷ M. Peter, *Eine Werkstatt zur Herstellung von subaeraten Denaren in Augusta Raurica*, SFMA 7, 1990, 74 ff.

⁶⁸ A. Kunisz, *La monnaie de nécessité à l'époque du haut-empire romain: problèmes et controverses*, in *Rhythmes de la production monétaire de l'antiquité à nos jours* (eds. G. Depeyrot/ T. Hackens, G. Mouchart), Louvain-la-Neuve 1987, 256.

⁶⁹ G. Boon, *Counterfeit coins in Roman Britain*, in *Coins and the Archaeologist*, BAR 4, 1974, 117 f; C. King (n. 50), 244.

⁷⁰ *Digest*. 48.10. 9.

⁷¹ G. Boon, op.cit., 113.

⁷² Dio Cassius 78, 14, 4.

⁷³ Concerning presence of ancient copies in the hoards from the Lower Danube, it must be acknowledged that the *denarii* have mainly been considered as the separation between genuine and faked *antoniniani*/ radiates is still not clearly reflected in the research in this area.

⁷⁴ For the hoards from *Dacia* see V. Suci, *Tezaure monetare din Dacia romană și postromană*, Cluj-Napoca 2000, the catalogue; for the provinces from the Lower Danube see C. Găzdac (n. 29), the catalogues of hoards from *Dacia* and the surroundings provinces, manuscript; also for the most recently Roman hoard found in *Dacia*, containing plated silver coins, see N. Gudea (n. 45), 35 ff.

⁷⁵ C. King (n. 50), 246.

⁷⁶ C. Găzdac (n. 29), chap. 3.

silver. As in the western frontier provinces, in *Dacia* the largest number of the false coins belongs to those pieces depicting the emperors of the period AD 193-238. Some possible factors of this outbreak in this period have already been suggested:

A change to the denominational system followed by a debasement of the silver coinage⁷⁷;

A failure to supply bronze coin north of the Alps⁷⁸.

The higher percentage of plated silver denominations in *Dacia* in comparison with the both provinces of *Pannonia* could be a result of the large number of auxiliary troops (see Graph).

This aspect also indicates that the outbreaks of the 2nd and 3rd centuries of imitative coinage took place not only in the western frontier provinces of the Empire but also in *Dacia*⁷⁹.

Such a large number of Roman copies in *Dacia* raises the problem of where they were produced. In the territories of the former western provinces of the Roman Empire, a large numbers of clay moulds to cast *denarii* and bronze denominations, coin-dies to strike *denarii* (see Plate, no. 5), spoilt cast coins (see Plate, no. 3, 4), coin-shaped bars (see Plate, no. 6) in the 3rd century have been recovered, especially from Britain and Gaul⁸⁰ (see Maps 1 and 2).

At the moments no moulds to cast bronze or silver coins were found in Roman *Dacia*. Owing to the presence of the spoilt bronze casts from Hoghiz, a monetary workshop was hypothetically located at this site⁸¹. For similar reasons another monetary workshop may have been located at the auxiliary fort of Ilişua (see Plate no. 4).

It has been generally considered reasonable that "if very large quantities of imitations are recovered from a site then the copies may have been [hypothetically] produced within or near it"⁸². On the basis of these criteria, in *Dacia* until now the presence of a „semi-official“ mints at *Porolissum* has been suggested⁸³. Some authors have also suggested such a mint at *Apulum*, based on the discovery of a hoard entirely consisting of *denarii* copies⁸⁴. This argument can also be used in the case of the monetary workshop from Ilişua where the plated *denarii* represents 56.4% of the total number this denomination found at this site. The possibility that the workshop from Ilişua could produce both silver and bronze copies is not unusual. There are already many sites from western provinces in which moulds to produce silver and bronze coins have been found together⁸⁵.

The large-scale outbreaks of copying Roman coins cover a wide area of the empire. This could indicate ignorance of the legislation, or even some small support from local authorities, especially in the periods of a shortage of the official coin. Similarly, it seems that this phenomenon was closely associated with the army.

For all these aspects, Roman *Dacia* can be considered a representative example.

⁷⁷ M. Orlandini, *Le monete romane imperiali 'coulées en Gaule' degli scavi di Aosta*, RINS 87, 1985, 61 ff.

⁷⁸ Ibidem; A. Kunisz, *La monnaie de nécessité dans les provinces rhénanes et danubiennes de l'empire romain dans la première moitié du III^e*, in Les 'dévaluations' à Rome, époque républicaine et impériale, vol. 2, Rome 1980, 136; C. King (n. 50), 243.

⁷⁹ For the concentration of the outbreaks of the Roman coin copies in the 2nd and 3rd century AD in the western frontier provinces see Cathy King (n. 50), 246.

⁸⁰ Ibidem, 241.

⁸¹ See n. 56.

⁸² Ibidem.

⁸³ I. Winkler, *Despre circulația monetară la Porolissum*, AMN 1, 1964, 220.

⁸⁴ V. Suciu (n. 46), 328.

⁸⁵ C. King (n. 50), 241.

Comparative tables of the genuine and plated denominations from sites of Roman *Dacia***VLPIA TRAIANA SARMIZEGETVSA = SARMIZEGETUSA**

Period	Denarii					Antoniniani					Total
	Genuine		Plated		Total	Genuine		Plated		Total	No
	No	%	No	%		No	%	No	%		
98-117	24	85.7	4	14.2	28						28
117-138	17	89.4	2	10.5	19						19
138-161	16	88.8	2	11.1	18						18
161-180	7	87.5	1	12.5	8						8
180-192	4	100			4						4
193-218	51	80.9	12	19	63						63
218-238	57	81.4	13	18.5	70						70
238-244			3	100	3	10	83.3	2	16.6	12	15
244-249						8	100			8	8
249-253						5	100			5	5
253-268						3	100			3	3
Total	176	82.6	37	17.3	213	26	92.8	2	7.1	28	241

APVLVM = ALBA IULIA

Period	Denarii					Antoniniani		Total
	Genuine		Plated		Total	Genuine		No
	No	%	No	%		No	%	
98-117	16	100			16			16
117-138	19	100			19			19
138-161	36	97.2	1	2.7	37			37
161-180	25	89.2	3	10.7	28			28
180-192	6	100			6			6
193-218	112	92.5	9	7.4	121	2	100	123
218-238	153	92.1	13	7.8	166	2	100	168
238-244			1	100	1	108	100	109
244-249						103	100	103
249-253						118	100	118
253-268						95	100	95
Total	367	93.1	27	6.8	394	428	100	822

POROLISSVM = MOIGRAD

Period	Denarii					Antoniniani					Total
	Genuine		Plated		Total	Genuine		Plated		Total	No
	No	%	No	%		No	%	No	%		
98-117	36	73.4	13	26.5	49						49
117-138	37	86	6	13.9	43						43
138-161	71	86.5	11	13.4	82						82
161-180	42	85.7	7	14.2	49						49
180-192	10	50	10	50	20						20
193-218	119	59.5	81	40.5	200	2	50	2	50	4	204
218-238	72	67.9	34	32	106	1	50	1	50	2	108

238-244						15	88.2	2	11.7	17	17
244-249						8	72.7	3	27.2	11	11
249-253						5	100			5	5
253-268						1	100			1	1
Total	387	70.4	162	29.5	549	32	80	8	20	40	589

NAPOCA = CLUJ-NAPOCA

Period	Denari				Total	Antoniniani		Total
	Genuine		Plated			Genuine		
	No	%	No	%		No	%	
98-117	2	66.6	1	33.3	3			3
117-138	1	100			1			1
138-161	2	100			2			2
161-180	1	33.3	2	66.6	3			3
180-192	1	100			1			1
193-218	2	100			2			2
218-238	3	100			3			3
238-244						2	100	2
244-249						1	100	1
253-268						1	100	1
Total	12	80	3	20	15	4	100	19

POTAISSA = TURDA

Period	Denarii				Total	Antoniniani				Total
	Genuine		Plated			Genuine		Plated		
	No	%	No	%		No	%	No	%	
98-117	17	100			17					17
117-138	10	100			10					10
138-161	33	100			33					33
161-180	21	100			21					21
180-192	11	100			11					11
193-218	105	96.3	4	3.6	109					109
218-238	93	89.4	11	10.5	104					104
238-244	7	100			7	15	93.7	1	6.2	16
244-249						12	100			12
249-253						4	100			4
253-268						5	100			5
Total	297	95.1	15	4.8	312	36	97.2	1	2.7	37

TIBISCVM = JUPA

Period	Denarii				Total	Antoniniani		Total
	Genuine		Plated			Genuine		
	No	%	No	%		No	%	
98-117	7	87.5	1	12.5	8			8
117-138	4	80	1	20	5			5
138-161	10	90.9	1	9	11			11
180-192	1	100			1			1
193-218	1	20	4	80	5			5
218-238	5	83.3	1	16.6	6			6

238-244	1	100			1	3	100	4
249-253						1	100	1
253-268						3	100	3
Total	29	78.3	8	21.6	37	7	100	44

DIERNA = ORȘOVA

Period	Denarii					Antoniniani					Total
	Genuine	Plated				Total	Genuine				
	No	%	No	%	No	%	No	%	No		
98-117	1	100			1						1
193-218	4	100			4						4
218-238	3	75	1	25	4						4
244-249						3	75	1	25	4	4
249-253						1	100			1	1
253-268						4	100			4	4
Total	8	88.8	1	11.1	9	8	88.8	1	11.1	9	18

DROBETA = DROBETA-TURNU SEVERIN

Period	Denarii				Total	Antoniniani		Total
	Genuine		Plated			Genuine		
	No	%	No	%		No	%	
98-117	4	100			4			4
117-138	2	100			2			2
138-161	2	100			2			2
180-192	1	100			1			1
193-218	3	60	2	40	5			5
218-238	5	50	5	50	10	1	100	11
238-244						3	100	3
244-249						10	100	10
249-253						2	100	2
253-268						28	100	28
Total	17	70.8	7	29.1	24	44	100	68

BUCIUMI

Period	Denari				Total	Antoniniani		Total
	Genuine		Plated			Genuine		
	No	%	No	%		No	%	
98-117	10	71.4	4	28.5	14			14
117-138	1	33.3	2	66.6	3			3
138-161	8	66.6	4	33.3	12			12
161-180	5	83.3	1	16.6	6			6
180-192	1	100			1			1
193-218	27	100			27			27
218-238	13	61.9	8	38	21			21
238-244						5	100	5
244-249						3	100	3
Total	65	77.3	19	22.6	84	8	100	92

ROMITA

Period	Denarii		Plated		Total	Antoniniani		Plated		Total	Total
	Genuine					Genuine					
	No	%	No	%		No	%	No	%		No
98-117	1	100			1						1
117-138	4	100			4						4
138-161	3	100			3						3
180-192	2	100			2						2
193-218	5	71.4	2	28.5	7						7
218-238	8	88.8	1	11.1	9						9
238-244						1	50	1	50	2	2
244-249						1	100			1	1
Total	23	88.4	3	11.5	26	2	66.6	1	33.3	3	29

ILIŞUA

Period	Denarii					Antoniniani					Total
	Genuine		Plated		Total	Genuine		Plated		Total	
	No	%	No	%		No	%	No	%		
98-117	2	33.3	4	66.6	6						6
117-138	5	100			5						5
138-161	4	57.1	3	42.8	7						7
161-180	2	50	2	50	4						4
180-192	1	50	1	50	2						2
193-218	7	31.8	15	68.1	22						22
218-238	6	46.1	7	53.8	13						13
238-244			3	100	3	1	33.3	2	66.6	3	6
244-249						5	83.3	1	16.6	6	6
Total	27	43.5	35	56.4	62	6	66.6	3	33.3	9	71

GHERLA

Period	Denarii					Antoniniani					Total
	Genuine		Plated		Total	Genuine		Plated		Total	
	No	%	No	%		No	%	No	%		
98-117	17	94.4	1	5.5	18						18
117-138	8	88.8	1	11.1	9						9
138-161	13	92.8	1	7.1	14						14
161-180	7	87.5	1	12.5	8						8
180-192	1	100			1						1
193-218	32	86.4	5	13.5	37						37
218-238	20	95.2	1	4.7	21						21
238-244						4	100			4	4
244-249						2	66.6	1	33.3	3	3
253-268						1	100			1	1
Total	98	90.7	10	9.2	108	7	87.5	1	12.5	8	116

MEHADIA

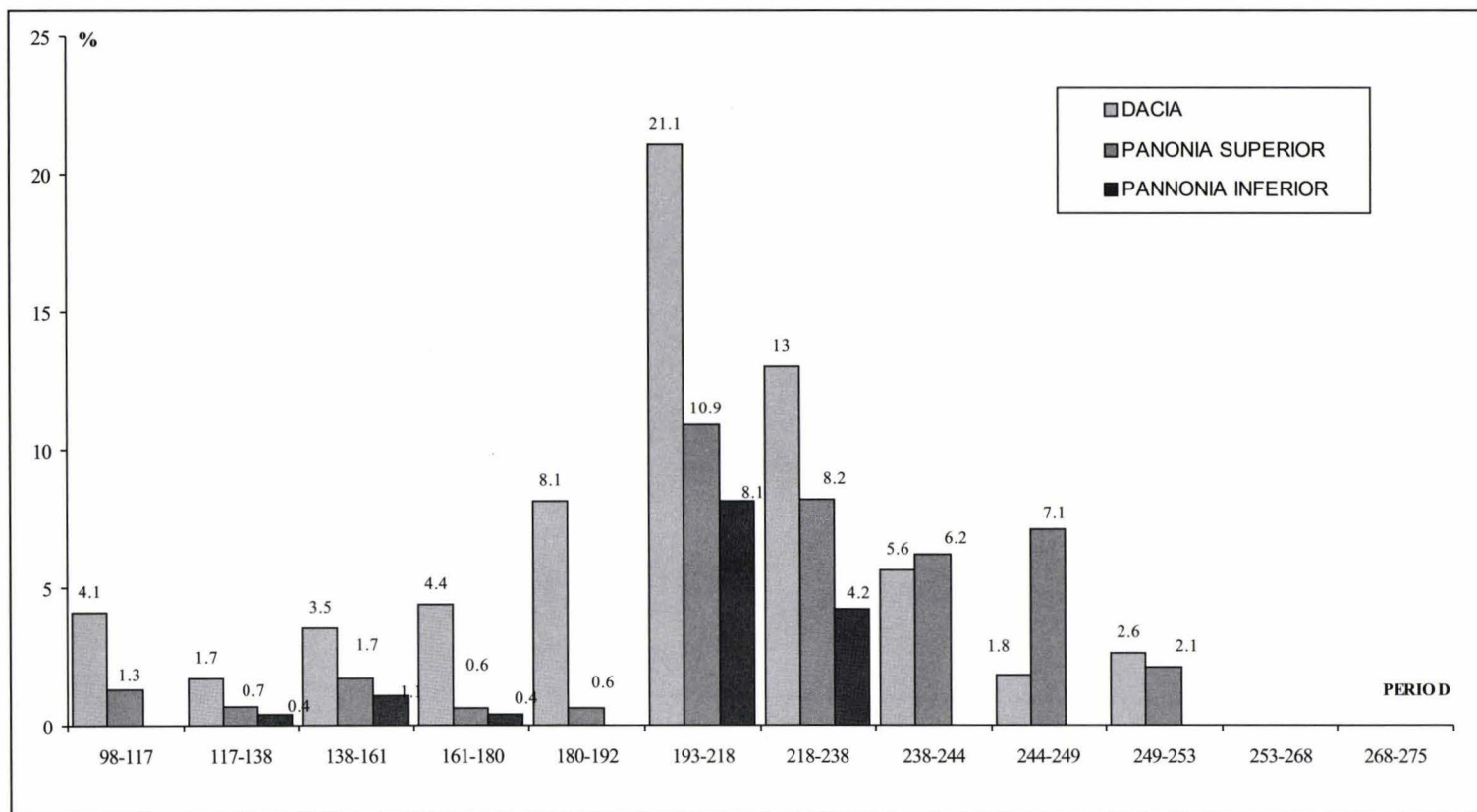
Period	Denarii		Plated		Total	Antoniniani		Total
	Genuine					Genuine		Total
	No	%	No	%		No	%	
98-117	5	100			5			5
117-138	1	50	1	50	2			2
138-161	4	100			4			4
180-192	1	100			1			1
193-218	6	66.6	3	33.3	9			9
218-238	19	95	1	5	20			20
238-244						3	100	3
244-249						7	100	7
249-253						1	100	1
253-268						1	100	1
Total	36	87.8	5	12.1	41	12	100	53

MICĂSASA

Period	Denarii				Total
	Genuine		Plated		
	No	%	No	%	
98-117	6	85.7	1	14.2	7
117-138	6	100			6
138-161	4	57.1	3	42.8	7
161-180	3	75	1	25	4
180-192	3	100			3
193-218	11	61.1	7	38.8	18
218-238	5	27.7	3	16.6	8
Total	38	71.6	15	28.3	53

ORLEA

Period	Denarii					Antoniniani					Total
	Genuine		Plated		Total	Genuine		Plated		Total	
	No	%	No	%		No	%	No	%		
98-117	1	100			1						1
117-138	4	80	1	20	5						5
138-161	7	63.6	4	36.3	11						11
161-180	5	71.4	2	28.5	7						7
180-192	5	83.3	1	16.6	6						6
193-218	31	62	19	38	50						50
218-238	24	53.3	21	46.6	45						45
238-244	2	100			2	6	75	2	25	8	10
244-249						5	100			5	5
249-253						2	100			2	2
253-268						3	100			3	3
Total	79	62.2	48	37.7	127	16	88.8	2	11.1	18	144

Comparative graph of % plated silver denominations from *Dacia* and *Pannonia**

* The percentage values are calculated in relations with all other denominations (gold, silver and bronze), see C. Găzdac, *Monetary circulation in Dacia in the period from Trajan to Constantine I (AD 106-337)*, DPhil thesis, University of Oxford (2001), manuscript, pl. Q 3 - 5.

Finds of moulds used to cast coins

2000+

1. Pachten

500+ ○

2. London

3. Trier

4. St. Mard

100+ ●

5. Arras

6. Bernard

7. Chateaubleau

8. Damery

9. Lyon

10. Reims

14. Mainz

15. Duston (4th c.)

21. Edington

22. Whitchurch

23. Rislissen

24. Sees (AE)

50+

11. Autun

12. Entrains

13. Grand

18. Rottweil

20+ ○

16. Köln

17. Strasbourg

19. Niederbieber

20. Nohfelden

10+ ◆

25. Vienne

26. Boulogne-sur-Mer

27. Famars

28. Gravenmacher

29. Augst (1st-3rd C.)

30. Rumsi

31. Rivenhall (4th C.)

1-9 ◆

32. Ancaster

33. Vroxeter

34. York

35. Silchester

36. Bartlow

37. Bitchester

38. Sleaford

39. Bottesford

40. Housesleeds

41. Bridgewater

42. Guernsey

43. Padua

44. Tetelberg

45. Dalheim

46. Bonn

47. Haltern

48. Heddernheim

49. Kölling

50. Saarbrücken

51. Saalburg

52. Saarlouis-Rox

53. Tholey

54. Wiesbaden

55. Xanten

56. Zugmantel

57. Attert

58. Elouges

59. Bavai

60. Bordeaux

61. Chateau Porcein

62. Corseul

63. Ecoust-St.-Main

64. Vichy

65. Mâcon

66. Luxeuil

67. Arles

68. Millington

69. Eining

93. Brigetio

94. Carnuntum

95. Lauriacum

96. Mandeure

97. Nieder-Sterreich

98. Odenbach

99. Keynsham

? No ◆

70. Rytton

71. Oakham

72. Chester

73. Lincoln

74. Nocton

75. Bulwick

76. Chelmsford

77. Colchester

78. Dorchester

79. Highbridge

80. Kenn

81. Lingwell Gate

82. Castor

83. Mijmegen

84. Brioude

85. Paris

86. Meaux

87. Melun

88. Rézé

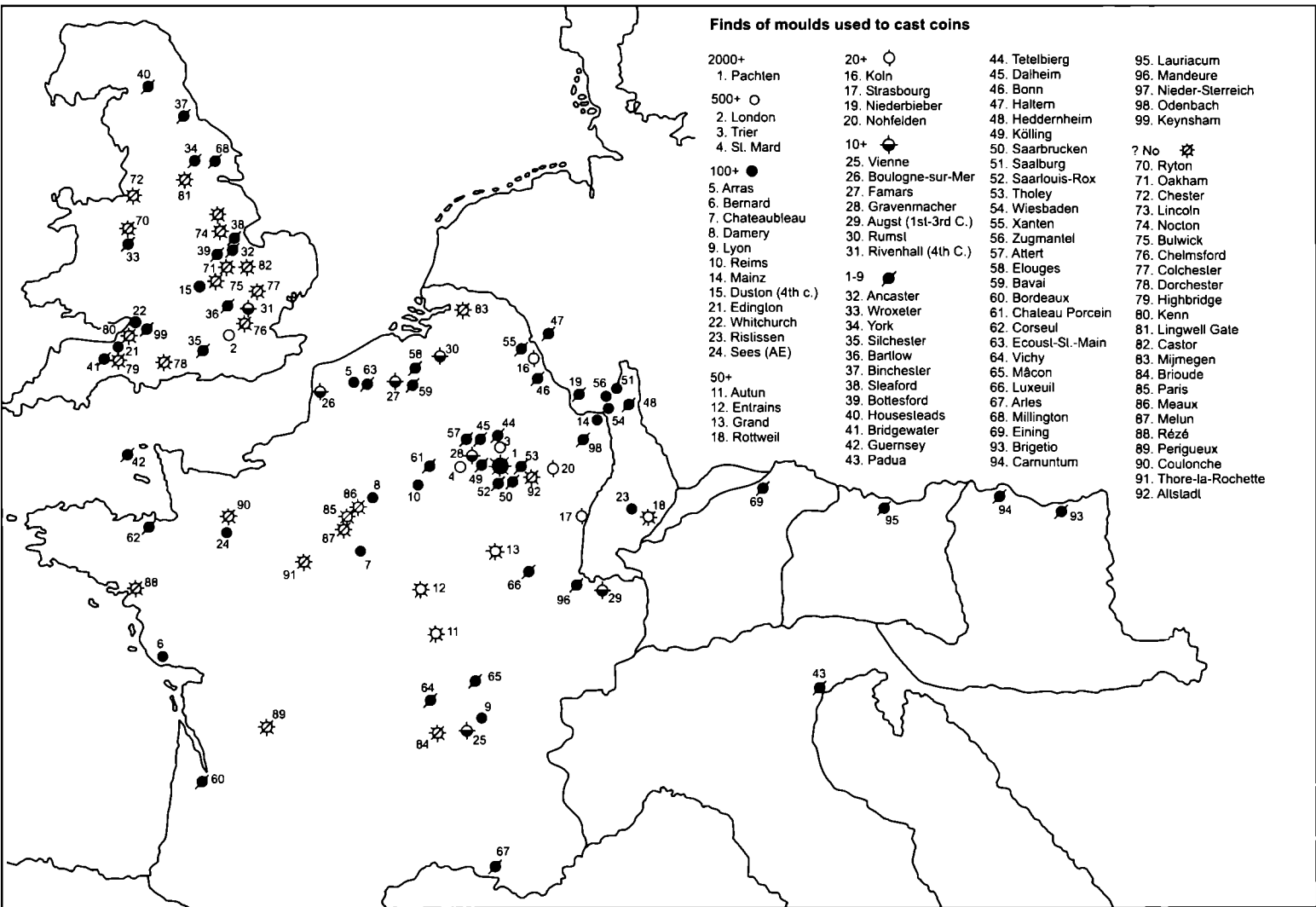
89. Périgueux

90. Coulonche

91. Thore-la-Rochette

92. Allsdladl

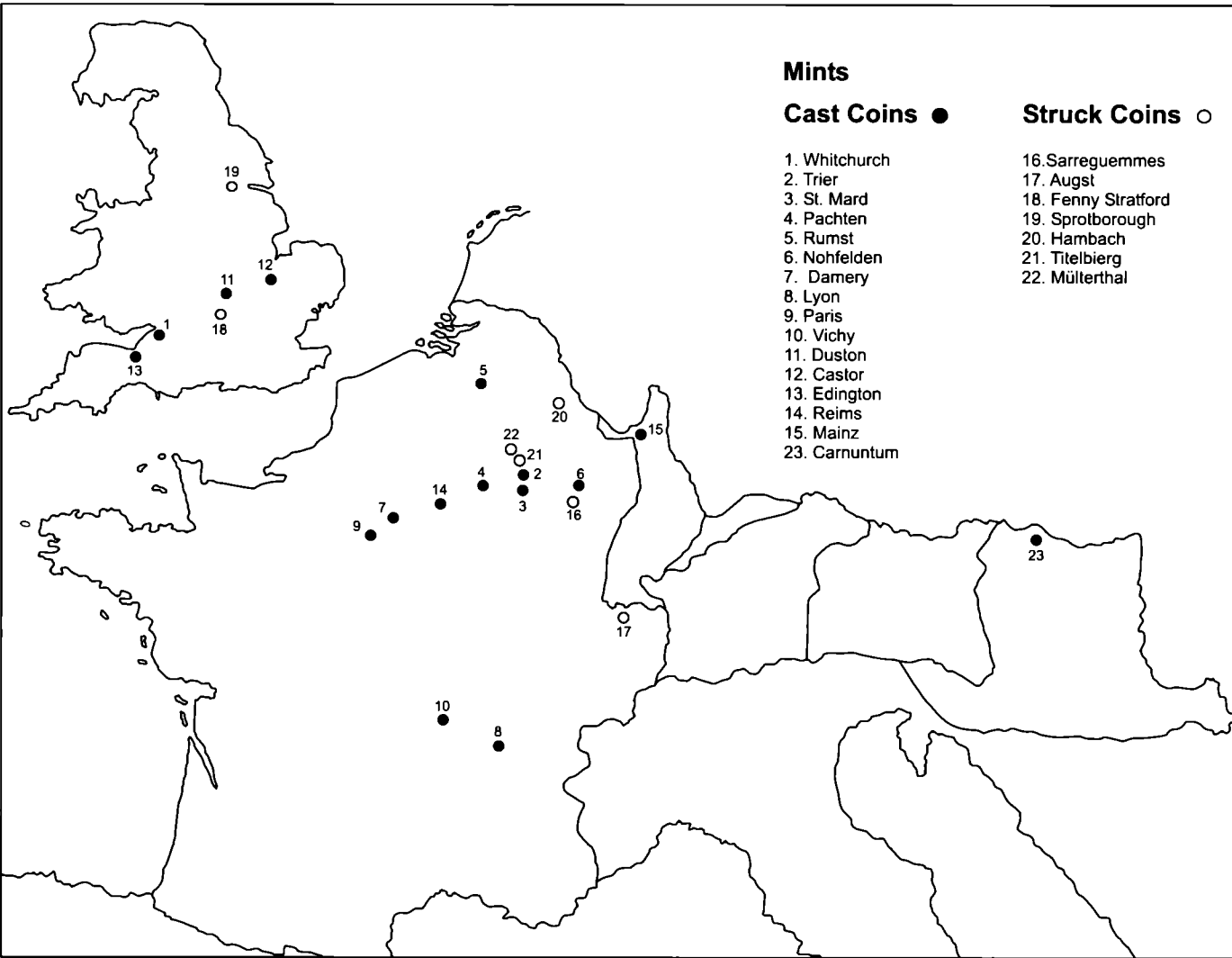
Map 1. Finds of moulds for casting coins (after C. King [n. 50])



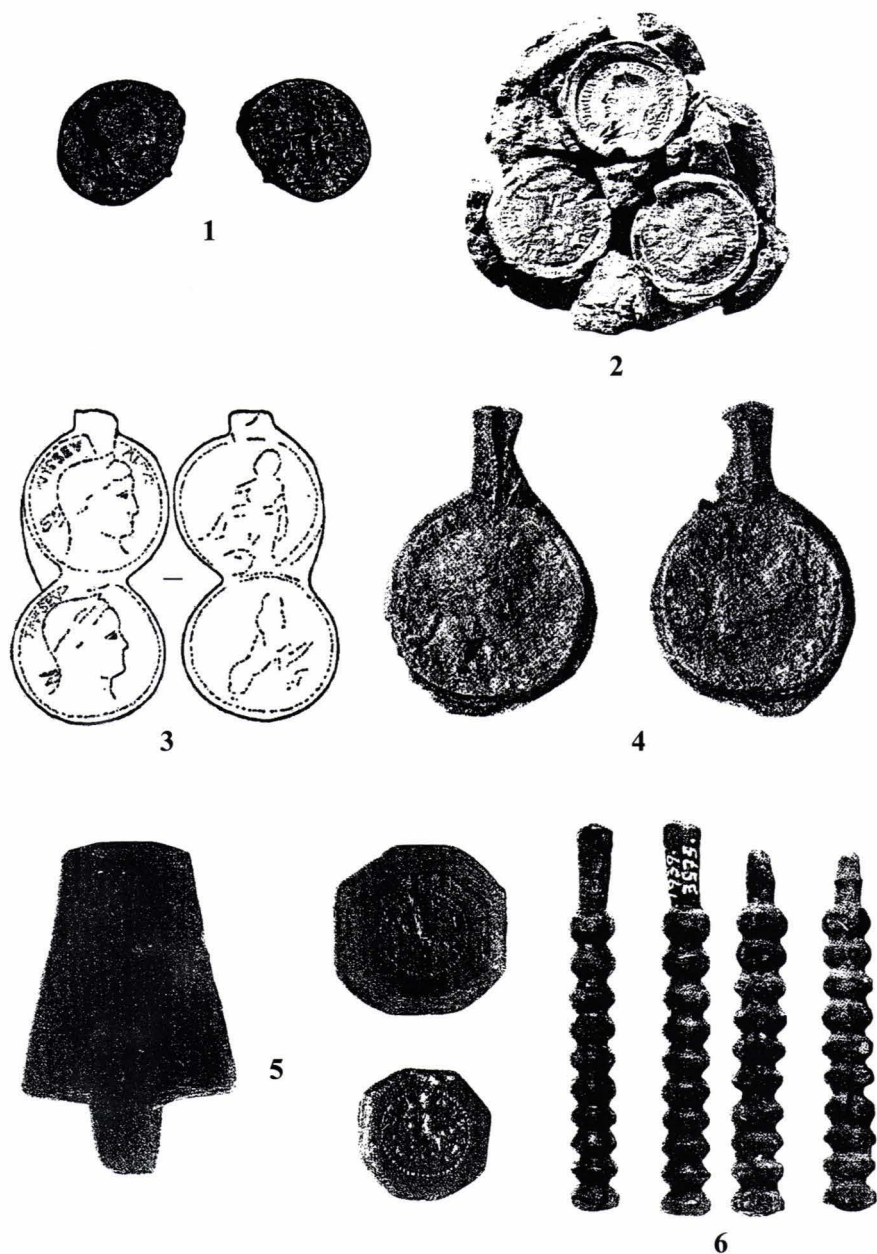
Mints**Cast Coins ●****Struck Coins ○**

1. Whitchurch
2. Trier
3. St. Mard
4. Pachten
5. Rumst
6. Nohfelden
7. Damery
8. Lyon
9. Paris
10. Vichy
11. Duston
12. Castor
13. Edington
14. Reims
15. Mainz
23. Carnuntum

16. Sarreguemmes
17. Augst
18. Fenny Stratford
19. Sprotborough
20. Hambach
21. Titelberg
22. Mülterthal



Map 2. Mints (after C. King [n. 50])



1. Plated *antoninianus* found at Apulum. 2. Bottom of composite mould, showing obverse of *denarius* of Severus Alexander and reverse of Gordian III, found at Pachten (after G. Boon [n. 67] 158-159, pl. II. no. 7a). 3. Spoilt casts of *sestertii* from two-piece slab-moulds from Brigetio (after G. Boon [n. 67] 108, fig. 1). 4. Spoilt cast of a *sestertius* showing obverse and reverse of Antoninus Pius, found in the auxiliary fort at Ilişua (after D. Protase, C. Gaiu [n. 60] pl. LXXXVII/162). 5. Coin die found at Augusta Raurica: reverse of M. Aurelius for Lucilla (the genuine coin was issued at Rome between AD 164-169, RIC III p. 274, no. 759) (after M. Peter [n. 65] 131 f., pl. 18). 6. Coin-shaped bars for *denarii* found at the mint at Augusta Raurica (after M. Peter [n. 65] 104 f., Pl. 4)