TRANSPORT OF COINS IN THE LATER ROMAN EMPIRE

In this contribution I propose to try to address the following questions: what do we know about the transport of coins and precious metal during the Later Roman Empire? What actions were undertaken by the government to ensure that gold, silver and coins were available when needed to cover government expenses throughout the empire? Are there any traces of important coin transfers between regions in this period?

For those less familiar with the subject, I will start with a very concise overview of the monetary organisation in the 4th and the 5th centuries, then examine more in detail what we know about the transport of valuables by the state and by private persons all over the empire. Finally, I will discuss briefly the types of containers used for these transports.

That Late Roman society was monetized to a high degree is beyond any doubt. Coins, including those used as small change, are found in the remotest corners of the empire. This situation is also reflected in the words of John Chrysostom (d. 407): «The use of coin», he says, «is inherent to our existence, it regulates everything in life. Each time we want to buy or sell something, it is done by means of coins (1)».

By the end of the 3rd century AD autonomous city mints and provincial workshops had ceased to exist and Diocletian, in continuation of the monetary reforms of Aurelian (270-275), created between 294 and 299 a series of mints striking an almost uniform coinage throughout the empire (2). Exactly the same coin types were struck in all mints at the same time. From some point in the 4th century onwards, there were two kinds of mints: the monetae publicae and the moneta comitatus, both under the supervision of the same financial secretary or count, known since AD 326 as the comes sacrarum largitionum (3).

(*) Johan VAN HEESCH, Coin Cabinet of the Royal Library of Belgium, Keizerslaan 4, B-1000 Brussels; e-mail: johan.vanheesch@kbr.be.

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(1) In Praecipium Actorum 4, 3 = P.G. 51, 99, 36-40. Quoted by J.-M. CARRIÉ, Aspects concres de la vie monétaire en Province, in RN, 159, 2003, p. 188.


(3) This of course is an oversimplification. For all the details see: J.P.C. KENT, Gold Coinage in the Later Roman Empire [=Gold Coinage], in R. CARSON & C. SUTHERLAND RBN, 152, 2006, p. 51-61.
Monetae publicae were fixed mints. They are often situated quite close to the frontiers of the empire and their main function was to strike billon or bronze coins. All products are clearly marked with the names of the mint and some 14 of these state factories were active. They can be found all over the empire, from Alexandria and Antioch in the East, to Trier and London in the West. Not all dioceses had a mint that worked continuously and Spain never had one at all!

The moneta comitatensis was a travelling mint attached to the imperial train or comitatus. It was responsible for the coining of gold and silver and from the reign of Valentinian I (ca 366 AD) onwards some of its products were even marked with the special mintmark COM for comitatus (or COMT.M) (4). Most coins signed by the comitatensis mint also bear a supplementary abbreviation referring to the name of the town where the coin was actually struck. Though coin dies were often engraved by the same die cutters as those working in the monetae publicae, the dies were the property of the comitatensis mint and travelled with it. Obverse die links between the different towns where the comitatus struck coins are mentioned by John Kent (5).

From the 4th century onwards gold (and later, silver) became increasingly important for military pay, for donativa to soldiers and for payments to barbarian kings. The value or price of the gold coin or solidus depended almost entirely on its intrinsic or metal value (5). As the solidus


(5) Kent, Gold Coinage (n. 3), p. 20 n. 5.

was the only stable beacon in a period of price fluctuation and inflation, the purity and weight of these gold coins were of the utmost importance. Clipped or false gold coins were apparently a threat to regular tax income and from 366-367 onwards the emperors demanded that gold received as tribute should be purified and cast into ingots, before being sent to the imperial aerarium or treasury (7).

Coins, whether of gold, silver or billon, remained of the utmost importance for payments of stipendia or donativa to the soldiers. In principle, taxation paid for the stipendia and donativa. But transporting tax money to the treasuries and the mints, and from the mints to the army, was not always straightforward. Ammianus Marcellinus mentions more than once that soldiers were not paid in time (8). For the year 358 AD he writes that: «The soldiers in Gaul, though worn out by their labours, had received neither donative nor pay from the very day that Julian was sent there...» (9). The emperor Julian had gone to Gaul in 355, so his soldiers were deprived of pay for almost four years! Several texts show how public functionaries stole gold and silver coins. Papyri tell us the story of Isodorus, an officialis, who went from Egypt to Hierapolis in Syria. His mission was to deliver 238 solidi to the imperial comitatus, but on arrival in Syria he learned that there was a tax reduction, and that he was to return to Egypt with part of the money and return it to the taxpayers! Unfortunately for Isodorus, he was robbed on the way back and lost the gold. His superiors doubted his account of the mission; he was put on trial and forced to pay back the lost gold (10).

Roman officials were often accused of withholding tax revenues. Libanius in a letter of AD 360 tells the story of a provincial governor of Syria who was accused of having withheld gold (11). Officers of the Comes sacrarum largitionum Ursulus came to his house «rushed in, impudently entered his bedroom » says Libanius, « and began a search for gold and demanded that he produce such an amount of gold as you could not imagine ». Finding nothing, they sealed the house, and continues Libanius, as a result of the commotion «his wife was distracted, and her child was very nearly prematurely lost by miscarriage ».

Transport of gold was very important for the state, and such matters are reflected in the Theodosian Code, a compilation of laws and decrees

(7) CTh. 12.6.12, 13; Kent, Gold Coinage (n. 3), p. 199.
(8) Quoted by Delmaire, Largesses sacrées (n. 3), p. 536-537.
dating from 313 to 438 (12). Gold and silver, as other tax revenues, had to be transported by the Public Post or cursus publicus. All this was regulated in great detail (13). A decree posted in November 381 specifies that: «If gold, which could have been delivered at the completion of the journey, should be detected as being retained more than ten days either by the official escorts or the palatines (servants of the palace or the count of the finances), the offenders shall learn that they will be obligated to the payment of two percent on the whole» (14). Other decrees also express this concern of rapid delivery (15).

The Theodosian Code also gives specific details relating to guards and wagonloads. A decree of 386 concerning official gold or silver transports, specifies that «for each carriage there shall be two palatines as official escorts, together with three slaves» (16). The regulations concerning loads per wagon and the treatment of animals are equally precise. A text of 357 specifies «only a thousand pounds of weight can be placed upon a carriage (raeda), two-hundred pounds on a two-wheeled vehicle and thirty pounds on a post horse» (17). And the law continues «eight mules should be used for a carriage in the summer, ten in the winter and three mules for a two-wheeled vehicle».

Considering that one Roman pound was approximately 324 g, these figures seem surprisingly low: 324 kg on the larger carriage, then 65 kg and finally 10 kg on a horse! A decree dated 385 gives almost identical figures and specifies that gold and other valuables shall be transported only on vehicles suitable for the load and weight (18). A decision of 386 gives other weights and is even harder to understand. The text reads as follows: «If gold or silver of the sacred imperial largesses [the financial department managed by the comes sacrarum largitionum] should be dispatched to our court, one carriage (raeda) shall be loaded with five hundred pounds of gold (162 kg) or with one thousand pounds of silver (324 kg). But if it is the gold or silver of the Privy Purse (Res Privata, the other financial department of the emperor), each carriage shall be loaded with three hundred pounds of gold or five hundred pounds of silver (19). These differences in loads are hard to explain, as are the weights that are


(13) P. Stoffel, *Über die Staatspost, die Ochsengespanne und die requirierten Ochsen­gespanne. Eine Darstellung des römischen Postwesens auf Grund der Gesetze des Codex Theodosianus und des Codex Justinianus*, Bern, 1994 (= *Über die Staatspost*).

(14) CTh 10.24.3 (translation Pharr).

(15) CTh 12.8.1.

(16) CTh 8.5.48 (translation Pharr).

(17) CTh 8.5.8 (translation Pharr).

(18) CTh 8.5.47.

(19) CTh 5.8.48 (translation Pharr).
The 162 kg of gold would correspond with approximately 360 gold ingots or 36,000 solidi. These would fit in a small square box, measuring 25 cm by 25 cm! Perhaps transports of valuables were limited for security reasons? That might explain why loads of silver were greater than those of gold. Perhaps efficiency was not a priority? Isodorus travelled from Egypt to Syria with a tax revenue of only 238 solidi, which was approximately 1 kg of gold. Perhaps there was no real need to transport larger quantities? Two boxes containing 36,000 solidi each would have been equivalent to the annual tax income of a smaller province. From the Novels of Valentinian III we know that the tax revenue of Numidia in the early fifth century was 78,200 solidi and that of Mauretania Sitifensis 41,600 (20).

Other texts do not speak of carriages or wagons, but of horses only. For example an ordinance of the emperor Anastasius (491-518) specifies that those who transport the state’s money (pecunia publica) can ask for as many horses as they need to accomplish their mission (21).

It is remarkable that there is no mention of boats or ships among all these laws relating to the transport of precious metals. The decree of AD 386, referring to gold and silver loads in carriages, also mentions linen and cloak transports for the government and specifies that: « Linen and cloaks... shall no longer be dispatched by carriages but by post wagons or by boats » (22). Perhaps land transport was preferred for security reasons? After all, the numerous shipwrecks on the sea-bed of the Mediterranean are testament to the risks of sea transport (23).

Most of the legal texts talk exclusively of precious metals or gold coins. But what about the bronze and billon coins that are found in huge quantities in military and civil sites, towns, farms and country houses all over the empire. As all the coins bear mintmarks, it is possible to study coin circulation and coin transfers between different regions. I will present some findings about official coin transports and private coin transports below.

Billon coinage (bronze coins with very little silver, usually between 1%-5% in the 4th century), was regularly — almost every five years or so — debased and reduced in weight. This means that, although billon coins were fiduciary money with a price fixed by the government, it was considered worthwhile by the state to melt them down (24). These coins


(21) CJust 12.50.23; Stoffel, Über die Staatsonst (n. 13), p. 72.

(22) CTh 5.8.48; Stoffel, Über die Staatsonst (n. 13), p. 120-121.


(24) On the monetary situation from Diocletian onwards see e.g. G. Depeyrot, Le système monétaire de Dioclétien à la fin de l'empire romain, in RBN, 138, 1992, p. 33-106 and Hendy, Studies (n. 2).
had to be withdrawn from circulation, sent to the *thesauri*, or treasuries, and then to the mints. Finally, the newly struck coins were sent to the armies. It is not so strange then, to see that new mints were sometimes situated in important ports, for example in Ostia and Arles. A fascinating coin, recently acquired by the Brussels Coin Cabinet and only the second specimen known, actually shows the transfer of the mint of Ostia to Arles in AD 313 (or the sending of coins by ships to other regions?) (Fig. 1).

![Nummus of Constantine I, Arles, 313 (mint mark: PARL), 2.80g, 6h; inventory 2005-56 (© Coin Cabinet Brussels).](image)

On the right stands the personification of Roma and on the left is Moneta holding scales and standing on a departing ship. The legend is also revealing: «*Utilitas Publica*» or «Public Interest» or «of interest to all» (25). While we know that there were large shipments of identical

(25) RIC VII, no. 50; G. Depeyrot, *Les émissions monétaires d'Arles* (Collection Moneta, 6), Wetteren, 1996, p. 23 no. 3/6; J.P.C. Kent, *The President's Address*, in
coins, there is rarely any evidence to prove it. Furthermore, we can never be sure whether they were official shipments or private ones. Two hoards belonging to the reign of the emperor Maxentius (i.e. 306-312) are interesting examples of possibly official shipments (26).

The first hoard comes from the sea off the Libyan coast and was found near Mangub (27). Of the 20,588 identified coins, almost 16,000 are from the mints of Rome and Ostia. A total of 4,856 nummi (almost 25%) belong to one coin issue, marked RB. All the coins were struck at some time between 307 and 310, after the reduction of the weight of the billon nummus in 307 when the coin was reduced to almost half its original weight (28). Where was this shipment of coins heading? It could have been a supply of new, reduced weight, coins, to Africa. Equally, it could have been intended to aid in the suppression of the revolt of the usurper Domitius Alexander, who was slain in 310 AD and whose territory was recovered by Maxentius (29).

Another remarkable hoard was discovered in the Mediterranean sea near Gruissan, not far from Narbonne, in France (30). Although workers made off with much of the hoard, 3,978 coins were identified. Of these, 90% are coins of the emperor Maxentius (306-312) and his son Romulus. While coins from fourteen mints are present, a very high majority (85%) of the coins was struck in Rome and Ostia, and a mere four catalogue numbers account for 59% of the hoard. For example, 966 nummi are identified as RIC, Rome, no. 210 (AD 308-310).

There are also examples of private transports of coins. The coins of Valentinian I, struck in the year 374 AD in Siscia in modern Croatia, are found in fairly large numbers in north-western Europe. A purse found in a soldier's grave at Oudenburg in Belgium contained 86 coins, of which 7 (i.e. 11%) were also struck in Siscia (31). This phenomenon is generally linked with the known movement of troops from the Danube to the Rhine and the North-Sea coast in 375 AD.

Another example comes from Morocco, where the French excavations at Zilil have revealed an extremely high proportion of coins minted in

NG, 147, 1987, p. X-XI and L. Laffranchi, La translation de la monnaie d'Ostie à Arles dans la typologie numismatique constantinienne, in RBN, 73, 1921, p. 7-15 (the type was first published by Banduri in the early 18th century).

(26) I should like to thank Georges Depeyrot for providing me with these references.


(28) C.H.V. Sutherland, RIC, VI, p. 102.


Arles for the years 330-380. George Depeyrot, who studied the finds, also showed that the very numerous *aes-3* coins from Gallic mints, and struck in 348-353, were sent especially to the North of Africa, as they are more frequent there than anywhere else (32). We do not know for certain who transported these coins and if they came by trade. But that trade can be responsible for the transfer of large quantities of bronze coins is proven by the masses of late Roman bronze coins (perhaps as many as 200,000) that have been found in India and Sri Lanka. These coins could only have reached India through trade. They circulated in the East, and were even imitated locally (33).

Legal texts relating to the transport of bronze coins are rare, but there is one that is particularly remarkable. A law, dated AD 356 and issued at Arles during the reign of Constantius II (34) reads: « If any person should be detected melting down coins (*pecunia* in Latin, the usual word for bronze or billon coins at that time) or transporting it to different regions for the purpose of selling, he shall undergo the sentence for sacrilege and shall suffer capital punishment. We decree that harbours and various shores... and roads must be guarded... » The law goes on, specifying that: « No trader (*negotiator*es) shall carry on his own animals more than a thousand *follis* [money of account?] of official coins... for the purpose of paying his expenses... For we order that merchants (*mercatores*) should not carry every kind of coin in their ships, and in fact we permit only such coins as are established in public use to be carried... But it shall be entirely unlawful for anybody to buy or handle forbidden coins (*pecuniae vetitae*), because it is proper for the price of a thing to be in coins established in public use and not in merchandise ». The text continues, forbidding the sale of coins called *maiorinae* or *centenionales communes* and other names.

Much has been written about this decree and there are many uncertainties (35). For our purpose, it is especially interesting to see that some traders sold coins as bullion in other regions. It still is a matter of dispute whether the intention was to extract the silver from the billon coins or whether it was to fabricate small emergency issues from larger official coins in regions where there was a lack of small change. It is also interesting that the law was posted in Arles, at the head of the Rhone delta.

(35) ALFÖLDI, op. cit. (n. 31); R. DELMAIRE, Aspects normatifs de la politique monétaire du Bas-Empire: une nouvelle lecture de CTh IX, 23, 1, in RN, 159, 2003, p. 163-174.
and one of the chief ports of Gaul \(^{36}\), and it is tempting to link it with the presence of Gaulish coins in Africa \(^{37}\).

It is perhaps also worthwhile to call attention to a fascinating papyrus from Oxyrhynchus \(^{38}\). The document in Greek is dated \(ca\) AD 352-354 and has been discussed in detail by Jean-Michel Carrié \(^{39}\). It is a letter written by a certain Dioscorides and addressed to Achilles. Dioscorides asks him to buy as quickly as possible some new merchandise for his shop and to use the billon coins (\(argyra\)), which he sent in two different boats. The first boat was loaded with a vase (\(sambathon\)) containing 2,700 myriads of denarii of \(\text{common coins}^1\); the second boat had a pot (\(kni-dion diploun\)) containing 4,000 myriads of coins. Depending on which coins are meant in this letter, Carrié calculates 3,220 or 5,360 coins \((aes-2\ or\ aes-3)\), a total weight of 8.5 kg or 14.7 kg, with a volume of 3 to 5 litres. Several things are interesting in this text for our purpose: first, the use of two ships suggests a regard for security, and second, the lack of gold and silver coins did not hinder commerce. It would seem that the transport and handling of small billon coins in large quantities were quite regular practices \(^{40}\).

The Oxyrhynchus papyrus mentions the use of earthenware vessels to transport the coins, and this brings me to my last topic: containers used for transporting coins \(^{41}\).

Vegetius in his \textit{Epitome of Military Science}, written at the very end of the fourth century, says that the soldiers' savings were kept in \(folles\) or bags, deposited in a large basket or \(cophinus\) \(^{42}\). \(Folles\) are often mentioned in Roman texts and several representations of these bags are

\(^{36}\) Hendy, \textit{Studies} (n. 2), p. 293.


\(^{38}\) \textit{P.Oxy. XXXIV}, 2729.


\(^{40}\) On the function and importance of billon and bronze coins in the fourth century see J.-P. Callu, \textit{Rôle et distribution des espèces de bronze de 348 à 392}, in C. King (Ed.), \textit{Imperial Revenue, Expenditure and Monetary Policy in the Fourth Century A.D.} (BAR International Series, 76), Oxford, 1980, p. 41-93. In the Netherlands a small Roman boat containing a hoard of almost 13,000 small bronze coins (mainly \(aes-4\)) was found in 1920 at Huigsloot-Haarlemmermeer. M. Streefkerk suggested that the hoard originated in Britain and was transported to the continent in the early fifth century: M. Streefkerk, \textit{Een nieuwe kijk op de Haarlemmermeer}, in \textit{JMP}, 82, 1995, p. 1-18 (with English summary; the structure of this hoard can also be found in J.P.C. Kent, \textit{RIC}, 10, p. cxlii).


known (43). The bags on the mosaic at Mirat in North Africa (44) even have an inscription «1000», which probably records the value of the contents, i.e. 1,000 denarii. The folles depicted on the floor of the Roman villa at Piazza Armerina in Sicily are marked «X 12,500». From the end of the third century, and owing to the depreciation of the billon coins, huge numbers of them were needed to pay fairly small amounts. To facilitate transactions, coins were apparently kept in sealed bags, marked with their value expressed in denarii, the money of account. Other representations of these bags can be found in the illustrations of the «Chronographer of 354», on ivory diptychs (45) and even on the coins themselves. Gold multiples of Constantius II and Valens show moneybags together with other valuables that were normally distributed as gifts to the soldiers (46).

Moneybags and other containers also figure in the illustrations of the Notitia Dignitatum, an administrative guide to the later Roman Empire compiled ca 400 (47). These pictures are quite remarkable. The originals are lost, however several medieval copies of the manuscript exist (48). They represent the insignia or distinctive marks used to symbolise the activities of the different financial secretaries or counts (comes), the comes sacrarum largitionum and the comes rei privatae. In addition to coins, silver plate, gold leaves, belt buckles and other desirable objects, there are also depictions of what may be money containers: wooden boxes with iron strips (arca); a basket filled with coins, and a domed box decorated with leaves, which Delmaire has identified as a container for coins, known as a cista or fiscus (49).

It is time now to make some concluding remarks. Although this paper covers the Later Roman Empire, it should be noted that most of the documents relate to the period 310-380 AD. The earliest documents all

(49) DELMAIRE, Largesses sacrées (n. 3), p. 56-59.
refer to billon coinage and the later ones refer mostly to precious metals. They offer a good illustration of the very important role of gold in later Roman society, especially from the reigns of Valentinian onwards. As often happens in history, documents from periods in which major changes occur are more frequent than sources from more tranquil decades. This is why more documents survive from the years which saw frequent debasement of billon nummi, and also from the years of Valentinian I which saw reforms of the gold coinage and changes in the way taxes were collected.

The «anthology» of texts and documents I have presented, offers a fragmentary, though often detailed insight, into the practical organisation of the transport of valuables for the imperial treasury. The legal texts in particular reveal the government's ever-present fear of running out of cash or gold, vital to ensure (and pay for) the support of the army and the loyalty of German kingdoms outside the empire. They also illustrate how coins and gold were recycled by means of tax collection and were reused or melted down to be spent again and again by the government.

Coin finds illustrate how large quantities of billon coins travelled to dioceses without a mint (for example, in Africa), though it is not easy to make a distinction between official shipments or private cargos related to trade.

Of course, there is a great deal about coin transport in the Roman world that remains to be studied. The Egyptian papyri are likely to contain a great deal of valuable information. We know from the Roman gold medallions found in great numbers outside the frontiers of the empire that Roman emperors lost large quantities of gold to barbarian kings (50). Detailed study of site finds and hoards would also yield many examples of divergent circulation patterns that would relate to transport, supply or trade. But these are beyond the scope of this exploratory paper.

(50) A. BurSChE, Later Roman-Barbarian Contacts in Central Europe: Numismatic Evidence (Studien zu Fundmünzen der Antike, 11), Berlin, 1996.