TABLE DES MATIÈRES – INHOUDSTAFEL

URBAN VERSUS RURAL CONTEXTS: DIFFERENCES OF MONETISATION FROM ANCIENT GREECE TO THE EARLY MIDDLE AGES (COIN FINDS, TAXES AND TRADE) – CONFERENCE MAY 23rd 2014

- François de Callataÿ & Johan van Heesch, Introduction 1
- Catherine Grandjean, La monétarisation de l’Astu et de la Chôra des cités grecques (VIe s. av. n.è. – VIe siècle de n.è.) en questions 3
- François de Callataÿ, Comedies of Plautus and Terence: an unusual opportunity to look into the use of money in Hellenistic time 17
- Christian Lauwers, Coins et ateliers monétaires celtes : de l’oppidum aux artisans itinérants 55
- Fran Stroobants & Jeroen Poblome, Bying and selling in late Roman Pisdia: a hypothetical framework of coin use in Sagalassos and its countryside 73
- Philippa Walton, From barbarism to civilisation? Rethinking the monetisation of Roman Britain 105
- Jean-Marc Doyen, La monétarisation des grands domaines ruraux de Gaule septentrionale : entre gestion capitaliste et commerce de proximité 121
- Alessia Rovelli, Contextes urbains vs. ruraux : l’Italie centrale et septentrionale durant le Haut Moyen Âge 145
- Jean-Pierre Devroey, Activité monétaire, marchés et politique à l’âge des empereurs carolingiens 177

MÉMOIRES – ARTIKELS

Panagiotis P. Iossif, Who’s wealthier? An estimation of the annual coin production of the Seleucids and the Ptolemies 233
Pierluigi Debernardi & Olivier Legrand, Roman Republican silver coins of the quadrigatus period struck in Spain 273
David Biedermann & Florian Haymann, Die Denare des P. Ventidius Bassus (RRC 531) 293
Martin Beckmann, Trajan’s restored coinage: volume, value and purpose 311
Peter Talloen, Fran Stroobants & Patrick Degryse, Hephastos in Pisidia: establishing the importance of a coin type 325
Giacomo Manganaro, Tra Gallieno et il ‘regnum Galliarum’: ‘radiati gallici anomali’ in Sicilia nel III-IV secolo AD 343
Fernando López-Sánchez, Priscus Attalus’ second coin issues in Narbonne (414-5) and the circulation of clipped siliquae in Spain and Gaul (420-2) 371
Peter Spufford, Turning from France to the Empire – The shift of the Low Countries from an Anglo-French currency region to an Electoral-Imperial currency region in the fifteenth century 387
MÉLANGES – MENGELINGEN

A lead pattern for a denaro of pope Adrian III (884-885) or Stephen VI (V) (885-888), door R. Van Laere – Zegelmatris van de beekers en muleners van Tongeren (15de eeuw), door T. Ghys & R. Van Laere 401

COMPTES RENDUS – RECENSIES

Harald Derschka, Suzanne Frey-Kupper & Reiner Cunz, Selbstwahrnehmung und Fremdwahrnehmung in der Fundmünzenbearbeitung (R. Van Laere) 407

Susanna Silberstein Trevisani Ceccherini, La monetazione di Reggio Magnograeca. Dal IV sec. a.C. alla chiusura delle zecca (Ch. Flament) 409

M. Reddé (dir.), De l’or pour les braves ! Soldes, armées et circulation monétaire dans le monde romain (V. Geneviève) 412

Karl-Josef Gilles, Der römische Goldmünzenschatz aus der Feldstraße in Trier (J. van Heesch) 414

Klaus Vondrovec, Coinage of the Iranian Huns and their successors from Bactria to Gandhara (4th to 8th century CE) (R. Van Laere) 415

Lucia Travaini, I cappelli di Carlo il Calvo (G. Sarah) 418

Niklot Klüssendorf, Numismatik und Geldgeschichte. Basiswissen für Mittelalter und Neuzeit (R. Van Laere) 421

Martin Bloemendal et al., Geslagen in Dordrecht – terugblik op de Munt van Holland (H. Vanhouwt) 423

Willy Geets, Rekenmunt en klinkende munt in de Zuidelijke Nederlanden. Een complexe en intieme relatie (13de-18de eeuw) (E. Aerts) 424

José Díaz Tabernero & Luca Gianazza, Die Geldbörse des ’Söldners’ vom Theodol-Pass (VS) = Il ripostiglio del ’mercenario’ del Colle del Teodulo (VS) (R. Van Laere) 427

Andreas Hedwig (eds.), Finanzpolitik und Schuldenkrise 16.-20. Jahrhundert (R. Van Laere) 429

Gerd-Henrich Stork, Geowissenschaften im Spiegel von Medaillen und Münzen (R. Van Laere) 431

BIBLIOGRAPHIE – BIBLIografie

Christine Servais, Bibliographie de la numismatique belge 2014 – Bibliografie van de Belgische numismatiek 2014 433

SRNB – KBGN

Extrait des procès-verbaux – Uittreksels uit de verslagen 449
Listes des membres – Ledenlijsten 465

NÉCROLOGIE – OVERLIJDENSBERICHT

Gay van der Meer (M. Scharloo) 469
INTRODUCTION

A huge body of numismatic research has been undertaken on Roman coinage found in Britain. The focus has fallen primarily on the quantification of hoards which has led to the compilation of a range of standard reference works for the identification of Roman coinage, notably the Cunetio and Normanby catalogues \[1\] and Robertson’s *Inventory of Romano-British coin hoards* \[2\]. However, in recent years, there has also been a growing interest in the analyses of coin assemblages from a more archaeological perspective, using numerical and statistical techniques, as pioneered by Richard Reece and John Casey \[3\]. The application of these techniques known collectively as ‘Applied Numismatics’ has resulted in the calculation of average values for coin loss in the province \[4\] and demonstrated that coin assemblages can be used to improve our understanding not only of the chronology of coin use at a particular site, or in a particular area, but also its function.

Despite the introduction of these innovative numerical and statistical techniques, numismatics has been surprisingly slow to embrace recent models of cultural change such as ‘discrepant identity’ \[5\] and ‘creolisation’ \[6\]. Instead, most research continues to be underpinned by a model of coin use and monetisation which closely reflects theories of acculturation and ‘romanisation’. Within this model, it is argued that ‘primitive’ social exchange

---

* Dr Philippa Walton, Research Fellow, Coin Hoards of the Roman Empire Project, Ashmolean Museum, University of Oxford (\(@\) philippa.walton@ashmus.ox.ac.uk).

\[2\] Robertson 2000.
\[4\] See *e.g.* Reece 1972, 1987, p. 72 & 1995; Walton 2012.
\[5\] Mattingly 2004 & 2006.
\[6\] Webster 2001.
was slowly but surely replaced by a ‘civilised’ monetary economy throughout the province. Thus, in the early Roman period, coinage was used primarily to pay the army and administration [7] with the province consisting of ‘coin using islands […] in an overwhelming sea of virtually coinless peasants’ [8]. In the mid-Roman period, an influx of bronze coinage encouraged wider participation in a monetary economy in rural areas [9]. By the late third century AD, the significant increase in the number of coins lost and the minting of large numbers of copies during periods of minimal supply, marked the completion of a transition from an economy based on social interaction, to one more closely aligned with market principles [10].

In this paper, I intend to explore the validity of the prevailing model of monetisation in Roman Britain, using data primarily collected by the Portable Antiquities Scheme (PAS). Using a range of case studies, I hope to indicate that the adoption and experience of coinage in Roman Britain may have been far more varied than previously thought.

THE DATASET

There has never been a better time for re-assessment. Roman Britain now possesses one of the most comprehensive numismatic records of any province in the Roman Empire. Since the nineteenth century, approximately 2,570 coin hoards have been catalogued [11] and the Treasure Act 1996 now provides a reliable mechanism by which their recording is ensured. Numerous assemblages found during research excavations and development control projects are also regularly published, both individually and in summaries [12]. These data are supplemented by the records of more than 130,000 stray losses and site finds gathered by the PAS and the 53,165 coins [13] located by Cardiff University’s Iron Age and Roman Coins from Wales project since 1997 [14]. All data is recorded to established numismatic standards, with findspot information, in an online and publically accessible database at www.finds.org.uk. The size of this dataset and its broad geographical spread allows analysis of patterns of coin use and loss, not only at the level of the individual site, but also on a regional and provincial level.

[13] These coins have now been integrated into the PAS database.
THE DISTRIBUTION OF COIN ASSEMBLAGES

A distribution map of all Roman coins recorded by the PAS up until September 2010 provides an indication of the geographical scale of this relatively new resource (Figure 1). However, as this map does not distinguish between stray losses and large groups (with each dot representing anything from a single coin to an assemblage of more than 1,000) it also conveys the somewhat erroneous impression that coin use was embraced uniformly throughout the province. Only the south-west, inland Wales and upland areas of the north-west appear excluded. Whereas a stray loss may indicate the presence of a single careless individual who happened to acquire and then mislay a Roman coin at some point during the 400 years of Roman rule, larger assemblages are more likely, although not altogether certainly, to represent processes associated with habitual coin use. This paper will therefore focus on an investigation of the distribution of the 446 statistically-useable groups of twenty or more coins from a single parish recorded by the PAS, alongside a comparative dataset of 368 similarly sized assemblages from published excavations [15]. Obviously, there are methodological concerns regarding the use of the arbitrary figure of 20 coins from a parish to signify a site assemblage [16]. A single parish can possess multiple sites with multiple functions, and sites which possess fewer than 20 coins may have specific functions which such an analysis will miss [17]. However, as a springboard for examining national and regional patterns of coin loss, this framework serves a purpose.

Figure 2 illustrates the distribution of assemblages of 20 or more coins recorded by the PAS alongside the comparative dataset of excavation assemblages. Their distribution pattern stands in direct contrast to that presented in Figure 1 and indicates clear regional difference. Perhaps most apparent is a north-south divide between the southern arable zone which is likely to have sustained a larger population, and the northern animal-grazing zone. The Fosse Way, the main communication artery running across Britain between the legionary fortresses of Exeter and Lincoln, acts as an approximate frontier between the two.

[15] For a full listing of parish assemblages and comparative coin assemblages used in this article, see Walton 2012, p. 199 passim.

[16] Casey states that 200 coins are needed for numerical and statistical analyses to work well (Casey 1986, p. 89), whereas Reece has argued that assemblages containing more than 100 coins should be favoured, as smaller groups ‘make far too much numerical noise’ (Reece 1991, introduction), although more recently he has stated that groups of 12 or more coins can produce acceptable profiles (Reece pers. comm.).

[17] For example, it is acknowledged that this approach will exclude sites which experience short-lived coin use, for example, military marching camps. Low levels of coin loss at such sites could reflect the length of occupation rather than the level of monetisation.
Fig. 1 – The distribution of all Roman coins recorded by the Portable Antiquities Scheme (1997-2012)
Fig. 2 – The distribution of all assemblages of 20 or more Roman coin
○ PAS parish with coin profile ○ Comparative sites — Roman roads
80% of assemblages fall within the southern zone and it is within this zone that the PAS has made the most significant contribution to the number of assemblages known. The counties of Northamptonshire, Hampshire and the Isle of Wight exhibit far greater volumes of coins loss than previously recorded, whilst the level of material from East Anglia is particularly striking. Reece published coin lists for only four sites in Norfolk, Suffolk and Cambridgeshire and went as far as to suggest that the absence of coinage was a reflection of low levels of coin use in the area, particularly in the mid to late Roman period. However, the PAS dataset includes 169 assemblages from the region, indicating that his assumption is unlikely to be valid. In contrast, there are far fewer assemblages within the northern zone, and where recorded, they tend to be much smaller in size. The majority originate from the excavation of military installations and urban foundations, rather than being PAS assemblages.

**BIASES IN THE DATA**

It is evident that there is a contrast between the number and size of coin assemblages recorded in the southern and northern zone. This is likely to be related directly to the numbers of coins both used and lost in each zone during the Roman period. However, before proceeding beyond the realms of observation to providing some interpretation of the data, it is worth noting biases inherent in the PAS material which may adversely affect distribution patterns. For example, finds recorded by the PAS are predominantly the result of metal detecting. Due to national park and scheduled monument designations in the northern zone, industrial disturbance of land in the nineteenth and twentieth centuries and upland terrain, the majority of detector users choose to enjoy their hobby elsewhere. The southern zone, with large areas given over to arable agriculture, provides a focus for much metal detecting activity. It is therefore possible that coins recorded are not necessarily representative of what was actually lost. Even so, some fundamental differences can be observed, not only in the quantity of coins recorded in the northern and southern zones, but also in the date and denominational composition of assemblages found in each.

**VARIATION IN THE COMPOSITION OF ASSEMBLAGES IN NORTHERN AND SOUTHERN BRITAIN**

Following the chronological framework of Reece periods to organise the data, average per mill values for coin loss in the northern zone have been calculated and compared with values for the southern zone. They are pre-

---

monetisation of roman britain

111

sented as a histogram in Figure 3. There are obvious differences in the proportions of coins recorded in each of the zones. In the north, there are higher levels of early coin loss, with 45% of all coins recorded there dating to the first to early third century AD (Period 1 to Period 11). The values for Periods 4 to 8 (AD 69 to 180) are particularly high. In contrast, only 14% of all coins recorded in the southern zone date to the first to early third century AD. Instead, the values are consistently higher in the late third century and throughout the fourth century AD.

There is also significant variation in the denominational composition of assemblages in the separate zones. In the northern zone, the proportion of silver denarii between Period 4 and 11 (AD 69 to 238) is far larger than in the equivalent periods in southern Britain, where the composition is more mixed and bronze denominations represent a far larger proportion of all coinage lost. This is clearly demonstrated by Figure 4 which illustrates the distribution of denarii, sestertii, dupondii and asses in the Flavian period (Reece period 4) and by Figure 5 where pie-charts present the proportions of different denominations in each zone in Periods 4 (AD 69 to 96), 7 (AD 138 to 161) and 9 (AD 180 to 193).
Fig. 4 – Distribution of denarii (left), sestersii (middle) and asses+dupondii (right) in Period 4 (AD 69 to 96)

North of Fosse Way

Period 4
AD 69 to 96

total: 259 coins

South of Fosse Way

Period 4
AD 69 to 96

total: 709 coins

Period 7
AD 138 to 161

total: 985 coins

Period 9
AD 180 to 193

total: 205 coins

Fig. 5 – The percentage of each denomination found
(■ denarius □ sestertius ▼ dupondius or as)
ACCOUNTING FOR VARIATIONS IN THE NORTHERN ZONE

The chronological and denominational variations outlined above demonstrate that it is inappropriate to apply a generalised model of monetisation and coin use throughout the province. Instead, the military and civilian status of each zone in the first to third century appears to have affected patterns of coin supply and usage. In the south, the third and fourth century emphasis of the per mill profile, which incidentally is characteristic of rural coin use, makes it difficult to interpret the significance of the early values. However, the widespread distribution of assemblages and the higher proportion of bronze denominations suggest some acceptance of currency without intrinsic value and adoption of coinage beyond forts and towns. In the north, assemblages are inextricably linked with the presence of the Roman army. As the army and administration were the main users of coin supplied to Britain in the first and second centuries AD, forts and towns have higher levels of early coin loss than other types of site. Therefore, the early Roman emphasis of the northern coin profile is significant, particularly as the peaks in coin loss between the Flavian and Severan periods (Period 4 to 11) coincide with the main thrust of military campaigning there (Tacitus Agricola; Cassius Dio Roman History; Herodian Roman History). It is also notable that later Roman coin loss is not a prominent feature of the northern per mill profile. This may suggest that following campaigning associated with the Roman invasion, there was little demand for, or usage of, coinage by the population at large – in other words, there was no widespread monetisation. It may also comment on the relative demilitarisation of the north in the late Roman period.

The dominance of the denarius in northern Britain may also reflect the military character of early Roman coin use in northern Britain. Military provinces such as Britain, Upper and Lower Germany and Pannonia are known to have received more silver coinage than civilian ones such as Gaul and Italy, and that individual sites with a military character tend to have bigger proportions of high value coins than established civil sites. Furthermore, the Vindolanda tablets, a series of accounts, receipts and letters which date to the early second century AD indicate an unusual preference for using the denarius as the main denominational unit of account. Of 28 published tablets which record amounts of money by denomination, 27

[21] The use of per mill values and mean values in general is not without methodological shortcomings. This is the problem of ‘closure’ whereby the relative proportions of coinage in each period are influenced by proportions in earlier and later periods (Lockyear 2007, p. 217).
[24] The sestertius is usually considered to be the usual denominational unit for accounting throughout the Western Empire (Reece 1987, p. 32; van Heesch 2007, p. 80).
employ the *denarius* as the main unit of accounting, even expressing lower denominations as fractions of the *denarius* rather than as *sestertii* or *dupondii*\(^{[25]}\). In fact, the *as* is the only bronze denomination used and is listed in 10 receipts in conjunction with *denarii* and in one example alone. This may suggest that the *denarius* was the main denomination in use at Vindolanda, in neighbouring forts with which it had dealings and in transactions with the local population.

Indeed, it is also possible that the high percentage of *denarii* in northern Britain to some extent represents the native attitude to Roman coinage in an area with no previous experience of money. In first century Germany, Tacitus noted that the native population in the frontier zone selected precious metal coinage in their dealings with the Romans (Tacitus *Germania* 5, 3–5) and finds of coins on native sites on the fringes of the Empire show a strong preference for *denarii* over bronze small change. For example, in Scotland, large hoards of silver *denarii*, such as that from Edston\(^{[26]}\), have been discovered during the excavation of native settlements. Their presence is not argued to be indicative of a monetary economy or trade, but of Roman diplomatic policy in frontier zones. They could be interpreted as targeted bribes by the Roman administration to troublesome areas which were then retained as prestige goods, acting as tokens for specialised transactions, for storing wealth and for displaying status with local society\(^{[27]}\). The presence of high levels of silver coinage may therefore represent recognition of their intrinsic value as silver objects rather than their use within a monetary system.

**NORTH AND SOUTH IN THE THIRD AND FOURTH CENTURIES AD**

Thus far, patterns of early Roman coin loss have been used to illustrate regional variation in the intensity of coin use in the first and second centuries and to suggest that the concept of a provincial monetary economy, embraced by all sectors of society, should be put to one side. But how, if at all, do things change in the late Roman period? The traditional view is that the changes in the denominational composition of Roman coinage in the late third century AD resulting in a plentiful supply of low value coinage, brought currency within the reach of rural populations for the first time. Instead of functioning as a unit of taxation and a mechanism for paying the army and administration, it was embraced in the rural marketplace and used in everyday exchange throughout the province\(^{[28]}\).

---


\(^{[26]}\) Holmes & Hunter 1997.

\(^{[27]}\) Hunter 2007, p. 218.

Figure 6 illustrates that this theory may be flawed, as the overall pattern of assemblages with above average coin loss in the fourth century AD remains much the same as it did in the first and second century AD. There is no widespread adoption of coinage in northern Britain, and profiles are almost all restricted to a southern zone. Furthermore, the fourth century does not see a continued increase and expansion in patterns of coin loss. In fact, as the fourth century progresses, there is a clear decline in the number of sites using coins and a contraction in their geographical extent. Figure 7 illustrates this decline. Assemblages with above average coin loss for the late third and early fourth century AD are located throughout the countryside, even away from major road networks. However, by the mid fourth century, there are fewer sites and there is a significant shrinkage in their distribution. By the end of the Roman period, assemblages are almost completely restricted to sites located on major communication and transport routes, particularly at nodal points such as cross-roads.

![Map of the distribution of assemblages with above average coin loss in the fourth century AD](image)

*Fig. 6 – The distribution of assemblages with above average coin loss in the fourth century AD*
Whilst the PAS does record substantial numbers of fourth century coinage in rural areas, an increased volume of coinage need not necessarily equate with widening participation in coin use and the development of a provincial monetary economy. The appearance of quantities of coinage in rural areas in the early fourth century AD could instead reflect changes in the way the Roman administration exploited the countryside and its agricultural output. Rather than reflecting widening participation in a monetary economy, this coinage could instead represent the pay of both officials and military units stationed throughout the countryside and tasked with extracting taxes in kind, such as the *Annona militaris* [29]. At a time when the Continent was suffering significant instability and the effects of barbarian invasion, it is possible that the Roman authorities would have wanted to establish and maintain a stranglehold over Britain’s agricultural resources [30]. With this in mind, it is worth noting the similarity in the distribution pattern of rural sites with above average mid to late Roman coin loss and late Roman belt fittings [31]. These fittings have been interpreted as the insignia of civilian administrators and local militias [32].

Large volumes of fourth century coinage and a peak in Valentinianic coin loss (AD 364 to 378) have already been noted to be characteristic of late Roman temple sites [33]. The PAS data continues to reinforce the relationship between prolific rural coin loss and religion. At sites such as Nether Wallop, Hampshire and Beedon, Berkshire, the coin assemblages are associated with objects with votive associations such as cut brooches and miniature objects,

---


whilst at the ‘near Salisbury’ temple site in Wiltshire[^34], 10% of the coins are mutilated or pierced with iron nails, probably indicating ritual activity. It is therefore possible that when coinage did eventually reach the rural population at large, it was offered to the gods, as part of numinous transactions, instead of being used in a rural monetary economy. Within this framework, large hoards of late third century radiates such as Cunetio[^35] and Frome[^36] could also represent the failure of coin use in rural areas coupled with a votive function.

**CONCLUSION**

This paper has illustrated the huge regional and chronological variation in patterns of coin use throughout the Roman period and has suggested that we need to think very carefully about how we interpret numismatic evidence in Roman Britain and why. The traditional model of monetisation which suggests the linear and widespread adoption of coin use culminating in a province-wide monetary economy is not necessarily borne out by the evidence. Coinage may have remained intimately linked to the payment of the army and administration and to fiscal policy. Whilst in southern Britain, there may have been something approaching a monetary economy or at least pockets of monetisation, particularly within urban centres and their environs, in the north, there is little evidence for the adoption of coinage as money outside military and administrative contexts. Indeed, it seems that it was possible to live in some parts of a Roman province, to be a Roman citizen and to pay taxes, and yet rarely to come into contact with coinage.

Strikingly one could argue that the Roman occupation had little effect on attitudes to and use of coinage. Indeed, when the distribution of coinage recorded by the PAS for the Late Iron Age, the late third century AD, the late fourth century AD and the sixth century are compared, it is striking how similar the patterns are. The regions which used coinage in the Late Iron Age are essentially the same as those which used it in the Roman period and beyond. The implications for our understanding of the impact of Roman rule and processes of cultural change within the province are massive.

[^34]: The ‘near Salisbury’ site is currently being excavated by a team comprising archaeologists from the University of Oxford, the University of York, English Heritage and the Portable Antiquities Scheme as part of the PAS Landscapes project investigating landscape change in the Roman period in the region.

[^35]: Besley & Bland 1983.

[^36]: Moorhead et al. 2010.
Fig. 8 – The distribution of a) Iron Age coinage; b) Period 14 coinage; c) Period 21 coinage; and d) Early Medieval sceattas.
BIBLIOGRAPHY


Reece 1991 = R. Reece, Roman Coins from 140 Sites in Britain. Cirencester, Cotswold Studies Volume IV.


