

“He will ruin many from among the people”: market exchange in the Byzantine Empire and the reform of Emperor Anastasius I

ABSTRACT

Emperor Anastasius I (491-518) reformed the copper coinage of the Byzantine Empire in the year 498. Previously, the low-value coinage of the Empire had been made up of tiny ‘nummi’, manufactured over the previous century and a half, each perhaps worth 1/7200 of the Empire’s gold solidus. The reform replaced these with a hierarchy of coins worth 40, 20 and 10 nummi, marked with their denominations. However, it is disputed whether the coins were made at specific weights, or if they were valued purely by their denomination, irrespective of size and weight. Unusually, written sources of the time refer to this coin reform. Historians have read these sources differently, some seeing the reports as positive but others emphasising contemporary condemnations of Anastasius as an oppressor of the poor. This paper argues that the negative portrayal is the correct one, and that it derives from the mismatch between these competing notions of face-value, fiduciary, coinage and coinage valued by weight. This conforms with recent work on the nummus coinage from all around the Mediterranean and helps explain the sources on Anastasius I in a new way.

The division between the entire Roman Empire and its eastern afterlife which is conventionally known to scholars as the Byzantine Empire is hard to draw in most spheres, since to the citizens, writers and rulers of the Byzantine Empire it was no such thing, but still the Empire of the Romans.¹ For numismatists, however, a conventional date of separation has long been noted at the year 498. In that year the Emperor Anastasius I introduced a new series of copper-alloy coins which were completely distinct from Roman coinage of the past, and that would more or less endure for another two centuries. This coinage reform has thus been held to commence ‘Byzantine coinage’, even though it ran alongside a gold coinage that was unchanged from nearly two centuries before.² Perhaps because the new coins are considerably easier to identify and work with than their predecessors, numismatists generally praise this reform as a work of enlightened policy.³ This paper will argue

¹ For recent thoughts on this issue see Averil Cameron, *The Byzantines, The Peoples of Europe* (Malden, MA: Blackwell Publishing, 2006), pp. 5–17; Stratis Papaioannou, ‘The Byzantine Late Antiquity’, in *A Companion to Late Antiquity*, ed. by Philip Rousseau and Jutta Raithel (Chichester: Wiley-Blackwell, 2009), pp. 17–28.

² Philip Grierson, *Byzantine Coins* (London: Methuen, 1982), pp. 1–3.

³ E. g. Grierson, *Byzantine Coins*, pp. 4 and 59–60, albeit with reservations (see n. 33 below); Michael F. Hendy, *Studies in the Byzantine Monetary Economy, c. 300-1450* (Cambridge: Cambridge University Press, 1985), pp. 475–78; Cécile Morrisson, ‘Monnaie et prix à Byzance du V^e au VII^e siècle’, in *Monnaie et finances à Byzance : Analyses et techniques*, by Cécile Morrisson, *Collected Studies*, 461 (Aldershot: Variorum, 1994), chapter III (pp. 239–60 at 243–44); A. D. Lee, ‘The Eastern Empire: Theodosius to Anastasius’, in *Late Antiquity: Empire and Successors, A.D. 425–600*, ed. by Averil Cameron, Bryan Ward-Perkins, and Michael Whitby, *Cambridge Ancient History*, 14 (Cambridge: Cambridge University Press, 2000), pp. 33–62 <<https://doi.org/10.1017/CHOL9780521325912.003>> (pp. 54–55); Peter Sarris, *Economy and Society in the Age*

that in fact the reform was not popular at the time, and that this was because Anastasius was attempting nothing less than to change the working principles of the Roman coinage from one of intrinsic to fiduciary value, which has not been fully appreciated.

The Detail of the Reform

When Anastasius I came to the throne in 491, he inherited a monetary system which had been in difficulties for more than a century. Runaway inflation during the third century had devalued the Roman silver coinage to the point where it contained almost no precious metal and, because of the loss of its value, had effectively replaced the copper-alloy small change of the high Empire.⁴ Reforms of the coinage under Emperor Diocletian (AD 284–305) established new, silvered copper coins as the default low-value coinage, and Emperor Constantine I (306–37) restored stability to the system by successfully establishing the gold *solidus* as the key to the imperial tax system, against which all other coins were reckoned, but this seems not to have arrested the depreciation of the low-value coinage, which in the century following Constantine I underwent persistent devaluation and shrinkage until the coins reached a normal weight of less than half a gram and a size smaller than most fingernails, with only vestigial precious metal content.⁵ Arguments over the stages and economic reasons for this depreciation of the coinage have been protracted, but the results of it are clearly visible in the surviving coin stock of the period.⁶ These *nummi* or *lepta* circulated for a considerable time; sixth-century sites in several places have produced coins from a century and a half's range. These were the small change of the Empire when Anastasius I succeeded in 491. Anastasius did issue his own *nummi*, but they cannot have been a great part of a coin population accumulated

of Justinian (Cambridge: Cambridge University Press, 2006) <<https://doi.org/10.1017/CBO9780511496387>>, pp. 200–201, again with reservations.

⁴ Hendy, *Monetary Economy*, pp. 468–75; Sylviane Estiot, 'The Later Third Century', in *The Oxford Handbook of Greek and Roman Coinage*, ed. by William E. Metcalf (Oxford: Oxford University Press, 2012), pp. 538–60.

⁵ On Diocletian's reform see Estiot, 'Later Third Century', 545–52; for later, see Richard Abdy, 'Tetrarchy and the House of Constantine' and 'Sam Moorhead, 'The Coinage of the Later Roman Empire 364-498', both in Metcalf, *Oxford Handbook*, pp. 584–600 and 601–32 respectively (esp. 619–24 of the latter).

⁶ Compare H. Adelson, 'The Monetary Deterioration in the Fifth Century', in *Proceedings*, ed. by A. Kindler (presented at The Patterns of Monetary Development in Phoenicia and Palestine in Antiquity, Tel-Aviv: Schocken Books, 1967), pp. 262–82; D. M. Metcalf, *The Origins of the Anastasian Currency Reform* (Amsterdam: Adolf M. Hakkert, 1969), pp. 10–11; Philip Grierson and Melinda Mays, *Catalogue of Late Roman Coins in the Dumbarton Oaks Collection and in the Whittemore Collection, from Arcadius and Honorius to the Accession of Anastasius*, Dumbarton Oaks Collection, 9 (Washington, DC: Dumbarton Oaks Research Library and Collection, 1992), pp. 11–15 and 40–47; Hendy, *Monetary Economy*, pp. 468–75, and Moorhead, 'Coinage of the Later Roman Empire', pp. 619–24, for different perspectives on the chronology of depreciation, the extent to which it was controlled by the emperors (with a steady transition in both aspects from most to least deliberate, Adelson to Moorhead), and the extent to which this was deliberate control of the economy by the emperors rather than uncomprehending reaction.

over such a range of issuers and periods.⁷ *Nummi* are therefore usually found, and must have circulated, in a badly worn state, making them hard to identify and unrewarding to study; interest in them has only lately begun to grow among numismatists.⁸

The value of these coins was extremely small. A law of the western emperor Valentinian III (425–55) promulgated in 445 demands that the *solidus* be sold for at least 7,000 *nummi* when bought for 7,200 from a money-changer, implying at least that this was a standard or acceptable rate of exchange, although also testifying to market variation.⁹ As it happens, the Greek historian Prokopios, writing of the time of Emperor Justinian I (527–65) gives figures which also testify to a rate of 7,200 *nummi* to the *solidus* somewhere in the period 527–48, in as much as he records a rate of 180 *φόλλεις* to the *στατήρος*, and the *φόλλεις* are taken to be Justinian I's large copper-alloy multiples, accordingly called *folles* by numismatists, which bear the number 40 (M) on their reverse; $40 \times 180 = 7,200$.¹⁰ It is too often overlooked that this was an adjustment of a rate which had previously been set at 8,400 *nummi* to the *solidus* (210 *φόλλεις* to the *στατήρος*), but despite that the general order of the rate of exchange seems clear.¹¹ In sixth-century Palestine, papyrological evidence allows us

⁷ For *nummi* of Anastasius I see Birmingham (UK), Barber Institute of Fine Arts, B0032, B0033 and B0034 <http://mimsy.bham.ac.uk/info.php?t=objects&type=ext&s=&maker=Anastasius+I&name_title=nummus> [accessed 4 March 2020].

⁸ Specific hoards are cited below (nn. 11, 16 and 40); for a synthetic approach see Sam Moorhead, 'Ever Decreasing Circles: The Nummus Economy at Butrint and Beyond', in *Νομισματική Και Οικονομική Ιστορία Στην Ηπειρο Κατα Την Αρχαιότητα. Numismatic History and Economy in Epirus during Antiquity*, ed. by Katerini Liampi, Cleopatra Papaevangelou-Genakos, Konstantinos Zachos, Angelika Dousougli and Athena Iakovidou (presented at the 1st International Conference Numismatic History and Economy in Epirus during Antiquity (University of Ioannina, October 3rd – 7th 2007), Athena: Εταιρεία Μελέτης Νομισματικής και Οικονομικής Ιστορίας, 2013), pp. 601–14.

⁹ Hendy, *Monetary Economy*, p. 477, with a translation of the whole law p. 365.

¹⁰ Procopius, *The Anecdota or Secret History*, ed. and trans. by H. B. Dewing, Loeb Classical Library, 290, 7 vols (Cambridge, Massachusetts: Harvard University Press, 1969), VI, pp. 294–97 (XXV.11–12).

¹¹ Historians dealing with the money of Anastasius I have, however, noted that his reformed coins, as will be discussed below, were issued in first a smaller and then a larger size almost double the previous, of which the larger were still being issued in the first years of Justinian I. It is therefore usually reasoned that, firstly that the change of size of *folles* under Justinian I in 538 explains the shift from 7,200 to 8,400 *nummi* per *solidus* (see Grierson, *Byzantine Coins*, pp. 60–1), and secondly that the rate of *nummi* to the *solidus* during the issue of the smaller coins of Anastasius I must have been double that of the rate which we therefore believe applied at the end of his reign and therefore to his larger coins. From this is usually derived a rate of 14,400 *nummi* to the *solidus* in the earlier part of Anastasius's reign (e. g. Philip Grierson, 'The Monetary Reforms of Anastasius I and Their Consequences', in Kindler, *Proceedings*, pp. 283–302 (285–86)—note that Grierson was more cautious by the time he wrote *Byzantine Coins*, where see p. 59—Metcalf, *Anastasian Currency Reform*, pp. 14–15, Hendy, *Monetary Economy*, 476–78, or Moorhead, 'Coinage of the Later Roman Empire', pp. 621–22, with justifiable confusion) to which Michael Hendy added the probability that the contemporary Vandal kingdom of Africa was using a rate of 12,000 *nummi* to the *solidus*, apparently confirming the plausibility of a Byzantine rate of 14,400:1 (Hendy, *Monetary Economy*, pp. 478–84 and esp. 478–79).

When examined together, however, the internal logic of this supposed system is riven with contradictions. In the first place, we are asked by it to accept that when Justinian I enlarged his coins the value of the *solidus* in *nummi* increased, but that when Anastasius I did so it decreased; and in the second place, the Vandal coins of 42 *nummi* are closer in size to Anastasius's large reformed coins but supposedly had a value more similar to the small ones. Such arguments also ignore that all the imperial multiples at issue in this argument were marked as being worth 40 *nummi* and circulated together, along with single *nummi* (as witness John H. Kroll, George C. Miles,

to state, a day's wages could be 5 *folles* (200 *nummi*) and 20 *lepta* (or *nummi*) would buy a loaf of bread.¹² The actual *nummus*, therefore, was worth almost nothing by itself by that time. Between *solidus* and *nummus*, moreover, lay only the *solidus*'s gold half and third fractions, the *semissis* (presumably worth 3,600 *nummi*) and the *tremissis* (2,400 *nummi*), and a very small number of silver *siliquae*, probably worth 100 *nummi* but likely, then as now, extremely rare.¹³ To cope with values between these relatively high-value coins and the tiny *nummi*, it seems that the latter were often used in bags, this being the original meaning of the term *follis*, which, unless they were opened and their contents counted at every use, were presumably reckoned by weight.¹⁴ By this means effective multiples could be created, not unlike the practice in China of reckoning cash by strings.¹⁵ Obviously it would then have been possible for unscrupulous users to replace individual coins or to make up weight with non-numismatic materials, and blanks and imitations are indeed sometimes found among *nummi* hoards, even though the gain from such fraud must have been very small.¹⁶ Since the coins themselves originated in such a long series of types and weights, standardisation must have been very lax in any case, and one supposes that the exact rate of exchange between bagged-up shrapnel and the gold coinage must have been a matter of on-the-spot negotiation on most occasions.¹⁷

To this somewhat chaotic situation, Anastasius's reform brought considerable clarity, which has been seen by many commentators as the end in itself.¹⁸ It is not clear whether he continued to issue single *nummi*, although they certainly continued in use, but the system was now supplemented with large coins worth 40, 20 and 10 *nummi*, values that they bore as the main element of the reverse design.¹⁹ The largest

and Stella G. Miller, 'An Early Byzantine and a Late Turkish Hoard from the Athenian Agora', *Hesperia*, 42.3 (1973), 301–11 <<https://doi.org/10.2307/147520>> (pp. 301–09), Howard L. Adelson and George L. Kustas, 'A Bronze Hoard of the Period of Leo I', *American Numismatic Society Museum Notes*, 9 (1960), 139–88 <<https://www.jstor.org/stable/43574114>> [accessed 4 March 2020], and Philip Guest, 'The Production, Supply and Use of Late Roman and Early Byzantine Copper Coinage in the Eastern Empire', *Numismatic Chronicle*, 172 (2012), 105–31 <http://orca.cf.ac.uk/44375/1/Guest_NC172_Offprint.pdf> [accessed 26 February 2017]), implying a bewildering simultaneous range of values for the *nummus* depending on the coin in question. The alternative proposed by this paper is simpler.

¹² Grierson, 'Monetary Reforms', pp. 298–99, with references.

¹³ On the *siliqua*, see Grierson, *Byzantine Coins*, pp. 56–59.

¹⁴ Hendy, *Monetary Economy*, pp. 338–42, following A. H. M. Jones, 'The Origin and Early History of the *Follis*', *Journal of Roman Studies*, 49.1-2 (1959), 34–38 <<https://doi.org/10.2307/297619>>.

¹⁵ Philip Grierson, *Numismatics* (Oxford: Oxford University Press, 1975), pp. 55–64, esp. p. 60.

¹⁶ Gabriela Bijovsky, 'The Gush Halav Hoard Reconsidered', *Atiqot*, 35 (1998), 77–105 <<http://www.jstor.org/stable/23458516>> [accessed 19 November 2017] (pp. 84–85); Barbara Burrell, 'A Hoard of *Minimi* from Sardis and the Currency of the Fifth Century CE', *Revue numismatique*, 6e série, 163 (2007), 235–82, DOI: [10.3406/numi.2007.2831](https://doi.org/10.3406/numi.2007.2831) (pp. 236–39).

¹⁷ As envisaged by Metcalf, *Anastasian Currency Reform*, p. 1.

¹⁸ See the works in 3 above but also Robert P. Blake, 'The Monetary Reform of Anastasius I and Its Economic Implications', in *Studies in the History of Culture: The Disciplines of the Humanities. A Tribute Presented to Waldo Gifford Leland*, ed. by Percy Waldron Long (Menasha, WI: G. Banta, 1942), pp. 84–97, at p. 90.

¹⁹ Grierson, *Byzantine Coins*, pp. 59–60; Hendy, *Monetary Economy*, pp. 475–92; Cécile Morrisson, 'Précis de numismatique byzantine', in *Byzance et sa monnaie (IVe–XVe siècle) : Précis de numismatique par Cécile Morrisson suivi du catalogue de la collection Lampart par Georg-D. Schaaf*, by Cécile Morrisson, Georg-D.

of these seems from contemporary texts—and it is significant that the reform was noted in texts, unusually for numismatic matters—to have been known as a *teruncianus*, *follaris* or *folleron*, although numismatists refer to them as *folles*, like the bags which they may have been meant to replace.²⁰

This arrangement, however, seems to have been relatively short-lived. In 512, probably, more new coins appeared, in the same denominations but nearly doubling the weight of the coins and adding a new 5-*nummi* piece at the bottom of the chain. There is no sign that the initial *folles* were removed from circulation, or indeed the old *nummi*, but apparently it had been felt necessary to make adjustments.²¹

Byzantine Sources on the Reform and Economy

As said, it is unusual enough for a single text to bear on a monetary reform in this period, but in this case we have three, which is some evidence for the significance of the reform's effects. The simplest of these is an anonymous Syriac notice, apparently from 512, which simply records: 'The emperor issued a coinage of forty, twenty, ten and five *nummi*'.²² This provides our date for the second reform in which the pentanommion was added to the system, but does not bear on the original one. More useful is the notice of John Malalas, writing seventy years later under Justinian I, that the reform was carried out by an appointee of Anastasius, John the Paphlagonian, as *comes largitionum*, roughly head of the treasury, who allegedly, 'made all of the current small change (*kerma*), the *lepton*, into *follera*, and ordered them to be current throughout the empire thereafter'.²³ The recall of *nummi* which this suggests is hard to credit, given the prolific continuing appearance of the coins in finds across the Mediterranean, but if *nummi* were now refused in payments by or to the state in favour of the new coins, the effect of that might be something very similar to a demonetisation as far as Malalas's sources were concerned. This, of course, would rather suggest that the state was no longer issuing *nummi* itself, but

Schaaf, and Jean-Michel Spieser (Paris: Lethielleux, 2015), pp. 7–104 (pp. 18–19). N. B. that I do not here address the question of chronological priority between Ostrogothic, Vandal and Byzantine invention of multiple *nummus* denominations; Hendy, as just cited, does so at length, with references.

²⁰ The texts are collected in Hendy, *Monetary Economy*, p. 476, and Morrisson, 'Monnaie et prix', pp. 243–44, and are all cited below.

²¹ Metcalf, *Anastasian Currency Reform*, pp. 100–01, discusses the circulation of the two kinds of coin together, and it is also visible in Kroll, Miles and Miller, 'Hoard from the Athenian Agora'.

²² *Chronica Minora*, ed. by E. W. Brooks, *Corpus Scriptorum Christianorum Orientalium, III: Scriptores Syri*, 240 vols (Leuven: Peeters, 1904), IV, p. 115: Morrisson, 'Monnaie et prix', p. 244, cites a Latin text, '*Edidit imperator monetam quadraginta nummorum et viginti et decem et quinque*', but the original was Syriac, so the origins of this Latin are unclear to me.

²³ Ioannes Malalas, *Chronographia*, ed. by Johannes Thurn, *Corpus fontium historiae Byzantinae Series Berolinensis*, 35 (Berlin: De Gruyter, 2000), p. 327 (XVI.12): 'Ἰωάννην τον Παφλαγόνα... ἀπαν το προχωρουου κέρμα το λεπτον ἐποίησεν φολλερα προχωρεῖν εἰς πᾶσαν την < Ρωμαϊκην κατάστασιν Ἐκτοτε.'

whether the detail in Malalas's account can be trusted so far is unclear, as *nummi* of Justin I are certainly known.²⁴

Likewise informative, but much more frequently quoted, has been the notice under the year 498, our source for the date of the reform, in the *Chronicle* of the Count Marcellinus. Translation of this notice is a matter of considerable importance, and so first I will simply give the Latin:²⁵

*“Nummis quos Romani terunciani vocant, Graeci follares,
Anastasius princeps suo nomine figuratos placibilem plebi commutationem
distraxit.”*

However statesmanlike this operation, however, it did little for Anastasius's immediate reputation. Anastasius, although praised by later imperial chroniclers for amassing a huge treasury surplus, was during his reign faced with repeated revolts and uprisings, perhaps unsurprisingly often related to tax burdens. Indeed, in 498 itself he had to abolish one particularly unpopular tax, the *chrysargyron*, and at some point in his reign, after the erection of an iron statue of him, had to endure the proclamation of a poem in the Hippodrome explaining that the statue had needed to be of iron, as if it had been of copper Anastasius would have ground it up into small change, a revealing if allusive accusation that seems to refer to another copper statue which had already been thus consumed.²⁶ More allusive still is a Greek prophetic text written during Anastasius's reign, the *Oracle of Baalbek*, which says of this emperor whom, narratively, it pretends to forecast:²⁷

*He is noble, terrifying, high-souled and liberal and hates all the
beggars. He will ruin many from the people either lawfully or unlawfully...*

²⁴ Grierson, 'Monetary Reforms', pp. 286–87, suggested that Anastasius stopped issuing *nummi* until the reform of 512, reasoning that the tiny size of *nummus* implied by the small *folles* would have been impossible to manufacture, but as will be argued below, this is to assume unnecessarily that the *folles* were intended to be valued by weight, and finds evidence, as noted by Kroll, Miles and Miller, 'Hoard from the Athenian Agora', pp. 307–308 n. 28 (which N. B. is free-standing, with no reference made to it in the body text), and Bijovsky, 'Gush Halav Hoard', p. 85, does not bear Grierson's suggestion out.

²⁵ 'Marcellini V. C. Comitis Chronicon ad A. DXVIII continuatum ad A. DXXXIV cum additamento ad A. DXLVIII', in *Chronica Minora saec. IV. V. VI. VII*, ed. by Theodor Mommsen, 3 vols, Monumenta Germaniae Historica (Scriptores: Auctores antiquissimi), 9, 11 and 13 (Berlin: Weidmann, 1892–98), II, 37–108 (p. 95, s. a. 498).

²⁶ Sarris, *Economy and Society*, pp. 200–01, collects these references, including the poem reported by Ioannes Lydus, *De Magistratibus populi romani libri tres*, ed. by Ricardus Wuensch (Leipzig: B. G. Teubner, 1903) <<https://archive.org/details/magistratibuspo00lyduuoft>> [accessed 2 November 2019], p. 135 (III.46); cf. Procopius, *Anecdota*, pp. 227–29 (XIX.5–9). We may note an undatable further reference to statues of the pagan gods avoiding being thus converted into small change (φόλλιν) in *The Greek Anthology*, ed. and trans. by W. Paton, Loeb Classical Library 67, 68 and 84–86, 5 vols (London: Heinemann, 1916–18), iii, 294–95 (no. 528).

²⁷ Paul J. Alexander, *The Oracle of Baalbek: The Tiburtine Sibyl in Greek Dress*, *Dumbarton Oaks Studies*, 10 (Washington, DC: Dumbarton Oaks Center for Byzantine Studies, 1967), p. 19 (“Ἔστι δὲ φαλακρός, εὐπρεπής ὡς ἄργυρος τὸ μέτωπον αὐτοῦ, τὴν δεξιὰν χεῖρα ἔχων μακράν, γενναῖος, φοβερός, μεγαλόψυχος καὶ ἐλεύθερος, μισῶν, πάντα τοὺς πτωχοὺς”), with trans. pp. 27–8.

Records like these make it very clear that Anastasius's fiscal prudence was achieved at a cost that, his people felt, was substantially borne by them.

Modern Writing about the Reform

Given this, it is remarkable how numismatists studying the reign have been determined to see Anastasius's reforms as well-intentioned and public-spirited. This has not always been the case: before the 1970s studies were more or less sure that the fiscal probity of the emperor would have hurt his populace.²⁸ Since then, however, whether because of capitalism becoming more self-assured or because of the numismatic urge to praise a system that brought a kind of order that we can enjoy to a coinage system we do not have to use, attitudes have swung the other way. This is nowhere more evident than in their use and translation of the quotation given above from Count Marcellinus. The tendency is easy to illustrate. In 1985, Michael Hendy, though no believer in Byzantine concern for the monetary needs of the people, translated the key phrase of this chronicle entry, "the emperor Anastasius sold an exchange that was pleasing to the people".²⁹ Cécile Morrisson likewise renders the line: "l'empereur Anastase offrit un change favourable au peuple" or 'agréable au peuple'.³⁰ Even economic historian Peter Sarris, immediately before a passage explaining how Anastasius's policies redounded badly on the poor, translates this passage: "the Emperor Anastasius brought a peaceful commutation to the people".³¹ Without the reference to Marcellinus, such views can be found even more widely; thus, A. D. Lee writes in the *Cambridge Ancient History* that, "the new coins made life easier for ordinary consumers by reducing the quantity of low-value *nummi* they needed to carry around."³²

Not all views of the situation have been so optimistic: Robert Blake, writing before any of these, balanced the possibilities and favoured the translation, "the Emperor Anastasius interfered with a form of exchange that was pleasing to the people" and Michael Metcalf likewise preferred to read Marcellinus as saying: "Anastasius... prevented the people from exchanging [their coins] as they pleased."³³ This certainly seems a more natural sense of the verb '*distrahere*', whose

²⁸ See for example Blake, 'Monetary Reform', esp. pp. 92-94 & 97, or Metcalf, *the Anastasian Currency Reform*, p. 13, but cf. Grierson, 'Monetary Reforms', p. 283: "One can fairly assume that commerce was facilitated by the monetary reforms of Anastasius..."

²⁹ Hendy, *Monetary Economy*, p. 476.

³⁰ Morrisson, 'Monnaie et prix', p. 244; Morrisson, 'Précis de numismatique', p. 19.

³¹ Sarris, *Economy and Society*, p. 200.

³² Lee, 'Eastern Empire', p. 55.

³³ Blake, 'Monetary Reform', p. 42; Metcalf, *Anastasian Currency Reform*, p. 1. Grierson, also, evinced scepticism, in *Byzantine Coins*, p. 59: 'Though these were more convenient than the old coins they did not altogether please the public', but did not there make it clear whence his reservation; I have not been able obtain his 'The Currency Reform of Anastasius', in *Atti del VIII Congresso Internazionale di Studi Bizantini, Palermo 3-10 aprile 1951* (Palermo, 1953), i, 374-75, but Metcalf, *Anastasian Currency Reform*, p. 13, indicates that views expressed there were similar to his own, and Grierson, 'Monetary Reforms', p. 287, indeed offers a more

default sense should surely be negative, as with most words beginning 'dis-',³⁴ and it would cohere rather better with the other sources on Anastasius's reign.

Why then would the new coins have presented the poor with problems? Morrisson, for example, supports her positive reading with the explanation that the coins' clearly-marked value must have simplified exchange.³⁵ The more cynical Hendy seems to have assumed that, because the new coinage proved stable in the long-term, it was considered favourably by our sources.³⁶ Even Sarris, clear in general that Anastasius's reign was bad for the poor, reads Marcellinus as understanding the reform favourably, reconciling these two positions by seeing Marcellinus as a member of the tax-receiving class who would have profited from the simplification of the fiscal machinery.³⁷

Economics and Weights

One obvious suggestion for an effect on the poor is that, by effectively setting all sums payable in values of ten *nummi* or its multiple, the new coins made anything that would once have cost less than this more expensive, which would explain why one of Anastasius's subsequent modifications was to introduce a smaller denomination too.³⁸ While many a medieval kingdom managed perfectly well without low-value coinage, in as urbanised a market setting as much of the Byzantine Empire one can imagine this having its effect.³⁹ However, this theory requires Malalas's suggestion that the old *nummi* were removed from circulation to hold, otherwise small sums would still have been possible to pay. Since the finds record is adamant that *nummi* continued in use, it does not seem that this can have

nuanced treatment defending the pessimistic reading of Marcellinus against emendation ("Such a cavalier treatment of the text is quite unjustified"), but still concludes, "after the necessary period of readjustment the creation of the follis must have made retail trade a much simpler affair than it had been before." See below for reasons why this may not have been true.

³⁴ Blake, 'Monetary Reform', pp. 92-94, examines this, and cites no less an authority than Theodor Mommsen (in 'Die Follarmünzen', in *Beiträge zur ältere Münzkunde*, ed. by M. Pinder and J. Friedländer (Berlin: Nicolaische Buchhandlung, 1851), i.1-2, pp. 123-131) as saying, „Ich verstehe nicht *distraxit*". *Distrahere* as 'to sell' appears to be a Western usage; it is so translated in *Mediae Latinitatis Lexicon Minus*, ed. by J. F. Niermeyer, 2 vols (Leiden: E. J. Brill, 1976), I, p. 342, but *A Latin Dictionary*, ed. by Charlton T. Lewis and Charles Short (Oxford: Clarendon Press, 1879)

<<http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.04.0059%3Aalphabetic+letter%3DD%3Aentry+group%3D45%3Aentry%3Ddistraho>> [accessed 2 November 2019], makes clear that this derives from a sense, 'to break up for sale', with more primary meanings including 'To pull asunder, tear in pieces, to separate forcibly, divide' and 'To tear away, draw away, part, to separate, remove'.

³⁵ See n. 20 above.

³⁶ See n. 20 above.

³⁷ Sarris, *Economy and Society*, pp. 200–01.

³⁸ Grierson, 'Monetary Reforms', p. 287.

³⁹ See Cécile Morrisson, 'Weighing, Measuring, Paying: Exchanges in the Market and the Marketplace', in *Trade and Markets in Byzantium*, ed. by Cécile Morrisson (Washington DC: Dumbarton Oaks Research Library and Collection, 2012), pp. 379–98.

been the problem.⁴⁰ One might argue instead that the smoother the operations of the imperial tax system, the more effectively its burden would fall upon the ordinary citizen, and thus link the reforms again to Anastasius's growing state surplus, but as many an economic historian of the Empire has pointed out, the poor probably had more to fear from inefficient tax collection than efficient.⁴¹ Peter Sarris explains the likely effects of the coinage changes as follows:⁴²

"The small-denomination coinage overhauled by the emperor represented that portion of the currency most commonly used... by the urban poor and by unskilled casual labourers. Any tampering with the bronze coinage and, in particular, any diminution of its rate of exchange against the solidus, in which taxes and rents were reckoned, risked being interpreted by the poor as an attack on their meagre standard of living."

This, also, makes sense in its own terms, but there is no indication in any of our sources that the rate of exchange of *follis* to *solidus* had been altered by the reforms; as discussed above, that was only scholarly assumption.

A more likely problem, therefore, is the rate of exchange between old and new *follis*. This should not, technically, have been a problem: the new coins stated clearly how many *nummi* they were worth. The question is of course whether users of the coins agreed. We have mentioned above how the bagged *nummi* that constituted the old small change system must have moved mainly by weight. Let us now explore the implications of that further. A great variety of weights of *nummi* are known, but since they usually occur in large numbers (and are perhaps often not found or recognised when single), averages are easy to extract from different reports. A quick sample of different hoards or assemblages (using only imperial money, as far as samples could be identified) produces averages of 0.61 g, 0.75 g, 0.72 g, 0.61 g, 0.66 g,

⁴⁰ To Kroll, Miles and Miller, 'Hoard from the Athenian Agora', Bijovsky, 'Gush Halav Hoard', and Moorhead, 'Ever-Decreasing Circles', add Howard L. Adelson and George L. Kustas, 'A Sixth Century Hoard of Minimi from the Western Peloponnese', *American Numismatic Society Museum Notes*, 11 (1964), 159–205 <<http://www.jstor.org/stable/43573737>> [accessed 4 November 2017] and Cécile Morrisson, 'La trouvaille d'Aïn Kelba et la circulation des minimi en Afrique au début du VI^e siècle', in *Mélanges de numismatique, d'archéologie et d'histoire offerts à Jean Lafaurie*, ed. by Pierre Bastien and others (Paris: Société française de numismatique, 1980), pp. 239–48 <http://www.academia.edu/6553569/La_trouvaille_dAïn_Kelba_et_la_circulation_des_minimi_en_Afrique_au_début_du_VI_siècle> [accessed 18 October 2017], among others.

⁴¹ Views differ considerably on the efficacy and progressiveness of Byzantine taxation. Compare any of Cécile Morrisson, 'La Logarikè : réforme monétaire et réforme fiscale sous Alexis I^{er} Comnène', in *Monnaie et finances à Byzance : Analyses et techniques*, by Cécile Morrisson (Aldershot: Variorum, 1994), chapter VI; M. F. Hendy, 'Aspects of Coin Production and Fiscal Administration in the Late Roman and Early Byzantine Period', *Numismatic Chronicle*, 7th Series, 12 (1972), 117–39; Nicolas Oikonomides, 'The Role of the Byzantine State in the Economy', trans. by John Solman, in *The Economic History of Byzantium from the Seventh through the Fifteenth Century*, ed. by Angeliki E. Laiou, 3 vols (Washington, DC: Dumbarton Oaks Research Library and Collection, 2002), III, 973–1058, or Vivien Prigent, 'The Mobilisation of Fiscal Resources in the Byzantine Empire (Eighth to Eleventh Centuries)', in *Diverging Paths? The Shapes of Power and Institutions in Medieval Christendom and Islam*, ed. by John Hudson and Ana Rodríguez López, *The Medieval Mediterranean*, 101 (Leiden: Brill, 2014), pp. 182–229.

⁴² Sarris, *Economy and Society*, p. 201.

1.05 g and 0.63 g.⁴³ It seems reasonable, therefore, to posit a floating average for *nummi* of around 0.72 g. In that case 40 *nummi* would weigh approximately 29 g bagged up. The new coins introduced in 498, however, weighed somewhere over 8 g, less than 40 of all but the tiniest *nummi* from any of those hoards.⁴⁴ Wherever transaction was now normally done by weighed coin, these would have been suspicious items and quite possibly hard to exchange. It is very easy to imagine a scene being repeated in many markets in which holders of the old currency, afraid that they would not be able to exchange the new coins for their notional worth in a by-weight transaction, attempted to refuse them or to retain their old *nummi*.⁴⁵ The advantage to the state is of course obvious: the metal from the old coins would have more than supplied that for the new issues, even if the mint did not charge for the exchange, which it surely did.⁴⁶ That the coin-using population were getting less metal back from the mints and money-changers must also have been obvious to them, and it was at the level of transactions of a small number of *folles*, or even of *nummi*, where these effects would be felt, that is, among the poorest and most ordinary folk of the city. Blake observed sharply that such persons would have been forced by a recoinage to exchange their limited savings at a loss; but even if this were not a recoinage as such, they were still being deprived not just of the ability to negotiate whatever exchange they liked between small change and state money, but were also deprived of access to any markets or transactions where coinage still moved by weight, at least until the new coinages won acceptance.⁴⁷

In this light it is easy to see why Anastasius I might subsequently have increased the weight of the new multiple coins. After nearly twenty years of use the 'exchange' that he had supposedly 'sold' the people must have brought in a considerable amount of base metal. The new coins, now easily manufactured from the state's stocks of metal, were closer to actually weighing the same as 40 old *nummi*: the average weight of 15.77 g from a sample available to me implies a

⁴³ Averages derived from Adelson and Kustas, 'Sixth Century Hoard' (0.61 g); Cécile Morrisson, 'Nummi byzantins et barbares du VI^e siècle', in *Χαρακτήρ: Αφιέρωμα στη Μαντώ Οικονομίδου* (Athena: n. p., 1996), pp. 187–92 <http://www.academia.edu/3446560/Nummi_byzantins_et_barbares_du_6e_siècle> [accessed 14 January 2016] (p. 188: 0.75 g, 0.72 g, 0.61 g and 0.66 g); Bijovsky, 'Gush Halav Hoard' (1.05 g); and Burrell, 'Hoard of Minimi' (0.63 g).

⁴⁴ Average of weights of the coins of Constantinople of this type now preserved as Birmingham (U. K.), Barber Institute of Fine Arts, B0035–B0054 (19 coins); Metcalf, *Anastasian Currency Reform*, with a larger sample including most of the Barber coins, also suggested an average of 8–9 g (pp. 87–88).

⁴⁵ Grierson anticipated parts of this argument: see his 'Monetary Reforms', p. 287 ("It is also quite possible that the original series of multiples were too light to circulate at their face value and that the immediate consequence of the reform was monetary confusion and widespread discontent", though cf. n. 33 above) or his *Byzantine Coins*, p. 59 ("in weight [the new coins] were far from being proportional to the old nummus...") but still thought that the new coins' weight must relate to some other value (*ibid.*, p. 60).

⁴⁶ Blake, 'Monetary Reform', is clear on this, although he seems to have missed the point that, given the weight disparity, the state could have doubled the *face* value of coinage in circulation while still not using all of the metal it would have received in exchange for it. Since Blake, however, the point seems to have been lost.

⁴⁷ *Ibid.*, p. 97; cf. Metcalf, *Anastasian Currency Reform*, p. 13: "The reformed coins, marked with their value, would have put an end to such haggling."

nummus of 0.39 g, still light for the currency, but considerably more than the 0.16 g of the original *folles*.⁴⁸

If there were still difficulties in imperial marketplaces where face value met value by weight, then, these coins might have done much to erase it, but only if the value of both old and new coins relative to the *solidus* was the same. Some authors have supposed that the new coins, being double the weight of the old ones, must have been tariffed to the gold coin differently, even though both sizes of coin circulated together, but this is to impute to the Empire the very same value-by-weight for its multiple coins that Anastasius had undercut with his new face-value coins in 498.⁴⁹ What these new coins in fact show us is that the empire had now reached the point of fiduciary coinage, where it could set a face value for its small change which did not relate to its metal content, and could therefore afford to issue some coins that would also sustain other systems of exchange.⁵⁰ One doubts that this measure alone repaired Anastasius's reputation in his times; but it may well have been part of how that reputation has come to be so glowing in our times. That reputation is, of course, based on sources which praised the thrifty emperor in order to dispraise the spendthrift Justinian I, which should also be considered.

The Purpose of the Reform

Such a reputation was probably not Anastasius's goal with his coin reform, of course. What that goal was remains elusive. Almost all commentators have assumed that the new coinage was intended to simplify accounting and exchange in the empire's markets, but in the light of the above deductions this must be questioned. Despite Grierson's opinion that, "the creation of the follis and its fractions must have made retail trade a much simpler affair than it had been before", it is hard to imagine a simpler system than one entirely based on weight of metal, without any further arithmetic required.⁵¹ Only the shift to face-value implied by the new coins would have made this system inconvenient, as otherwise *nummi* did not need to be counted, only weighed. All the difficulties of such a system in the market would thus have been created by the coinage reforms, not resolved by them.

The late Michael Metcalf, in a work on these problems as full of unjustifiable deductions as brilliant suggestions, was the lone voice in opposition to this view that the new coins were for commercial convenience. He noted that they are relatively

⁴⁸ Average of weights of coins of this type from Constantinople in University of Birmingham, Barber Institute of Fine Arts, B0088–130 (43 coins).

⁴⁹ E. g. Grierson, *Byzantine Coins*, p. 60; Hendy, *Monetary Economy*, pp. 477–78.

⁵⁰ Cf. Cécile Morisson, 'La monnaie fiduciaire à Byzance, ou « Vraie monnaie », « Monnaie fiduciaire » et « fausse monnaie » à Byzance', *Bulletin de la Société française de numismatique*, 34.10 (1979), 612–16 <http://www.academia.edu/3459557/La_monnaie_fiduciaire_à_Byzance> [accessed 9 October 2017], or Prigent, 'Mobilisation of Fiscal Resources', p. 190.

⁵¹ See n. 33 above.

few in preservation compared even to the shorter-lived issues of larger *folles* of Anastasius I, and also argued from their apparent distribution that the coins are predominantly found in frontier provinces. From this he argued that their actual purpose was not as small change for the markets, but for the army, whose wages in gold had to be changed down into base-metal coinage to be spent.⁵² Although Metcalf's view was not picked up by his contemporaries, newer studies of coin finds along the Byzantine fortification line through the Balkans have also strongly suggested such a distribution for the enlarged *folles* of Justinian I, as army pay first and foremost and circulating from those forts to everywhere else, and this seems to confirm the plausibility of Metcalf's suggestion even if his own distribution information was quite dubious.⁵³

The benefits of the reform would then presumably have been the cost of transporting the coins to the army's deployments, considerably reduced by the lower mass of metal now involved in counting out fractions of a *solidus*, and the invulnerability it gave army wages to the market value of the gold coinage; a *solidus* would now be exchanged for 180 (or 210) of the new coins irrespective of its local worth in *nummi*, and every soldier's wage would thus be directly comparable. Of course, the ordinary imperial citizen would have had very little choice about accepting the new coins as payment if it was the army offering them, but would still not necessarily have found them easy to exchange in a weight-based market system. The army might then have been paying its way in coins the sellers could hardly use, which would probably explain some of the discontent to which our sources testify.

Follis or Follaris

A short digression on the name of these coins may also be worthwhile. As said above, and indeed imitated, it is standard practice in Byzantine numismatics to call the reformed coins of Anastasius *folles*. Although this term appears to have been used by Prokopios (φολλεις), his approximate contemporary Malalas preferred *follera* (φολλερα) and Marcellinus, writing only slightly earlier, referred to *folares*.⁵⁴ The universal adoption of the term *follis* has doubtless been because of its plentiful attestation as a unit of currency, even if that unit was initially non-, or at least sub-monetary, being as mentioned a bag of coins. Extensive work has gone into reconstructing the value of the old-fashioned *follis*. Jones long ago argued that the

⁵² Metcalf, *Anastasian Currency Reform*, pp. 5–7 and 95–99.

⁵³ Andrei Gândilă, 'Early Byzantine Coin Circulation in the Eastern Provinces: A Comparative Statistical Approach', *American Journal of Numismatics*, 2nd Series, 21 (2009), 151–226 <https://www.academia.edu/349317/Early_Byzantine_coin_circulation_in_the_Eastern_Provinces> [accessed 4 July 2015]; Florin Curta and Andrei Gândilă, 'Hoards and Hoarding Patterns in the Early Byzantine Balkans', *Dumbarton Oaks Papers*, 65/66 (2011), 45–111 <<https://www.jstor.org/stable/41933704>> [accessed 30 July 2014]; Andrei Gândilă, 'Heavy Money, Weightier Problems: The Justinianic Reform of 538 and Its Economic Consequences', *Revue Numismatique*, 168 (2012), 363–402 <<https://doi.org/10.3406/numi.2012.3186>>.

⁵⁴ See nn. 10, 25 & 23 above respectively.

denomination, or rather substitute for a denomination, became necessary when the buying power of the debased silver coin known to numismatists as an *antoninianus* became so small that it could not be spent individually.⁵⁵ He assembled a myriad of citations from papyri and other textual references that appear to testify to a range of values, of uncertain fourth-century dates, for the *follis* between 1/7 and 1/1500 of a *solidus* (and even one, which he did not integrate into his argument, suggesting a *follis* worth 3½ *solidi*!), and by assuming that these values formed a sequence used them to suggest a substantial progressive depreciation in the value of the *follis* over the fourth century.⁵⁶ To this, Howard Adelson added figures for the fifth-century value of the unit, which ranged between 1/192 and 1/1500 of a *solidus*, the former dating to around AD 392 and the latter to AD 500.⁵⁷ Key in both scholars' arguments was a mosaic depiction of money-bags in the Piazza Armerina in Sicily; the bags are both labelled with the number 12,500.⁵⁸ Jones, in particular, argued that each bag was in fact a *follis*, which he argued was then comprised of 1,000 *denarii*, with a *nummus* then worth 1/12 of the notional *denarius* so that 12,500 would make the *follis*.⁵⁹ In fact, of course, it would make 12,000 coins, not 12,500, but even if the arithmetic were adjusted to a *nummus* of 12½ *denarii*, it still seems unlikely that the bags in the mosaic depict a standard unit.⁶⁰ If the bags were in fact each 1 *follis*, and that a regular unit of account, one would surely expect the bags to be numbered with 1, not with their value in *nummi*. In fact, as Jones indeed recorded, money-bags with many other values on can be found in similar depictions, so no standard value can be assumed; the one at the Piazza Armerina has become famous merely because it can be used to argue for a mathematically plausible value for the *follis*, for which it is not, however, independent evidence.⁶¹

Adelson's figures were in any case all extremely questionable deductions from unpromising materials, and do not match Jones's in any reliable particular, but for numismatists the problem arises that Anastasius's supposed *folles* were worth probably 1/180 of a *solidus*, as argued above, rising above even the very highest value given the *follis* in any of these debatable arithmetical deductions. Was this yet another respect in which the coins disappointed market expectations, being not just underweight but considerably over-valued? It may be so, but it is perhaps more reasonable to take the texts at their exact word and to call the new coins *follares* or

⁵⁵ Jones, 'Origin and Early History of the Follis', p. 34.

⁵⁶ *Ibid.*, pp. 34–38 with 1/7 at p. 36, 1/1500 at p. 37 and 1:3·5 at p. 35 (in 393, at the end of the supposed sequence!).

⁵⁷ Adelson, 'Monetary Deterioration', pp. 266–74, with 1/180 at p. 274 and 1/1500 at pp. 270–271.

⁵⁸ The mosaic can be seen at 'Villa Romana del Casale roman villa in Piazza Armerina, Sicily; home to stunning Roman mosaics', *Sicily Visitor* <<https://www.sicily-visitor.com/places/piazza-armerina.php>> [last modified not specified as of 4 March 2020].

⁵⁹ Jones, 'Origin and Early History of the Follis', p. 34.

⁶⁰ Adelson, 'Monetary Deterioration', pp. 265–66, performs the necessary adjustment to the arithmetic but accepts the idea that the bags are *folles*.

⁶¹ Jones, 'Origin and Early History of the Follis', p. 34 n. 1.

follera. If Malalas or Marcellinus had meant to call them *folles*, they could presumably have done so; the fact that they did not suggests that that is not what the coins were worth. Indeed, the whole purpose of the coins, as argued above, may have been to disassociate their value and thus the value of the *solidus*, even if perhaps only in the context of military pay, from the floating and unstable value of the weighed bag of coins that is what the *follis* apparently still was in many places. Despite its acceptance in the literature, numismatists might be well advised to cease the use of the word *follis* for Byzantine coins.

Conclusions

By the time that Anastasius I introduced his new copper-alloy multiple coins into the Byzantine monetary system, it had been operating with no common denomination of a value between a single *nummus* and several thousand *nummi* for most of a century without apparently causing the state difficulty. The economy based on this system must perforce have exchanged such intermediate sums by weight, since counting individual coins to any great value would have been extremely tedious. Anastasius's new coins, however, were issued at a face value which did not relate to their weight in metal. Scholars should probably avoid the name *follis* for these coins, which contemporaries called *follares*; as far as can be told, they exceeded the value of a *follis*, which was in any case changeable, whereas the new coins' value was fixed.

We do not know what prompted Anastasius thus to intervene in the currency. It has been suggested that the value of the *nummus* had finally dropped below a critical level, but that coin had already clearly become unusable singly and the Ostrogothic and Vandal kingdoms seem to have felt the same need for copper-alloy multiples at around the same time (though their coins were not of the same value or weight).⁶² Nonetheless, by introducing the new coins Anastasius seems to have added significantly to an existing reputation for fiscal policies which hurt the poor and enriched the state coffers. One text referring to this has been persistently misread by numismatists and historians who prefer to see state intervention in the economy as beneficial for the population. The coin reform of Anastasius was not such a change, however. Its purpose is not certain, but it may well have been intended only to ease and regularise supply of spending money to troops of the imperial army on deployment. Whether the coins arrived in the exchange system from the army or by other means, however, their low weight compared to their equivalent in single *nummi* must have caused great difficulties in the weight-based market system. Anastasius's subsequent increase of the size of the coins may have ameliorated this problem, but only once a considerable quantity of metal had been built up by the exchange by the state of new coins for old *nummi* or *lepta*. Whatever

⁶² Speculations in Adelson, 'Monetary Deterioration', pp. 281–82, and see n. [19] above on the non-imperial multiples.

its purpose, we should see this reform as one of the ways in which Anastasius was supposedly prophesied to 'ruin many from among the people'.