Cécile Morrisson

Coin use in Byzantine cities and countryside (6th-15th centuries): a reassessment

The often cited words of John Chrysostom: »The use of coins welds together our whole life and is the basis of all our transactions. Whenever anything is to be bought or sold, we do it all through coins«[1] tell how the availability of coins for daily transactions and exchanges was, as it still is, a prerequisite of trade and prosperity. Conversely, the lack of them, the *endeia khrèmatos*, was a »disease and a cause of injury« to fight by all means. In his Novel LII, the emperor Leo VI blames his predecessors who decided that only their own coins would be current, demonetised those of their predecessor and failed to recognise the »damage which resulted for everyone (...). For the great number of merchants, and of those living by their hands, and the whole of the farming class, were put to the greatest degree of difficulty and need, not possessing the means of acquiring, in any other way, the necessities of life, when what previously had been the basis of their support [i.e. coin] disappeared«[2]. Constantinople was clearly dependent on an appropriate money supply for its daily life. Its religious and civil authorities, the 4th century patriarch and the 10th century emperor alike, were well aware of the importance of »monetisation« although the Greek equivalent of the word did not yet exist[3].

Economists today define monetisation as the commercialised percentage of the GDP, gross domestic product (Ym/Y). This differs from the level of liquidity, which is the ratio of money to GDP (M/Y). In modern economies M, money, includes not only M1, metallic money, and easily convertible deposits like checking accounts, traveller's checks etc., but also M2, that is, M1 + quasi-coins of various duration like savings and fixed-term deposits. Bank accounts were not unknown in Byzantine times but were probably convertible deposits and may be included in the classic conception of M1.

Based on evidence collected in *The Economic History of Byzantium* and the advice of economists, Angeliki Laiou proposed a simplified model of what the economy may have looked like in the first half of the 12th century, a model which would probably also have applied in the early 6th century: agriculture represents 75 % of domestic production and is 35 % monetised, while the non-agricultural sector (25 % of domestic production) is 80 % monetised (**tab. 1**)[4].

This gives a national product monetisation ratio (Ym/Y) of some 46 % (46.25 %) and a ratio of non-agricultural monetised product to total monetised of some 43 % (43.24 %).

This estimate, which is more than an educated guess, only applies to the two more prosperous periods of Byzantine history. It encapsulates the contrast between the highly monetised urban areas and the less monetised rural areas. This contrast overlaps but is not identical with the well-known opposition between coastal regions and inland ones, where monetised trade and exchanges are hindered by transportation costs[5]. According to Gregory of Nazianzen, the situation when there was a famine in 4th century Cappadocia was as follows: »the city [Caesarea] was hard pressed for there was neither aid from anywhere, nor was there a remedy for the evil. Now the coastlands bear such scarcities with no difficulty giving of their own and receiving by sea. But for us who live inland, both a surplus is unprofitable and a need is unsatisfiable, not having the means to export what does exist, or to import what does not exist«[6]. The situation was similar in 13th century Paphlagonia, where an increased fiscal demand in cash from Michael VIII created a crisis: »For although the land particularly easily yielded useful things, it only sparsely yielded coinage, which resulted in pressing needs for all the farmers. For the tax-headings having been reckoned in terms of gold and silver coins, they [the Paphlagonians and those who were even more distant] were driven to give their stock [of coin] out of necessity«[7].

Texts like these or the famous relation of the commutation (*adaeratio*) of tax from payment in kind (wheat, millet and wine) to cash, which prompted the Bulgarians to revolt in 1040[8], are not the only evidence for regional differences in liquidity. Coin finds provide a less anecdotal and more precise

1 Joh. Chrys. hom. 25 in quaedam loca Novi Testamenti 99, engl. in: Barnish, Julianus Argentarius 37.
2 Leo VI, Novellae 199-201.
3 Modern Greek uses εκχρηματισμός.
4 Laiou, Economic History of Byzantium III 1146-1147.
5 Morrisson, Routes fluviales et maritimes 633-634.
6 Greg. Naz. or. XLIII,34, cols. 541. 544, engl. transl. in: Hendy, Studies 296.
7 Geōrgios Pachymerēs III,246-249.
8 Geōrgios Kedrēnos, Synopsis historiarum II,530.

GDP	Agricultural	Nonagricultural	Total
Monetised	26.25	20	46.25 (Ym)
Nonmonetised	48.75	5	53.75 (Ynm)
Total	75	25	100 (Y)

Tab. 1 A simplified model of the monetised and nonmonetised economy in Byzantium in the 1st half of the 12th c.

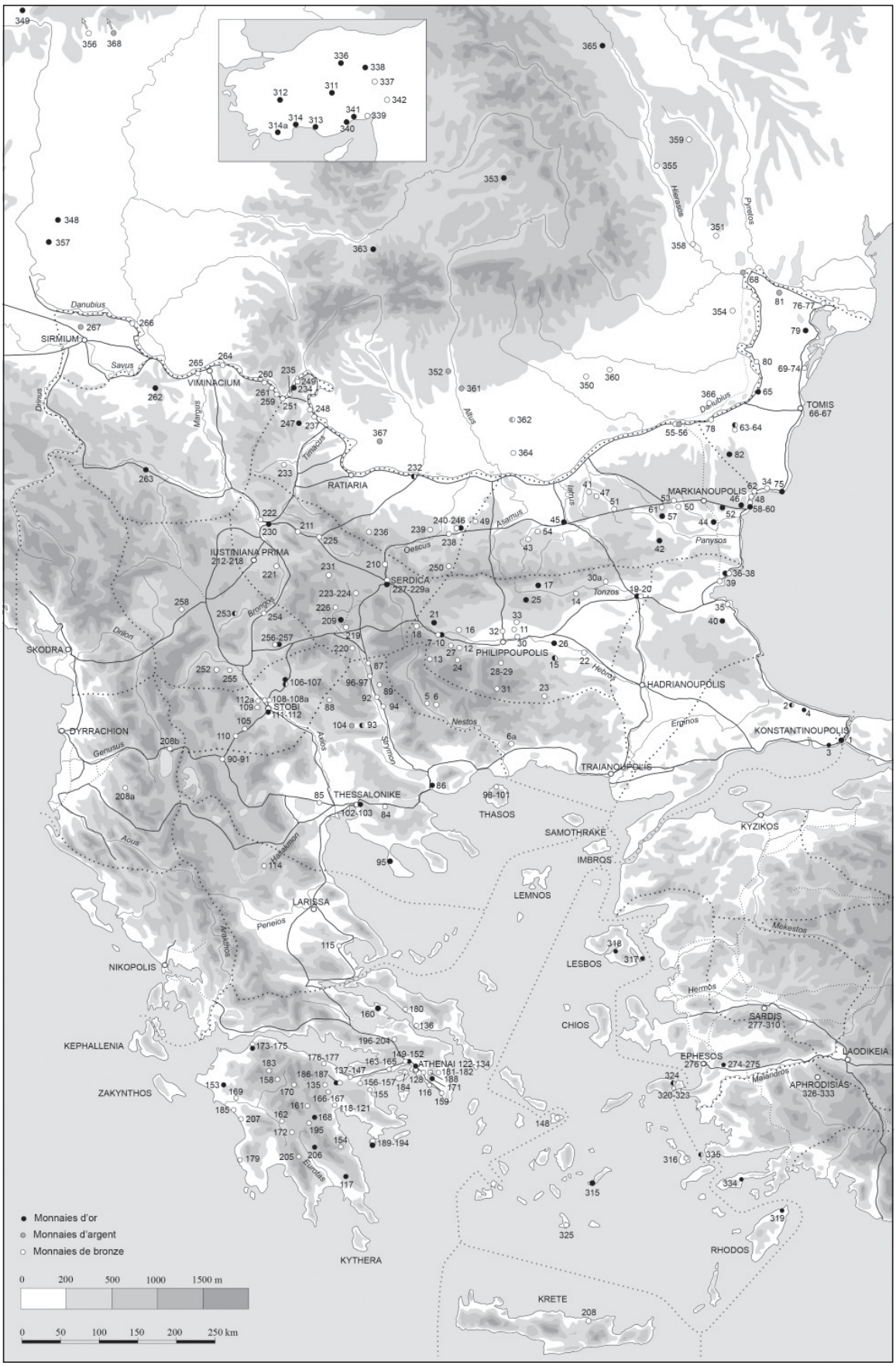

Fig. 1 Location of coin deposits in the Balkans (491-717). – (After V. Ivanišević, in: Morrisson/Popović/Ivanišević, Trésors carte hors-texte 2).

representation. For instance, in the Balkans (**fig. 1**)[9], a region where numismatic information is rather satisfactory, Vujadin Ivanišević's map of early Byzantine coin finds shows a typical concentration in coastal regions (Peloponnese) and main valleys (Danube, Hebros/Maritsa, Strymon, the Margus/Morava and Axios/Vardar axis). It is true that this map is only a proxy and could be rejected on the grounds that it is not based on stray finds but on the four hundred or so (372) »hoards« in the inventory of our book. However, most of these deposits (272) are copper: they range from a handful of minimi or lots containing a few folles to the 600 folles and half-folles of the Serbian find of Prahovo (okr. Bor/SRB) or the 126 mixed denominations of the Spetsai/Zogeria find and the majority are of minimal value. Small change is indeed the best index of active daily transactions and for base metal, the distribution of collective finds (»hoards«) and that of stray finds is usually similar. Witness the map of Egyptian hoards and stray finds drawn by Hans-Christoph Noeske in his monumental book on the dioceses of Aegyptus and Oriens (**fig. 2**)[10]. The same coincidence can be observed on maps of Byzantine coin finds in Central Europe published recently in the monumental and excellent volume edited by Marcin Wołoszyn: for example, regarding finds in Bohemia and Moravia[11]. The distribution of single finds and »group finds« broadly overlaps and marks out the main natural routes along the rivers (Elbe, Morava, to a lesser degree Vltava) and the passes in the White Carpathians.

Until recently, the circulation of coins in rural areas has rarely been studied *per se*. Fifteen years ago, the *incontro di studio*, entitled ›La moneta in ambiente rurale‹, conducted in Rome in 2000 by Paolo Delogu and Sara Sorda[12] opened up the discussion. It included several papers which, on the basis of the abundant Italian archives, insisted on how, in the 12th to 14th century countryside, either in Lombardy or Tuscany, as well as in South Italy, coins were used for buying land, investing in it, trading its products and paying taxes or salaries. Several papers asserted that textual documentation of the Western Later Middle Ages enables historians to assess the extent of monetisation and even to trace the relative number of monetised and non-monetised exchanges, although no attempt at quantification was made[13]. Numismatic material appeared unsatisfactory to our Italian colleagues, mainly because of the massive destruction of archaeological layers by road construction and other agricultural works and the looting of the remainder by *tombaroli* or detectorists[14]. This pessimistic picture stood in great contrast to the situation in some Scandinavian countries and Great Britain where numismatic discoveries in the last decade have led to a complete reversal in the assessment of the degree of monetisation of

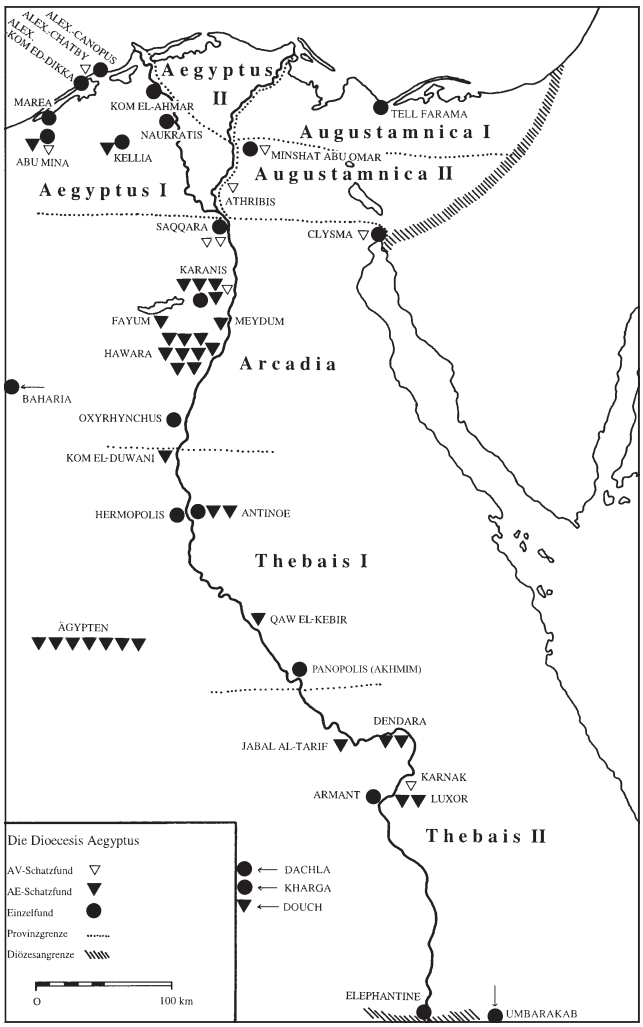

Fig. 2 Hoards (triangles) and stray finds (large dots) in the Diocese of Aegypt (4th-8th c.). – (After Noeske, Münzfunde Beil. 1).

the economy in the Anglo-Saxon period[15]. However, in some parts of Italy, the scarce and biased textual documentation of the Early Middle Ages is being supplemented by the results of emergency or planned excavations. They provide some examples of documentation for the comparison of the respective monetisation of urban and rural sites and highlight its parallel increase, starting first with the Ottonian deniers in the late 10th century and extending dramatically until the mid-12th century[16].

There were attempts to make more factual inroads at the 2001 International Congress of Byzantine Studies during the course of several sessions devoted to villages[17]. Seven numismatic contributions were included in the proceedings. Before discussing their conclusions, it is important to first mention a few points about our documentation, as well

9 Morrisson/Popović/Ivanišević, Trésors carte hors-texte 2.
10 Noeske, Münzfunde III fig. 1.
11 Militký, Finds 358 fig. 1.
12 Delogu/Sorda, Ambiente rurale.
13 For Antiquity see Callataÿ, Quantification. I am grateful to François de Callataÿ for giving me access to his text before publication.
14 Arslan, in: Delogu/Sorda, Ambiente rurale 119-125, citing Sorda, Storia mutilata.
15 Moesgaard, Monnaies à la campagne. – Moesgaard, Single finds. – Mayhew, Countryside
16 Rovelli, Coins and trade.
17 Lefort, Villages 9-28.

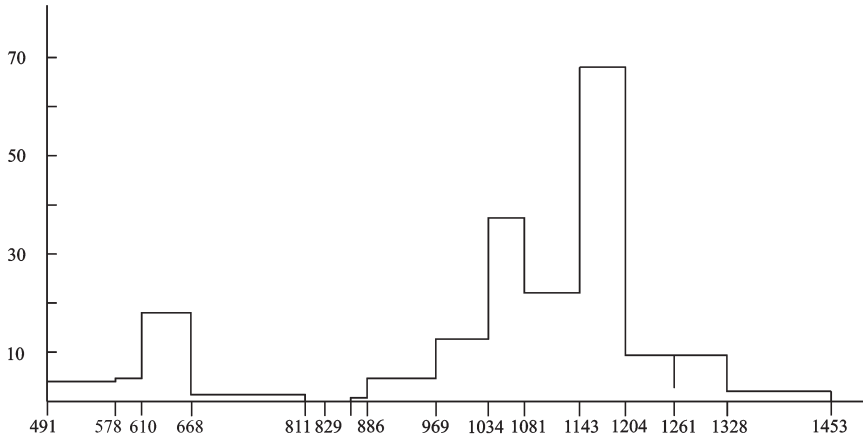

Fig. 3 Monetary finds from Athens (491-1453). – (After Morrisson, Money fig. 6.5).

as the historical context. In the Mediterranean countries covering the former territory of the Byzantine world, the archaeological records of coin finds are very uneven. In the Balkans, rural archaeology of medieval settlements is more advanced and has already yielded increased evidence comparable with that of urban sites. However, the recent dramatic increase in wild ›detectorism‹ is damaging the previous situation. In Asia Minor, a central region of Byzantine resilience from the 8th through to the 11th century, interest has long been focussed on Ancient sites where classical archaeologists were prone to clear away Byzantine layers in order to access classical levels, while Byzantine archaeologists themselves had for a long time been focusing on isolated buildings, mainly ecclesiastical or military, located either in cities or out in the countryside. However, the excavations at Amorium (il. Afyonkarahisar/TR), capital of the theme of Anatolics, have uncovered a totally new picture of mid-Byzantine coin circulation in a large city that, during that period, was both a political and a military centre, as well as an economically productive one[18].

In general, only little attention was paid to smaller cities, rural sites and stray finds. In Syria, a few isolated excavations shed light on circulation in the hinterland of Antioch. In Israel, the extent of the archaeological record provides impressive material. However, in Tunisia, which covers the greatest part of Byzantine Africa, little is known about the countryside. At this wider level, there is still much to do in order to recover a more satisfactory sample. And still more has to be done at local level to recover small metal artefacts from excavations, including coins, either by systematic sieving (as was the case in the Carthage Michigan excavations) and/or by using metal detectors (as practised by most Scandinavian archaeologists). In spite of the unsatisfactory and uneven recovery of the material, some general diachronic and synchronic trends are already emerging.

With regard to the historical context of monetisation, one must bear in mind the importance of the imperial budget that has been estimated at some 5-6 million solidi in the 5th and early 6th century, 1.7 million in the 8th century and perhaps 6-7 million hyperpyra in the 12th century. Gold issues can now be estimated on the basis of die analysis: on average, some 200 000 coins may have been struck in the 8th century and some 800 000 in the late 10th to early 11th century[19]. This relied on an elaborate fiscal system where, except from the late 7th through 8th century, most tax was mainly collected in cash rather than in kind. For a long time, the *kharagè* mechanism implied that sums above two-thirds of the gold nomisma, amounting to two tremisses in the 5th to 7th century and to some eight silver miliaresia in the 8th to 11th century, were paid in gold coins, the taxpayer receiving change in copper coins (so-called *apostrophè*). However, fiscal accounts preserved in papyri, like the cadaster of Aphrodito (525/526), show that bronze was accepted as payment of taxes according to its estimated value in gold following the legal weight relationship between the two metals (25 pounds for one solidus in 424, 20 pounds for one solidus after the Anastasian reform)[20]. This fiscal mechanism resulted in an incentive to produce cash crops. It fostered regional exchanges between large or smaller cities and their hinterland.

Transactions were subject to various taxes, usually paid in small change, such as the keratia and argyria (that is in fact copper coins) mentioned in the inscription from Anazarbos in Cilicia (mid-5th-mid-6th c.)[21]. *Sportulae* and taxes levied on *annona* staples destined for the capital are stated in the decree of Abydos, dated to 528, in keratia and folles. The tariff from Cagliari, dated to 582-602, covers only items for the local market (food and palms for roofing), which are taxed in nummi but also in kind[22]. All things equal, the contrast between the first two Eastern inscriptions and the Sardinian one may be taken as a reflection of the contraction of exchanges

18 Lightfoot, Anatolia. – Katsari/Lightfoot, Amorium. I am extremely grateful to Chris Lightfoot for his remarks on this paper and for communicating to me the text of his latest publications on the monetary finds ahead of their publication.

19 Based on Füeg, Corpus 166-171 estimates of 10 to 20 obverse dies per year in the period 717-802 (i.e. circa 200 000 to 400 000 nomismata : 2760 to 5520 pounds or 0.9 to1.8 t gold) and 40 to 60 from 945 to 976 (i.e. circa 800 000 to 1 200 000 nomismata).

20 Zuckerman, Du village ch. 2.

21 G. Dagron, in: Dagron/Feissel, Cilicie no. 108. 170-185.

22 Durliat, Taxes.

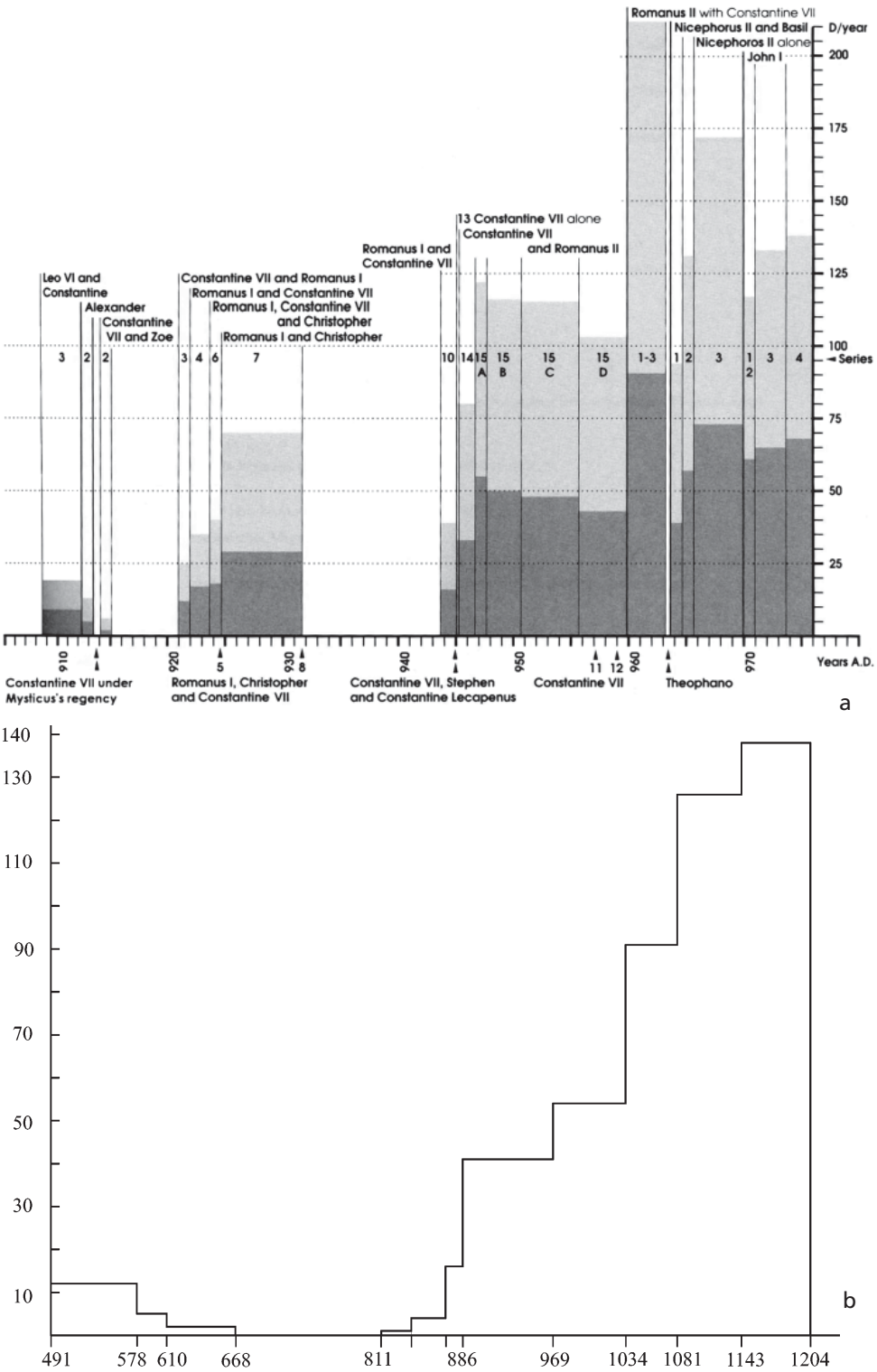

Fig. 4 Diagram of estimated dies for nomismata 900-976 (**a**) compared with Corinth monetary finds (**b**). – (a after Füeg, Corpus; b after Morrisson, Money fig. 6.9).

and the economy in the second half of the 6th century, compounded by the lesser degree of monetisation in the western island. It epitomizes two phenomena: a diachronic evolution on the one hand, and a structural difference between a great metropolis (Constantinople) or regional trading centre (Anazarbos) and a smaller ruralised city on the other hand. Coin finds provide evidence for both phenomena.

There is, in fact, general agreement on the overall evolution of the supply of coins in Byzantine cities. So it will suffice to recall its ups and downs in the longue durée. Due to the varying delay between the issue of a coin and its deposit, plotting the cumulative stray finds on urban sites provides only a rough index of the fluctuations in money supply (**fig. 3**) and an indirect one of the use of money. However, considered over several centuries, they are representative of monetary circulation aggregates. Another argument in favour of this relative reliability of the coin finds index is provided when comparing its evolution with the general

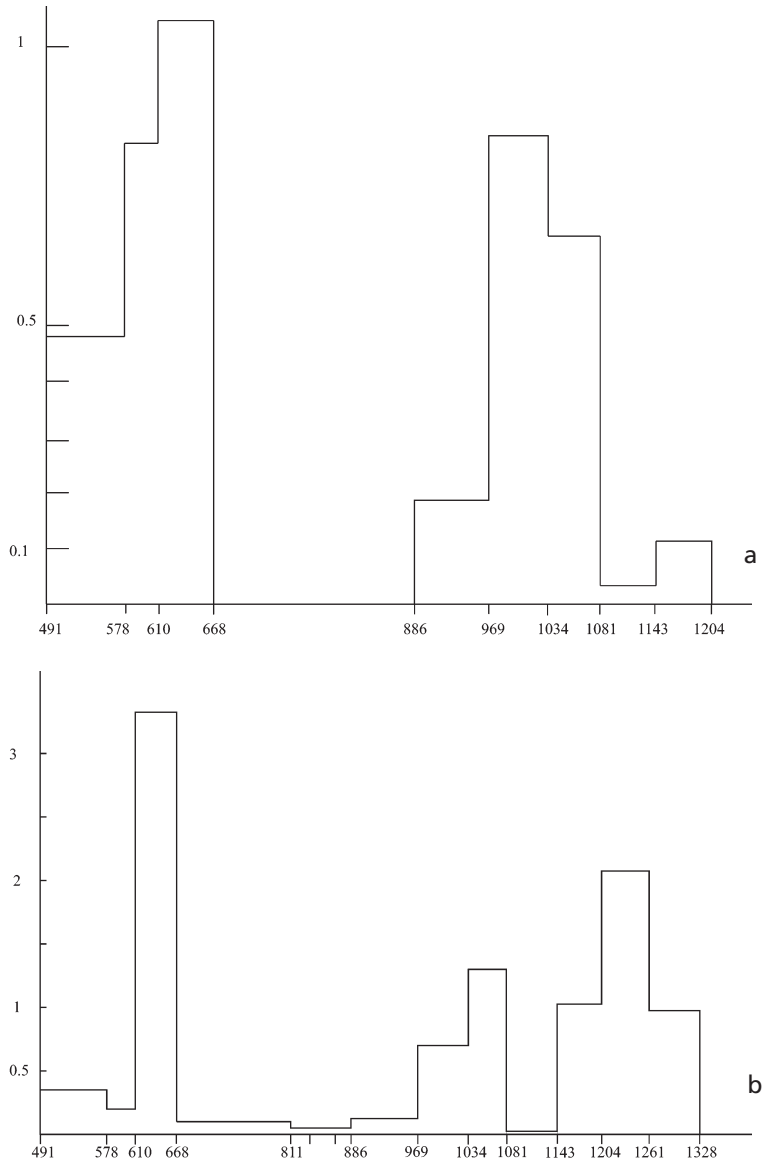

Fig. 5 Monetary finds from Aphrodisias (**a**) and Pergamum (**b**). – (After Morrisson, Money fig. 6.1-2).

pattern of the evolution of gold coins issues estimated from die analyses (**fig. 4**).

The two periods of higher monetisation have already been mentioned: the 5th and early 6th century before Justinian's Plague and the 11th to 12th century. Contrary to the earlier historiography, the latter period is now recognised as one of expansion and economic growth, with a population increase, a higher rate of urbanisation and the rise of many cities producing artisanal and manufactured goods for wider »mass« consumption[23]. The 8th century is one of »retrenchment«, general crisis and a decline in territory, population, production; a period of de-urbanisation and the localisation of exchanges, as analysed by John Haldon in this volume (p. 31 ff.). Almost complete de-monetisation is observed in all the ancient sites (e. g. Athens, Corinth, Ephesos, Aphrodisias, Priene, Pergamon; **fig. 5**) while, to some degree, resilience is unsurprisingly observed in Constantinople and in Sicily as a whole (**fig. 6**) where documentation does not allow differentiation between urban and rural finds. Here, it is not possible to examine in greater detail the characteristics of this 8th century de-monetisation, a subject that I have studied before[24]. The so-called »Byzantine revival« in the 9th century is best approached from the discoveries of the Amorium excavations over the last two decades (**fig. 7**) where an absolute apex is reached in the period 842-867 when the capital of the theme of Anatolicon was rebuilt following its sacking by the Arabs (838)[25].

Post-1204 monetisation is much more difficult to comprehend due to the lack of evidence and the loss of homogeneity of the circulation medium. Looking back at the Athens

23 Laiou, Byzantine City.
24 Morrisson, Survivance. – Morrisson Recession.
25 This graph is based on absolute numbers. When converted to the index of coins found per year, it shows a continuous rise from the Early Byzantine period (491-640) through 1080.

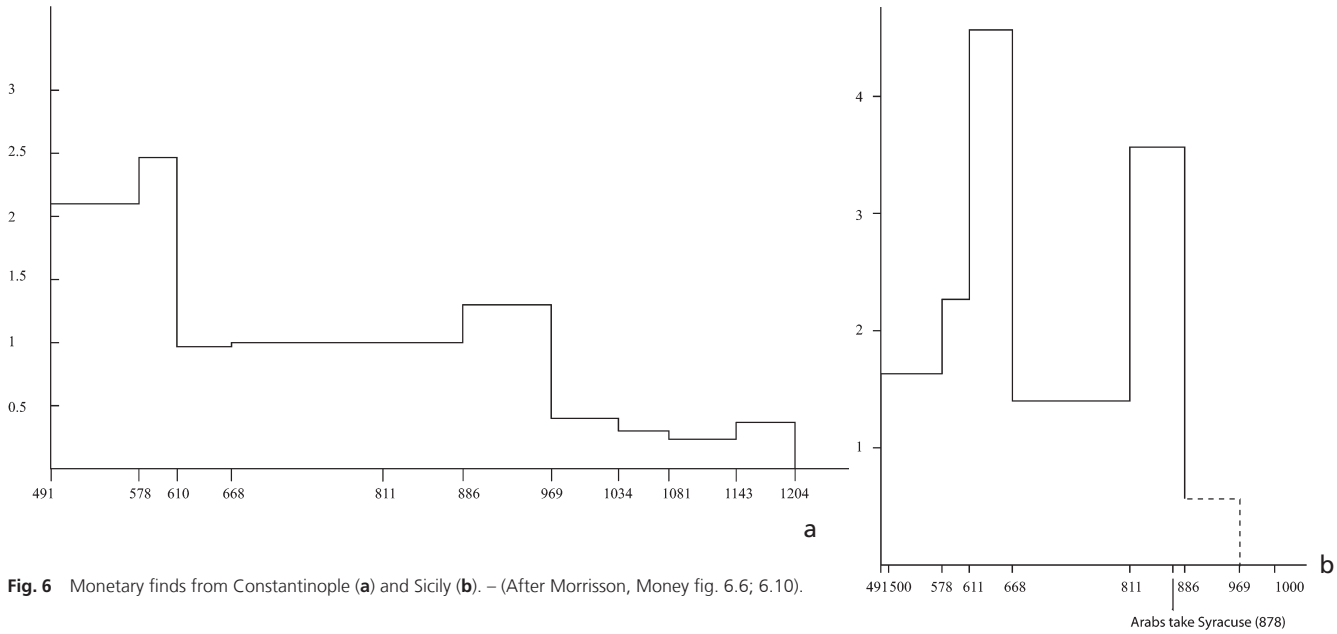

Fig. 6 Monetary finds from Constantinople (**a**) and Sicily (**b**). – (After Morrisson, Money fig. 6.6; 6.10).

histogram (**fig. 3**), it may seem that money supply and use dwindled in the 13th-14th century, which appears paradoxical before the economic turn of the 1340s and earlier. However, there is some bias in the numismatic evidence of that time because the purchasing power of the base silver denier tournois and later of Venetian denominations was higher than that of the tetartera, which constituted the bulk of 12th century coin finds, although some of these tetartera may, in fact, have been early 13th century imitations that have only recently been identified[26]. For this late period, the evidence from documents surpasses that of coins. It provides both ample confirmation of the widespread use of all varieties of currencies in long-distance or local trade, as well as contrary examples of barter[27] and sluggishness in particular regions, such as 13th century Epiros[28] or 15th century Corfou[29]. In the case of Corfou, this is mainly due to the desire to avoid the high transaction costs after the fragmentation of the coinage in the wane of the Fourth Crusade and, in the case of Epiros, it is mainly due to an inland situation.

Finally, this brings us to look into the specificities of coin circulation in rural areas or sites versus cities. Should we assume that, all things equal, sites yield coins in numbers proportional to the relative importance of their population? Managing such a comparison rests on the very questionable premise that the proportion of areas excavated and the ensuing rate of recovery is similar. This is impossible to determine. If one attempts this dangerous exercise with the data from Antioch and its hinterland, using the data from Déhès and Çatal Hüyük and taking the number of 6th century coins (491-610) as a rough proxy for the monetary stock at the end of the period (**tab. 2**), one calculates a higher ratio in villages.

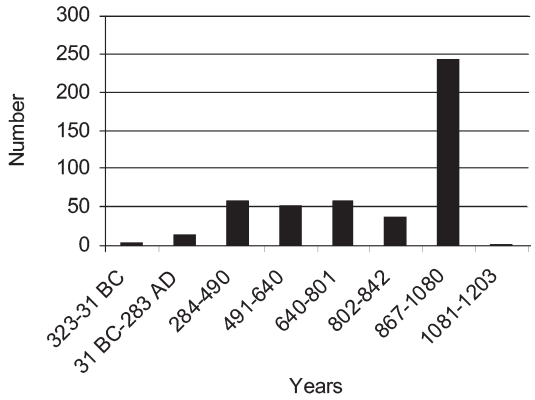

Fig. 7 Monetary finds from Amorium excavations. – (Courtesy C. Lightfoot).

This seems paradoxical at first glance; not least if one takes into account the higher velocity of money, namely the rate at which money changes hands, in an urban context[30]. It would have been twelve times higher in Antioch than in Déhès and five times higher than in Çatal Hüyük. Although this twelve to one ratio seems too high, the relative difference makes some sense since Çatal Hüyük, situated on the Amuq plain on the Afrin, was more accessible and could trade its products more easily than Déhès in the Djebel Bariša, which was more remote.

Another way of looking at data is to examine small bronze deposits as an index of the ›average‹ 6th century Byzantine purse: the Sardis shops coin finds, most of them presumably cash boxes, contain an average of 37 pieces and the deposits in the baths or other places at Histria around 16, with an

26 Papadopoulou, Tétartèra.
27 Saradi, Barter Economy.
28 Laiou, Use and Circulation.
29 Mueller, Baratto.
30 This is usually measured by the ratio of nT (nominal value of aggregate transactions) to the total amount of money in circulation (VT = nT/M, here M1).

Site	Antioch (metropolis)	Déhès* (big village)	Çatal Hüyük (smaller village)
Number of coins to 610	2369	93	16
Estimated population	± 200 000	± 800	± 332
Estimated no. of households	± 50 000	± 187**	± 83
Ratio per person	0.01	0.16	0.04
Ratio per household	0.04	0.5	0.2
Velocity ratio	1	1/12	1/5

Tab. 2 Monetary finds in Antioch and two neighbouring rural sites. – * Data from Morrisson, in Sodini et al., Déhès and Morrisson, unpublished (submitted for publication in a forthcoming book ed. by B. Bavant on the 1979-1991 excavations). – ** I am grateful to Bernard Bavant for answering my questions about Déhès and giving, though rather reluctantly for obvious scientific reasons, the following estimates that are based on the number of second storey rooms in village houses (for the importance given to these rooms in estimating fluctuations in settlement, see Tate, Campagnes 207). The published and unpublished excavations (Sodini et al., Déhès; Bavant, forthcoming on the 1979-1991 excavations) dealt only with four houses out of a total of 54, numbering 187 second-floor rooms. I assume that Antioch excavations were as partial but note that the publication of coins also included specimens recovered at Seleucia-in-Pieria (Vorderstrasse, Coin Circulation 12).

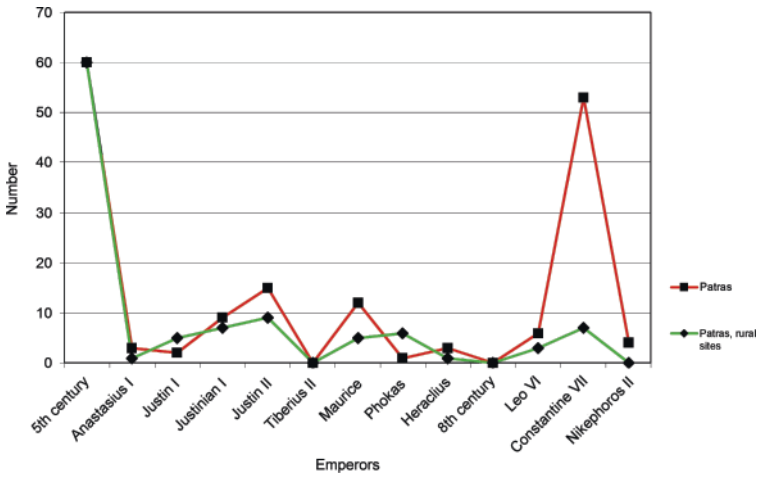

Fig. 8 Monetary finds in Patras and its close hinterland. – (After Callegher, Patras 229 fig. 3).

average value equalling some nine folles, enough to cover a week's basic needs at that time[31].

As regards the chronological and geographical pattern of coin supply in a regional metropolis and its close hinterland[32], data from the Antiochene villages, studied by Tasha Vorderstrasse[33], and those from Patras and the northwestern Peloponnese, studied by Bruno Callegher, reveal a good degree of convergence between the cities and the surrounding area. The main difference lies in the fact that Antioch yielded more Anonymous A1.A2 classes than the neighbouring rural sites; this suggests a delay in the diffusion of Byzantine money to the countryside after the reconquest and slow integration in the Byzantine economy. The pattern in the city of Patras (**fig. 8**) and its immediate rural hinterland follows a broadly comparable curve, from the 5th century high due to the abundance of small nummi, to the two 6th century peaks under Justin II and Maurice as a result of the inflation of copper at the time of the Slav invasions, through the final steep rise in the 10th century. This latter rise is sharper in the urban area than beyond, certainly reflecting a more dramatic increase in monetised exchanges in the city's markets[34].

More reliable details are offered by the survey of thousands of coins from stray finds and hoards (6th to 11th c) discovered in Dobrudja (BG) and in less documented North-Eastern Bulgaria by Ernest Oberländer-Târnoveanu[35]. Results are summarised in the following two charts (**fig. 9a-b**). They display an early convergence followed by a diverging trend. The first chart (**fig. 9a**) displays, in the urban finds, the same coin issue trends in the 6th century that Vujadin Ivanišević and I outlined on the basis of the database of about 9000 coins from the Balkans and Asia Minor coin hoards inventoried in our book (precisely 8915 identified specimens including 2212 gold, 188 silver and 6515 copper coins). The lower curve traces the rapid decrease in rural monetisation due to rising insecurity: the number of coin finds is very low, no gold coins and hardly any hoards have been found, apart from Slava Rusa (dep. Tulcea, RO), Constanța – Anadolchioi (dep. Constanța, RO), Kavarna (distr. Dobrič, BG) and Bălgarevo (distr. Dobrič, BG) all very close to Tomis and a few other

31 Data from Morrisson/Popović/Ivanišević, Trésors nos 277-310 and 69-74. In 1968, in their estimate of M1, surveys carried out before decimalisation of British coinage found that every resident held some 140 coins representing a value of approx. £5 (data cited by Metcalf, South-Eastern Europe, 336), i. e. around £12 of our money. John Day estimated the amount of cash per person in Western Europe in the 14th c. at 80d (unpublished, paper delivered in Athens 1994).

32 Defined as a maximum distance of 50 km.

33 Vorderstrasse, Coin Circulation 500 (for the 6th and 7th c. finds); 504 f. (for the 11th c.).

34 Callegher, Patras.

35 Oberländer-Târnoveanu, Échanges.

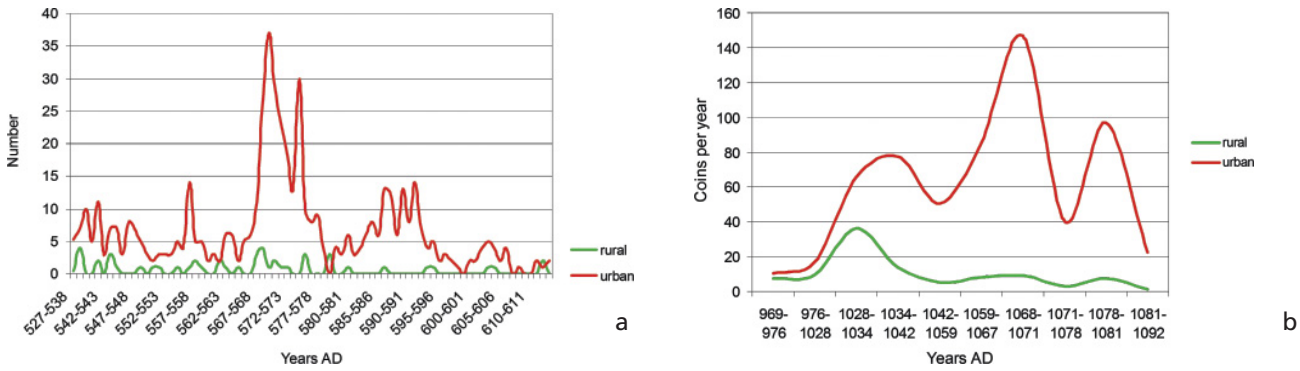

Fig. 9 Coin penetration in rural and urban sites in Dobrudja in the 6th c. (**a**) and in the 11th c. (**b**). – (a Morrisson, graph redrawn after data in Oberländer-Târnoveanu, Échanges; b after Oberländer-Târnoveanu, Échanges 391 fig. 7).

cities. The countryside is clearly not tuned to coin exchanges, unlike the cities that were still defended and supported by the capital and Asian provinces through the *Quaestura exercitus*. A comparable difference between cities, such as Dristra, Dinogetia, Nufăru, Păcuiul lui Soare and Isaccea, and the surrounding countryside is observed in the 11th century (**fig. 9b**). From approx. 1000 to 1030, re-established Byzantine rule involves increased monetisation in cities and rural sites alike. However, from 1030-1040s, the Petchenegs invasion blocks this integration of rural society in the Byzantine network of exchanges. Villages are destroyed or abandoned, the newly settled tribes fail to adapt to the use of coins and the population decreases. This replicates the phenomenon observed in the late 6th century, the same military causes producing the same consequences.

The only other extensive and impressive database of coin finds inside the former territory of the Byzantine Empire is that established by Haim Gitler from the material collected at the Israel Antiquities Authority[36]. It includes some 15000 coins from 70 rural sites which could be compared to the evidence from the poleis – and particularly from Caesarea – in what was, as we all know, a highly productive and monetised province exporting wine all over the Mediterranean, and attracting pilgrims and donations from all Roman provinces. However, the author has not yet published the vast amount of material he gathered for this project. In his provisory presentation in 2001, he preferred to concentrate on a general quantitative examination of coins minted each year and on the significant decrease in the number of coins supplied to Palestine after the 4th century. This decrease is unquestionable but does not mean that there was a decrease in monetisation. The 4th century issues were so large that they provided a long-lasting stock, the remnants of which are still found in 7th century layers[37].

As one would expect, the first attempts at the study of monetisation in the Byzantine countryside show a relative similarity in global trends. The difference of scale in the absolute values of coins recovered between a metropolis and a large village in its hinterland does not apparently reflect the difference in population. As far as the »educated guess« proposed above for Antioch can be trusted, it seems that the average village household purse may have contained ten times more coins than the urban one, a plausible index of the greater sluggishness (smaller velocity) of circulation in rural centres. In the few cases where databases allowed comparative surveys in the long run, it is clear that the decrease entailed by demographic, military and/or economic difficulties is felt first and most acutely in the countryside. Conversely, the signs of the relative expansion or recovery of the 10th and 11th century are first perceived in cities like Antioch whilst the villages lag behind, taking some time to follow the course of more active monetary transactions. But on the whole the Byzantine peasants, like their medieval English counterparts, »owned and used coins, were embedded in a market economy and were money conscious«[38]. Of course, it remains to explore in greater detail the wealth of this existing evidence in order to build inventories and databases, and the painstaking identification of plentiful and poorly preserved material. The study of comparative monetisation »Hinter den Mauern und auf dem offenen Land« leaves room for work in the second decade of the 21st century and beyond.

36 Gitler/Weisburd, Palestine villages.
37 As argued independently by Bijovsky, Byzantine Palestine.
38 Dyer, Peasants and Coins 46.

Bibliography

Sources

Geōrgios Kedrēnos, Synopsis historiarum: Georgius Cedrenus Ioannis Scylitzae ope, suppletus et emendatus. 2 vols. Ed. by I. Bekker. CSHB (Bonnae 1838-1839).

Geōrgios Pachymerēs: Georgios Pachymérès. Relations Historiques. 5 vols. Ed. by A. Failler (Paris 1984-2000).

Leo VI, Novellae: Les novelles de Léon VI le Sage. Ed. by P. Noailles / A. Dain (Paris 1944).

References

Barnish, Julianus Argentarius: S. J. B. Barnish, The Wealth of Julianus Argentarius: Late Antique Banking and the Mediterranean Economy. Byzantion 55, 1985, 5-38.

Bijovsky, Byzantine Palestine: G. Bijovsky, Gold Coin and small Change: Monetary Circulation in Fifth-Seventh Century Byzantine Palestine. Polymnia. Numismatica Antica e Medievale, Studi 2 (Trieste 2013).

Callataÿ, Quantification: F. de Callataÿ, Long-term quantification in ancient history: A historical perspective. In: F. de Callataÿ (ed.), Quantifying the Greco-Roman economy and beyond. Pragmateiai 27 (Bari 2014) 7-29.

Callegher, Patras: B. Callegher, La circulation monétaire à Patras et dans les sites ruraux environnants (VI^{e}-VII^{e} siècle). In: Lefort/Morrisson/Sodini, Villages 225-235.

Dagron/Feissel, Cilicie: G. Dagron / D. Feissel, Inscriptions de Cilicie. TM Monographies 4 (Paris 1987).

Delogu/Sorda, Ambiente rurale: P. Delogu / S. Sorda (eds), La moneta in ambiente rurale nell'Italia tardomedioevale: Atti del Incontro di studio, Roma, 21-22 settembre 2000 (Rome 2002).

Durliat, Taxes: J. Durliat, Taxes sur l'entrée des marchandises dans la cité de Carales-Cagliari à l'époque byzantin. DOP 36, 1982, 1-14.

Dyer, Peasants and coins: C. Dyer, Peasants and coins: the uses of money in the Middle Ages. British Numismatic Journal 67, 1997, 30-47.

Füeg, Corpus: F. Füeg, Corpus of the Nomismata from Anastasius II to John I in Constantinople 713-716. Structure of the Issues. Corpus of Coin Finds. Contribution to the Iconographic and Monetary History (Lancaster P. A. 2007).

Gitler/Weisburd, Palestine villages: H. Gitler / D. Weisburd, Coin finds from villages in Palestine during the Late Roman and Byzantine periods (A.D. 383-696/7): A Quantitative Examination of Monetary Distributions. In: Lefort/Morrisson/Sodini, Villages 539-552.

Hendy, Studies: M. F. Hendy, Studies in the Byzantine Monetary Economy, c. 300-1450 (Cambridge 1985).

Katsari/Lightfoot, Amorium: C. Katsari / C. S. Lightfoot, Amorium Reports, vol. 4. The Amorium Mint and the Coin Finds (Berlin 2012).

Laiou, Economic History of Byzantium: A. E. Laiou (ed.), The Economic History of Byzantium From the Seventh through the Fifteenth Century. DOS 29 (Washington D.C. 2002).

Use and circulation: A. E. Laiou, Use and Circulation of Coins in the Despotate of Epiros. DOP 55, 2001, 207-215.

Byzantine City: A. E. Laiou, The Byzantine City: Parasitic or Productive? In: A. E. Laiou, Economic thought and economic life in Byzantium. Variorum Collected Studies 1033 (Farnham 2013) art. XII, 1-35.

Lefort/Morrisson/Sodini, Villages: J. Lefort / C. Morrisson / J.-P. Sodini (eds), Les villages dans l'Empire byzantin (IV^{e}-XV^{e} siècle). Réalités Byzantines 11 (Paris 2005).

Lightfoot, Anatolia: C. S. Lightfoot, Byzantine Anatolia: Reassessing the numismatic evidence. Revue Numismatique 158, 2002, 229-239.

Mayhew, Countryside: N. Mayhew, Money in the late medieval countryside: Britain. In: Delogu/Sorda, Ambiente rurale 5-26.

Metcalf, South-Eastern Europe: D. M. Metcalf, Coinage in South-Eastern Europe (820-1396). Royal Numismatic Society, Special publications 11 (London 1979).

Militký, Finds: J. Militký, Finds of the Early Byzantine Coins of the 6th and 7th century in the Territory of the Czech Republic. In: Wołoszyn, Central Europe 357-393.

Moesgaard, Monnaies à la campagne: J. Ch. Moesgaard, Monnaies à la campagne au Moyen Âge. Remarques de méthode. In: Lefort/Morrisson/Sodini, Villages 135-48.

Single finds: J. Ch. Moesgaard, Single finds as evidence for coin circulation in the Middle Ages – status and perspectives. Nordisk Numismatik Årsskrift, 2000-2002, 228-275.

Morrisson, Déhès: C. Morrisson, Les monnaies. In: Déhès (Syrie du Nord) Campagnes I-III (1976-1978). Recherches sur l'habitat rural. Syria 57, 1980, 267-287.

Money: C. Morrisson, Byzantine Coinage. Production and Circulation. In: Laiou, Economic History of Byzantium III, 901-956.

Recession: C. Morrisson, Recession and expansion of money use in Byzantium. In: M. Whittow (ed.), The Economic Turn (in prep.).

Routes fluviales et maritimes: C. Morrisson, La monnaie sur les routes fluviales et maritimes des échanges dans le monde méditerranéen (VI^{e}-IX^{e} siècle). L'acqua nei secoli altomedievali. Settimane di Studio del CISAM LV (Spoleto 2008) 631-670.

Survivance: C. Morrisson, Survivance de l'économie monétaire à Byzance (VII^{e}-IX^{e} s.). In: E. Kontoura-Galake (ed.), The Dark Centuries of Byzantium (7th-9th c.) (Athens 2001) 377-397.

Morrisson/Popović/Ivanišević, Trésors: C. Morrisson / Vl. Popović / V. Ivanišević, Les trésors monétaires des Balkans et d'Asie Mineure (491-717). Réalités Byzantines 13 (Paris 2006).

Mueller, Baratto: R. Mueller, Il baratto in una terra soggetta a Venezia: l'esempio di Corfù nel Quattrocento. In: Delogu/Sorda, Ambiente rurale 27-36.

Noeske, Münzfunde: H. Ch. Noeske, Münzfunde aus Ägypten I. Prolegomena zu einer Geschichte des spätrömischen Münzumlaufs in Ägypten und Syrien I-III. Studien zu Fundmünzen der Antike 12 (Berlin 2000).

Oberländer-Târnoveanu, Échanges: E. Oberländer-Târnoveanu, Les échanges dans le monde rural byzantin de l'est des Balkans (VI^{e}-XI^{e} siècle). In: Lefort/Morrisson/Sodini, Villages 381-401.

Papadopoulou, Tétartèra: P. Papadopoulou, Tétartèra d'imitation du XIII^{e} siècle: à propos du trésor de Durrës – Albanie. Revue Numismatique 161, 2005, 145-162.

Rovelli, Coins and trade: A. Rovelli, Coins and trade in early medieval Italy. Early Medieval Europe 17, 2009, 45-76.

Saradi, Barter Economy: H. Saradi, Evidence of Barter Economy in the Documents of Private Transactions. BZ 88, 1995, 405-418.

Sodini et al., Déhès: J.-P. Sodini et al., Déhès (Syrie du Nord). Campagnes I-III (1976-1978): recherches sur l'habitat rural. Institut Français d'Archéologie du Proche-Orient, Publication hors série 15 (Paris 1981).

Sorda, Storia mutilata: S. Sorda (ed.), La storia mutilata: la dispersione dei rinvenimenti monetali in Italia. Studi e Materiali 6 (Rome 1997).

Tate, Campagnes: G. Tate, Les campagnes de la Syrie du Nord (Paris 1992).

Vorderstrasse, Coin Circulation: T. Vorderstrasse, Coin Circulation in Some Syrian Villages (5th-11th Centuries). In: Lefort/Morrisson/Sodini, Villages 495-511.

Wołoszyn, Central Europe: M. Wołoszyn (ed.), Byzantine Coins in Central Europe between the 5th and the 10th century. Proceedings from the conference organised by the Polish Academy of Arts and Sciences and the Institute of Archaeology University of Rzeszów under the patronage of the Union Académique Internationale, Kraków, April 23-26, 2007 (Krakow 2009).

Zuckerman, Du village: C. Zuckerman, Du village à l'Empire: autour du Registre fiscal d'Aphroditô (525/526). Monographies du Centre de Recherche d'Histoire et Civilisation de Byzance 16 (Paris 2004).

Zusammenfassung / Summary / Résumé

Der Gebrauch von Münzgeld in byzantinischen Städten und ländlichen Gebieten (6.-15. Jahrhundert): Eine Neubewertung

Der Beitrag thematisiert in Form einer kurzen und nicht erschöpfenden Beurteilung die Methoden und Probleme eines Vergleichs städtischer und ländlicher Monetarisierung in Byzanz, ein Thema, das erst kürzlich in den wissenschaftlichen Fokus geraten ist (z. B. in Rom, 2000 und in Paris, 2001). Die Monetarisierung, verstanden als vermarkteter Teil des Bruttosozialprodukts, war relativ hoch im 5.-6. Jahrhundert und wieder im 11.-12. Jahrhundert und nahm in den dazwischen liegenden Jahrhunderten stark ab, besonders im 8. Jahrhundert mit wenigen Ausnahmen in einzelnen Regionen oder Städten. Dieses generelle Muster ist ebenso wie viele einzelne regionale Entwicklungen anerkannt, aber wenig wurde bislang über ländliche Funde erarbeitet. Zurückgreifend auf wenige Beispiele vom Balkan und aus Syrien werden einige Beobachtungen zu Unterschieden hinsichtlich der zur Verfügung stehenden Menge und der chronologischen Verteilung von Münzen vorgetragen und die Gründe dafür aufgezeigt. Aber das gesamte Thema benötigt darüber hinausgehende archäologische Studien, neue Datenbanken und Analysen.

Übersetzung: J. Drauschke

Coin use in Byzantine cities and countryside (6th-15th centuries): a reassessment

This article offers a brief and non-exhaustive assessment of the methods and problems that occur when comparing urban and rural monetisation in Byzantium, a subject that has only recently drawn scholars' attention (e. g. in Rome, 2000, and in Paris, 2001). Apart from a few isolated regions and cities, monetisation, the commercialised part of gross national product, was relatively high in the 5th-6th century and the 11th-12th century and decreased significantly in the intervening period, notably in the 8th century. This general pattern is now established, as are many specific regional developments, but little work has been done thus far on rural finds. Referring to a few examples from the Balkans and Syria, some observations are proposed about differences in the available amounts, in the chronological distribution of coins and its causes. However, the whole topic needs further archaeological documentation, new databases and analyses.

L'usage de la monnaie dans les villes et les régions rurales de l'empire byzantin (6e-15e siècle): une réévaluation

Cette contribution thématise sous la forme d'une évaluation brève et non exhaustive les méthodes et problèmes d'une comparaison entre monétarisation urbaine et rurale à Byzance. Ce thème n'a attiré que récemment l'attention de la communauté scientifique (par exemple à Rome en 2000 et à Paris en 2001). La monétarisation, c'est-à-dire la part du produit national brut utilisée dans les transactions, avait atteint un seuil relativement élevé aux 5e et 6e siècles, puis de nouveau aux 11e et 12e siècles, alors qu'elle avait fort régressé entre temps, particulièrement au 8e siècle à l'exception de certaines régions et certaines villes. Ce schéma est reconnu dans ses grandes lignes, comme beaucoup d'évolutions régionales, mais l'on a peu étudié jusqu'à présent les trouvailles rurales. Sur la base de quelques exemples des Balkans et de la Syrie, nous présentons quelques observations sur les différences constatées dans la quantité disponible et la répartition chronologique des monnaies, ainsi que les raisons qui les déterminent. Mais tout ce thème nécessite des études archéologiques plus poussées, de nouvelles analyses et banques de données.

Traduction: Y. Gautier