

# REPUBLICAN DENARII IN ROMANIA: THE SUPPRESSION OF PIRACY AND THE SLAVE-TRADE \*

By MICHAEL H. CRAWFORD

One of the most remarkable phenomena within the pattern of monetary circulation in antiquity is the presence of large numbers of Roman Republican denarii, for the most part struck between c. 130 and 31 B.C., on the soil of present-day Romania, roughly ancient Dacia. Absolute figures are impressive; it has been calculated that taking together isolated finds, hoards closing with Republican pieces, nuclei of Republican coins in Roman Imperial hoards and Republican coins in collections in Romania the total comes to something like 25,000 pieces.<sup>1</sup> But absolute figures are themselves unable to convey fully the uniqueness of the phenomenon; this emerges most clearly from a comparison with neighbouring territories.

There are no known hoards of Republican denarii from the territory of the Moldavian S.S.R.;<sup>2</sup> the territories of Poland, Czechoslovakia and Hungary to the north-west have produced between them a mere handful of Republican hoards;<sup>3</sup> Yugoslavia and Albania to the west and Greece to the south are slightly more productive,<sup>4</sup> but display no trace of the feature characteristic of Romania, a great block of hoards, the latest coin of which belongs in the first century B.C.

The only area which may eventually rival Romania, when the level of publication improves, is the Bulgarian side of the lower Danube basin. Such published material as there is shows a pattern in some respects not dissimilar to that characteristic of Romania, and there are numerous brief citations in Bulgarian periodicals of hoards of unspecified Republican coins.<sup>5</sup> I shall therefore be considering what may be a single phenomenon, the appearance *en masse* of late Republican denarii in the lower Danube basin, although much of the detailed evidence I shall be discussing is Romanian rather than Bulgarian.<sup>6</sup>

I have so far talked of the presence in rather than of the import into Romania and Bulgaria of Republican denarii; for the possibility must be faced that the bulk of the apparently Republican denarii therefrom are in fact locally produced imitations. I argue elsewhere, however, that the positive reasons for supposing this are without weight and that there are indeed some grounds for arguing the opposite.<sup>7</sup> I have on present evidence no doubt that it is reasonable to talk of the massive import of Republican denarii into the lower Danube basin, predominantly in the latter part of the first century B.C.

I propose to consider first why the denarii came there at all, then the evidence for the precise moment at which they began to arrive, finally why they began to come then.

The answer to the first question emerges in large measure from a consideration of the existing context into which the denarii of the Republic were inserted. It is clear from the literary and epigraphic evidence that Thrace and the lower Danube basin were in the

\* This paper has benefited from the reactions of audiences in Bucharest, Cambridge, Manchester and Sheffield and from the acute comments of Professors P. A. Brunt, M. I. Finley and M. K. Hopkins. Its defects are of course the responsibility of its author. My visit to Romania was made possible by the Exchange Agreement between the British Academy and the Romanian Academy of Sciences.

<sup>1</sup> See I. Glodariu, *Acta Mus. Nap.* 1971, 71, 'Considerații asupra circulației monedei străine'.

<sup>2</sup> A. A. Nudel'man, *Topographie des trésors et des trouvailles des monnaies isolées* (in Russian), Kishchivnev, 1976, 156-7.

<sup>3</sup> Poland: Polaniec 1968—*Rocznika Muzeum Swietokrzyskiego* 1970, 103; 1975, 327. Czechoslovakia: Kysice 1917—E. Nohejlova-Pratova, *Nalezý* 1, no. 225a; Libčevés 1908—*R(oman) R(epublican) C(oin) H(oard)*, no. 328; Sillein 1871—*RRCH*, no. 330 (with *NZ* 1903, 147—down to Augustus); Podivín about 1930—E. Nohejlova-Pratova, *Nalezý* 1, no. 853; Göding = Hodonin—E. Nohejlova-Pratova, *Nalezý* 1, no. 859 (down to issue with *IMP.CAESAR*); A. Rzehak, *Zeitschrift des deutschen Vereins für die Geschichte Mährens und Schlesiens*, Brunn (Brno), xxii, 1918, 197, 'Die

römische Eisenzeit in Mähren', at 268 (down to 15 B.C.). Hungary: Körösszakall 1965—*Különlenyomat a Debreceni Déri Múzeum* 1967, 67; Bia 1846—*RRCH* 370; Erd 1957—*RRCH* 373; Nagyagya = Cadea 1941—*RRCH* 411; Lagymanyos 1902—*RRCH* 510.

<sup>4</sup> Recent discoveries do not significantly alter the pattern for Yugoslavia and Greece which emerges from the hoards listed in *RRCH*; a recently-published group of three hoards from Albania is to be associated with the civil war between Caesar and Pompeius, H. Ceka, *Dy thesare drahmesh ilire e denarësh romakë të zbuluem në Tiranë* (*Studime Historike* 1, 1966, 3-40).

<sup>5</sup> Four hoards are listed in *RRCH*, four (as far as I know) have been published since (see Table 2); I know of a further 26, deliberately omitted from *RRCH* as being insufficiently documented.

<sup>6</sup> There is a brief survey of recent views on cultural links across the lower Danube in V. Mihailescu-Birliba, *Thracia* III, 1974, 261-5; but the evidence there adduced for coins struck south of the Danube being found north of it is of little significance.

<sup>7</sup> *Studii și Cercetări de Numismatică* VII (forthcoming).

Hellenistic period as earlier an area hungry for precious metal. The war between Rhodes and Byzantium in 220 B.C. was provoked by an attempt by Byzantium to impose tolls on traffic sailing into and out of the Black Sea in order to pay tribute to the Gauls settled in her hinterland;<sup>8</sup> the Agathocles inscription from Istria shows that city buying immunity from invasion for 600 gold coins.<sup>9</sup>

The evidence of coin finds shows also that Thrace and the lower Danube basin had by the first century B.C. long been used to the large-scale availability of silver; didrachms of Philip II (together with imitations in large quantities), tetradrachms of Alexander III, Philip III and Lysimachus (again with imitations), imitations of coins of Larisa, Geto-Dacian tetradrachms, coins of Macedonia Prima and Thasos (together with imitations in large quantities), coins of Dyrrachium and Apollonia—each of these coinages for a time, between the fourth and the first centuries B.C., predominated in part or all of the area.

Most of these coinages came from outside the lower Danube basin, the coinages of Philip II and his successors and their imitations from Macedonia or southern Thrace, the coins of Macedonia Prima and Thasos and their imitations from the same area, the coinages of Dyrrachium and Apollonia from the west. Only for a limited period in the third and second centuries B.C. did the Geto-Dacian coinage provide Dacia with its own coinage.<sup>10</sup>

Beside the evidence of coin finds stands the evidence of finds of jewellery; the two are indeed often associated. But just as there are a large number of finds of coins alone, so also there are of jewellery alone.<sup>11</sup>

If one turns to consider the social and economic significance of these finds, it seems likely that the presence of a variety of coinages in the lower Danube basin from the fourth to the first centuries B.C. has little to do with the operation of a money economy, and that this picture does not essentially alter with the arrival of denarii of the Republic.

The virtual absence of any small denominations means that none of the coinages available to the lower Danube basin can have functioned very effectively as a means of exchange in a market economy. And the readiness of the area to use coins of differing areas and differing weight standards without any consistent attempt to produce its own suggests that the coinages functioned perhaps only in a rather rough and ready way as a measure of value.<sup>12</sup>

The answer lies along other lines, I think, with coinage being used rather for exchange of gifts and for payments such as dowries, where the gift element is considerable; its function was presumably to define and enhance the status of a local aristocracy and its retainers (cf. n. 30 below). An analogy from Gaul, in the absence of direct evidence for Dacia, may perhaps lend some plausibility to this view of the role of money in Dacian and proximate societies; the father of King Bituitus of the Arverni displayed his wealth by scattering gold and silver coins from his chariot;<sup>13</sup> one may perhaps suggest that a similar process lies behind isolated finds of Republican denarii and other coins in Romania. Coinage in fact is to be envisaged as for the most part a fashionable form in which to hold and display wealth, alongside jewellery and other forms of mobile riches; the origin of the fashion perhaps lies in a perception of the power of money in the civilized and fascinating Greco-Macedonian Mediterranean world; there of course the power derived from a real economic function.<sup>14</sup>

<sup>8</sup> Polybius IV, 46, 3. Note the large revenues from customs-dues of the Thracian kings of the fourth century B.C.

<sup>9</sup> S. Lambrino, *Rev. ét. roum* v-vi, 1960, 180 = *Historia* XI, 1962, 21; see also D. M. Pippidi, *I Greci sul basso Danubio*, 104-6.

<sup>10</sup> No longer struck in the first century B.C., contra C. Preda, *Monedele Geto-Dacilor*, Bucharest, 1973; there are few Thracian issues of the third/second or of the first centuries B.C., Y. Youroukova, *Coins of the Ancient Thracians*, Oxford: *British Archaeological Reports*, Supp. 4, 1976, 26 and 40.

<sup>11</sup> The material is catalogued by K. Horedt, *Dacia* xvii, 1973, 127; E. and F. Stoicovici, *Acta Mus. Nap.* 1973, 541; 1974, 19, analyse the (small) gold content of selected pieces. For jewellery manufactured from Republican denarii see the Stâncuța hoard (*RRCH* 331).

<sup>12</sup> Isolated indications of weight on a few pieces of plate, no doubt put there by Greek craftsmen, tell us

little (*Thracian Treasures from Bulgaria*, British Museum, 1976, nos. 311, 360, 361).

<sup>13</sup> Athenaeus IV, 152d = Posidonius fr. 67 Edelstein-Kidd; Strabo IV, 2, 3 (191); see the important remarks of D. Nash, *Num. Chron.* 1975, 214-215.

<sup>14</sup> My view of Dacian society and economy is thus radically different from that of C. Preda, *Monedele Geto-Dacilor*, 22-3 = 440, who sees the development of 'Warenaustausch' as leading to the emergence of Geto-Dacian coinage. I should not of course wish to deny that some 'Warenaustausch' for coinage took place.

The fascination exercised by the typology of the Roman Republican coinage is documented by the terracotta medallion from Gradiștea copying the head of Diana on the obverse of a denarius of Ti. Claudius Ti.f.Ap.n. (*Mat. arch.* 1959, 396; *Illiri și Daci*, Cluj and Bucharest, 1972, pl. xxxi; I see no reason to suppose that the medallion portrays Bendis).

Nor is there any reason to suppose that any change took place when Republican denarii replaced the assortment of Greek and native issues available earlier. There is still no small change, and it is clear that the arrival of Republican denarii in the lower Danube basin does not mean the extension to that area of existing patterns of circulation elsewhere.<sup>15</sup> In Italy and the other Mediterranean areas to which the circulation of the denarius gradually extended, the hoards usually contain a solid run of issues down to the latest one; the pattern is one of regular contact with the source of supply. Most Dacian hoards consist of a run of issues followed by a few pieces separated by several years from each other and from the hoard as a whole; hence the uselessness of most Dacian hoards for chronological investigation.

There are good reasons in terms of the needs of a primitive society for Republican denarii to have come to the Lower Danube basin, to have remained there and in a restricted sense to have circulated there in the form of coin. But none of these phenomena need have much to do with any development of the Dacian economy.

The problem of the date when the massive import of Republican denarii into Dacia and neighbouring areas began is complicated by a factor which does not affect a consideration of the earlier coinages which entered the area. Unlike these, the Republican coinage remained long in circulation in the Roman world, and it is theoretically possible that none of it entered the area before the imperial age; though it would be in that case exceedingly hard to explain the large number of hoards which contain no coin later than the middle of the first century B.C.

It is, however, inconceivable that most of the material did not enter Dacia well before the Roman conquest in the reign of Trajan. By that time there were few Republican denarii in circulation, certainly not enough to account for the pattern of their occurrence in Dacia; we are in any case therefore faced with the phenomenon of massive penetration of non-Roman territory by Roman coinage.

Similarly, I doubt very much whether the availability of Republican denarii in the age of Augustus or immediately thereafter could have allowed penetration on the scale which actually occurred;<sup>16</sup> I shall return later to the possibility that some Republican denarii came in that period. Further, although Republican denarii were still circulating in the Roman empire under Augustus, and it is possible that some such denarii entered Dacia in that period, one would expect that if the penetration were in general so late it would comprise in addition a far higher proportion of contemporary issues. Moreover, the latest Republican coins in some of the Romanian hoards which close in the first century B.C. show relatively little wear; it is hard to believe that they came to Romania or were buried many decades later than the date of the latest coins in them.

On balance, therefore, the beginning of the massive penetration of Republican denarii may be regarded as contemporary with the closing date of the earliest hoards of Republican denarii from the Danube basin (see Tables 1 and 2). For it is implausible to suppose, in view of the large number of hoards of non-Roman coins of earlier centuries, that Republican denarii circulated for very long in the Danube basin without being hoarded.<sup>17</sup>

We are faced then with a massive penetration of the lower Danube basin by Republican denarii probably beginning towards the middle of the first century B.C. and continuing on a considerable scale to the end of the Republic and beyond. A phenomenon so anomalous and so unique can hardly be explained in terms of general trading activity,<sup>18</sup> the existence of

<sup>15</sup> *Contra* B. Mitrea and I. Glodariu, cited in n. 20 below; for the absence of small change see C. Rodewald, cited in n. 42 below, 41-2.

<sup>16</sup> Early imperial hoards from Pannonia and Illyria do not show a particularly large proportion of Republican pieces. It has also been argued that Roman Republican denarii in Romania were in large part the booty of Burebista (L. Ruzicka, *Bul. Soc. Num. Rom.* 1922, 5, 'Die Frage der dacischen Münzen', esp. 10); but the areas he plundered were not characterized by extensive circulation of Republican denarii.

<sup>17</sup> B. Mitrea, *SCIV* 1970, 434, wrongly supposes

that the presence in Romania of many examples of issues of the late second century and of the 80s B.C. shows that the coins must have come in during those periods; both periods were characterized by massive issues which remained in circulation in enormous quantities in the first century and were indeed the major component of Italian hoards of the mid-first century.

<sup>18</sup> See in any case the fundamental cautionary remarks of P. Grierson, *Trans. Roy. Hist. Soc.* 1959, 123, 'Commerce in the Dark Ages: a critique of the evidence'.

which between the lower Danube basin and the Mediterranean world is of course not to be denied. Polybius in the second century B.C. records five different commodities—cattle and slaves among necessities, honey, wax and preserved fish among luxuries—as coming from the area round the Black Sea, in exchange for olive-oil and wine, with corn sometimes going one way and sometimes another.<sup>19</sup> The archaeological record shows a variety of goods from the Mediterranean world entering the territory of present-day Romania. But general trade cannot explain the phenomenon in which we are interested.<sup>20</sup>

Some recent work has moved away from the perspective of earlier scholars, simply postulating general trading activity, but is vitiated in my view by concentration on particular parts of the phenomenon rather than on the whole, and by insufficient awareness of the pattern of circulation of the Republican coinage outside Romania.

M. Chițescu has argued that the first wave of Republican coins came into the lower Danube basin as a result of being paid out as remuneration to mercenaries hired by Rome.<sup>21</sup> It is of course true that at various stages of antiquity the area provided mercenaries to the Mediterranean world; but nothing suggests that the Romans used mercenaries from this or indeed any area on any significant scale.<sup>22</sup> And Dr. Chițescu is mistaken in supposing that the wave of coins which she is discussing entered Dacia in the 80s B.C.,<sup>23</sup> a period when the Roman need for troops *might* have led them to use foreign mercenaries (though it must be said that no such use is attested in a well-documented period).

Similarly, Dr. Chițescu has also argued that the prevalence of legionary coins of M. Antonius in parts of Dacia is to be explained in terms of military assistance provided for him and the recompense made therefor;<sup>24</sup> Dr. Chițescu has gone on to localize particular Geto-Dacian chiefs on the basis of the coin finds. This seems to me implausible. Dacian hoards closing with legionary coins of M. Antonius do indeed exist, but these coins occur in hoards all over the Mediterranean world soon after 31 B.C. in numbers which make the Romanian pattern not particularly striking; and, alone of Republican issues, legionary coins of M. Antonius continue to circulate in enormous numbers under the principate, surviving in some cases until the Severan age; we know nothing of the arrival of these coins in Dacia, except for the relatively small proportion consisting of those pieces in hoards where they form the latest issue.<sup>25</sup>

In considering then the earliest hoards of Republican coins from Dacia, we are dealing with hoards composed for the most part of a block of common coins of the late second century B.C. and of the 80s B.C., with normally an isolated terminal coin or scatter of coins of the 70s and 60s B.C.; the vast majority of these hoards are not now known in anything like their entirety. Even were it not true that the 70s and 60s B.C. are for the most part a period of small issues from the Roman mint, it would clearly be extremely hazardous to

<sup>19</sup> Polybius IV, 38, 4–5.

<sup>20</sup> I. Glodariu, *Relații comerciale ale Daciei cu lumea elenistică și romană*, Cluj, 1974 = *Dacian trade with the Hellenistic and Roman World*, Oxford: *British Archaeological Reports*, Supp. 8, 1976. Isolated objects, such as the tools of Aquileian origin at Gradiștea, prove nothing of importance (*Relații comerciale*, 248 = *Dacian trade*, 211, where note also a few objects of adornment and toilet and pieces of marble, alabaster and terracotta).

B. Mitrea, *Eph. Tac.* 1945, 1, 'Penetrazione commerciale e circolazione monetaria nella Dacia prima della conquista' (concentrating mainly on Transylvania), esp. 113, sees the import of Republican coinage into Dacia purely as a result of general commercial activity, without undertaking any analysis of this concept. Gold, salt and corn are seen (151) as the major exports from Dacia; to suggest corn goes against the evidence of Polybius and Strabo (n. 32); salt seems quite implausible as a *major* export from Dacia to Italy; likewise gold, of which Rome had more than she knew what to do with after the victory

of Cn. Pompeius. There is no new conceptual framework in *Dacia* IX–X, 1941–44, 359 (on Oltenia) or in *Stud. Cerc. Num.* II, 1958, 123 (on Muntenia).

I. Glodariu operates with a similarly modernizing framework; his Ch. v, on trading personnel, supposes that the evidence of other provinces is relevant to Dacia before the conquest and makes the astonishing assumption that places of origin of objects of trade are the same as places of origin of traders.

<sup>21</sup> *Carpica* 1971, 159.

<sup>22</sup> See G. T. Griffith, *Mercenaries of the Hellenistic World*, Cambridge, 1935, 234–5, for the limited use by Rome of mercenaries.

<sup>23</sup> See n. 17 above.

<sup>24</sup> *Dacia* XVIII, 1974, 147, esp. nn. 52–5 for earlier bibliography.

<sup>25</sup> The attempt to refute the argument that worn legionary coins found in Dacia perhaps arrived long after 31 B.C. by asserting that worn dies gave the coins a worn appearance from the outset betrays unfamiliarity with the non-Dacian material.

argue that the hoards were deposited immediately after the date of the latest coin in them. Even if the hoards were Italian, all we could say is that the group *as a whole* is likely to have been deposited by the mid or late 60s B.C.<sup>26</sup> In the case of Dacia, we perhaps have a time-lag for travel to reckon with as well.<sup>27</sup>

If we may with all due caution posit a beginning to the massive import of Republican denarii into the lower Danube basin from the mid or late 60s B.C. onwards, an anomalous and unique phenomenon, as I have already remarked, as well as a sudden one, I cannot think of any satisfactory explanation except in terms of the slave trade, forced in the immediate aftermath of the victorious campaigns of Cn. Pompeius against the pirates in 67 B.C. to find an alternative source of supply for Rome and Italy outside the Greco-Macedonian Mediterranean world. The problem was no doubt exacerbated by the fact that not only did 67 B.C. see a virtual end to the kidnapping and slave-raiding organized by the pirates, but 63 B.C. saw the inclusion within the Roman empire of vast territories which thereby theoretically ceased to be available as sources for the supply of slaves. Caesar's razzias in Gaul (see p. 122) did not begin until 58 B.C. Italy had also of course in any case suffered severe losses of slave manpower in the revolt of Spartacus.

It should not of course be assumed that denarii were the only object imported into the lower Danube basin in exchange for slaves, though it is precisely their massive import from the middle of the first century B.C. onwards that is, I think, best explained in terms of a phenomenon such as the slave trade, the scale of which is attested in general terms by Strabo's famous account of Delos.<sup>28</sup> One may suppose that traditional imports into the Black Sea area, such as the wine and oil recorded by Polybius, also came in exchange for slaves; in support one may draw attention to the account of trade in Gaul preserved by Diodorus, where Italian traders take wine to Gaul and exchange a jar of wine for a slave.<sup>29</sup>

In Dacia as in Gaul, we have a local aristocracy selling perhaps its own humble dependents and certainly the humble dependents of others captured in internal raiding in exchange for the desirable products, from silver to wine, of the Mediterranean world;<sup>30</sup> contact with that world was leading a barbarian élite to define its status in terms of the possession of things presumably perceived as among the characteristic goods of civilisation.<sup>31</sup>

The Black Sea area as a whole is reasonably well documented as a source of slaves. They are highlighted by Polybius among the five commodities exported by the Black Sea area,<sup>32</sup> and M. I. Finley was able to show that there was just enough evidence for an earlier

<sup>26</sup> The general methodological point is made quite correctly by M. Babeş, *Dacia* XIX, 1975, 132-3 and 139 n. 61, against the argument of M. Chişescu, *ibid.*, 249, linking the burial of the hoards with the growth of the state of Burebista.

<sup>27</sup> Assertions to the contrary without supporting evidence are valueless, as by M. Chişescu, *Dacia* XVIII, 1974, 153; *Stud. Cerc. Num.* VI, 1975, 55; note the Stobi hoard, closing in the mid-120s B.C., probably buried in 119 B.C. (*Stobi Studies* I, 1).

<sup>28</sup> Strabo XIV, 5, 2 (668); note slaves of Asian origin coming to Sicily in the 70s B.C., Cicero, II *Verr.* v, 146. Roman involvement in the slave trade through Delos did not lead to any large-scale appearance of Republican coins on Delos, because that island formed part of a functioning monetary area, to which Roman coins were alien and from which they were in practice largely excluded; the Greek cities still had their own coinages, of which Romans in the east made use, and presumably normally melted down such Roman coins as came their way; Republican denarii were, however, gradually hoarded more and more in Greece after Sulla.

There is a casual mention of slaves at I. Glodariu, *Relaţii comerciale*, 106 = *Dacian trade*, 56.

<sup>29</sup> Diodorus v, 26; see Cicero, *pro Quinctio* 24 for a slave-trader from Gaul in 83 B.C.

<sup>30</sup> Endemic raiding might help to explain the non-recovery of the hoards which now form the material for study; the retainers who helped carry it out no doubt received Republican denarii as a status-enhancing reward.

<sup>31</sup> I note in passing that, *grosso modo*, amphoras and pots (and their imitations) predominate outside the mountains which surround Transylvania, silverware, bronze-ware and coins (and their imitations) predominate within; there is not enough evidence for glass-ware and other assorted objects to detect a pattern; see I. Glodariu, *Relaţii comerciale = Dacian trade*, summarized in *Crisia* (Oradea) I, 1972, 45, 'Importuri Elenistice-Italice (200 B.C.-100 A.D.)'. I suppose the difference to correspond to a difference of fashion; within the mountains one threw silver around, without them one got drunk. Burebista eventually attempted to ban wine, Strabo VII, 3, 1 (303-4).

<sup>32</sup> Polybius IV, 38, 4; 50, 2-4; see Strabo XI, 2, 3 (493) for the Crimea, with slaves and skins going one way, clothing and wine the other way. Polybius, loc. cit., with Strabo VII, 4, 6 (311), shows that corn was no longer in the Hellenistic period a major export of the Black Sea area.

period to show a consistent pattern.<sup>33</sup> I should argue that imports of silver into the lower Danube basin in the Hellenistic period reflect in part the trade in slaves; knowledge of this trade then suggested in and after 67 B.C. to some merchants (whose identity remains unknown) the solution to the problem posed by the suppression of piracy; the result was presumably the substantial monopolization of the trade by the western market.<sup>34</sup>

The nature of the evidence does not make it possible to point to an upsurge of slaves from the lower Danube basin in the last years of the Republic; one can only draw attention to the fact of their existence. Even if it is not possible to say whether or not the Thracians attested are to be taken as including peoples from further north,<sup>35</sup> Dacians are amply attested at Rome under the early Empire; one even appears under Augustus in Africa.<sup>36</sup>

If it is true that the Roman world moved to replace a lost source for the supply of slaves after 67 B.C., it follows that the world was not in any sense glutted with slaves despite the mass enslavements of Cimbri and Teutones and by Sulla in the east, and despite the long-term effects of piracy in producing slaves.<sup>37</sup> Strong demand for slaves in the Roman world in this period is also to be inferred from the lists of Delphic manumissions; foreign slaves seem progressively to disappear over the period from the second century into the first,<sup>38</sup> and the mean release price of an adult male slave rises over the same period.<sup>39</sup> The last generation of the Roman Republic is probably a period of increase in the size of great estates;<sup>40</sup> stable or increasing demand in Italy for slaves over the same period would be no surprise. It is perhaps reasonable to suggest that the relative infrequency in the lower Danube basin of coin hoards closing with coins of the 50s B.C. is to be connected with the availability of slaves from Caesar's wars in Gaul;<sup>41</sup> the penetration of coins of the 40s and 30s B.C. into Romania is again on a massive scale.

It is unfortunately not possible to calculate other than very roughly what proportion of the Republican denarii which travelled to Romania is represented by the 25,000 now known. Some hazardous calculations may, however, perhaps be suggestive. If one assumes that one coin in a thousand from an original population may survive, one would have a total of 25,000,000 Republican denarii once circulating in Dacia. There is of course no way of knowing the number of denarii exported to Dacia and instantly melted down because of the special circumstances obtaining there (see above). As a pure hypothesis, one might suggest a total of 50,000,000 denarii once exported to Dacia. One might then hypothesize that a very low sum was paid for a slave at the point of original purchase, comparing the amphora of wine paid for a slave in Gaul, say 50 denarii. Republican denarii exported to Dacia

<sup>33</sup> M. I. Finley, *Klio* 1962, 51; see also D. M. Pippidi, *St. Clas.* 1966, 232 = *Contribuții la istoria veche a României*, Bucharest, 1967, 523, on G. Klaffenbach, *Die Grabstelen der einstigen Sammlung Roma in Zakynthos* (Abh. Ak. Berlin, Kl. f. Lit. u. Kunst, 1964, 2), no. 28, two Istrian slaves, perhaps so designated because bought at Istria (compare Varro, *LL* VIII, 21 on slaves named after their place of purchase). I know of no other evidence for the likely involvement of the Greek cities near the mouth of the Danube in the slave trade.

See Strabo VII, 3, 12 (304) for Getic and Dacian slaves in Athens; whence Eustathius, *Comm. on Dionys. Perieg.* 305 (*Geogr. Gr. Min.* II, pp. 270-1). N. Lascu, *Acta Mus. Nap.* 1970, 79, argues that Daos is a name appropriate to a slave from Asia Minor, not to a Dacian slave; but that does not affect Strabo's belief that there were Dacian slaves in Athens. See M. I. Rostovtzeff, *Social and Economic History of the Hellenistic World*, Oxford, 1941, 675 n. 87, for Scythian, Sarmatian and Maeotian slaves on Rhodes (a bare list of references to slaves in inscriptions of Rhodes in P. M. Fraser and T. Rönne, *Boeotian and West Greek Tombstones*, Lund, 1957, 96, n. 37.) See V. Velkov, *Etudes Balkaniques* 1, 1964, 1, 125, 'Zur Frage der Sklaverei auf der Balkanhalbinsel während der Antike', for slaves from Thrace in the Mediterranean world.

<sup>34</sup> Contact between Italy and the lower Danube basin seems to have been relatively direct, presumably by sea; the maps published by I. Glodariu as pls. xii,

xiii, xiv show the coins of Macedonia Prima and Thasos on the one hand and of the Republic on the other hand spreading out from the lower Danube; by way of contrast, the coins of Dyrrhachium and Apollonia seem to come overland from the west.

The presence of Romans, perhaps men of business, at Narona, Issa and Corcyra Nigra in the late Republic is clearly irrelevant to the arrival of Republican coins in Dacia.

<sup>35</sup> See M. Bang, *MDAI(R)* 1910, 223, 'Die Herkunft der römischen Sklaven', esp. 226; G. G. Mateescu, *Eph. Tac.* 1923, 57, 'I Traci nelle epigrafi di Roma', esp. 77 ff. for freedmen; M. L. Gordon, *JRS* 1924, 93, 'The nationality of slaves under the early Roman Empire', is a—for our purposes—inconclusive study of nomenclature.

<sup>36</sup> See M. Bang, 237 and 230 (*CIL* VI, 7407). The evidence of slave nationality at Laurium is trivial in bulk for this period.

<sup>37</sup> See M. H. Crawford, *Ec. Hist. Rev.* 1977, 42, 'Rome and the Greek world: economic relationships.'

<sup>38</sup> W. L. Westermann, *The Slave Systems of Greek and Roman Antiquity*, Philadelphia, 1955, 33; verbal information from Keith Hopkins.

<sup>39</sup> Verbal information from Keith Hopkins.

<sup>40</sup> See P. A. Brunt, *Italian Manpower*, Oxford, 1971, 301-5; *Latomus* 1975, 619, 'Two great Roman landowners'.

<sup>41</sup> W. L. Westermann, 63, playing down the numbers involved. Precise calculations are speculative.

between the mid-60s and 30 B.C. might then account for something approaching 30,000 slaves per year. This is a substantial part of the annual requirement of Italy, if one assumes a total slave population of 2,000,000 and an annual requirement of 50,000 by purchase and 50,000 by breeding.

Precise tabulation of imperial hoards in Romania is not possible for much of the period, since many of the terminal coins are not so precisely datable as is the case with the Republican coinage. But some flow of Roman coins into Dacia continued right down to the conquest of Dacia by Trajan.<sup>42</sup>

It is also possible that the beginning of the principate sees the extension to other areas of a phenomenon peculiar to the lower Danube basin under the Republic. The export of silver coins beyond the Rhine and Danube has been documented by Cosmo Rodewald;<sup>43</sup> Strabo's account of Aquileia leaves no doubt about the importance of slaves among the commodities that came from the north.<sup>44</sup> I suggest that they formed the main commodity in exchange for which silver coins under the Empire passed beyond the northern frontiers.

It is then a possible corollary of this thesis, if true, that one can no longer use one of the arguments for supposing a shift from slavery to tenancy as a mode of production on Italian estates in the early Empire, namely the disappearance of a major source of slaves without any alternative source being found.<sup>45</sup>

*Christ's College, Cambridge*

TABLES

Hoards with half-a-dozen or fewer Roman Republican denarii and those whose contents are inadequately known, are excluded from the table. Hoards in *Roman Republican Coin Hoards* appear before the diagonal line, and others after it.

Numbers in brackets after each hoard are those of the hoard in *Roman Republican Coin Hoards*; bibliographical references are given for hoards not in that inventory.

1. Romanian hoards from 80 to 31 B.C.

80-76	+	+	+	+/+	+	+	+	+	+		
75-71	+	+	+	+/+	+	+	+	+	+		
70-66	+	+	+	+/+	+	+					
65-61	+	+	+	+/+	+	+	+				
60-56	+	+	+/+								
55-51	+	+	+/+								
50-46	+	+	+	+/+	+	+	+	+	+		
45-41	+	+	+	+/+	+	+	+	+	+	+	+
40-36	+	+									
35-31	+	+	+/+	+							

80-76 Nedeia (274), Sadina (275), Bălănești (280), Lunca Deal (293), Bobaia (unpublished, Museum of History, Cluj), Rociu (*Studii și Comunicări*, Pitești, 1969, 101), Suhaia (*SCN* 1968, 452), Moroda (*Apulum* 1971, 169), Inuri (O. Floca, 'Un nou tezaur', *Contribuții la cunoașterea regiunii Hunedoara* (Deva, 1956; preface by O. Floca), 11)  
 75-71 Alexandria (295), Căpreni (296), Hunedoara (303), Sfîntești (320), Zătreni (*SCIV* 1971, 579), Hotărani (*SCIV* 1971, 579), Năsăud (*Apulum* 1974, 577), Segarcea (unpublished, Romanian Academy, Bucharest), Beiuș (*SCN* 1968, 355), Hotăroaia, Roșiile (*Revista Muzeelor* IX, 1972, 570)  
 70-66 Hevisz Szamos (321; Th. Mommsen, *Histoire de la monnaie romaine* II, 471), Martiniș (322; *BSNR* 1948-72, 75), Nicolae Bălcescu (323), Medveș (324), Grădiștea (325), Bîrsa (*Tibiscus* I, 1971, 24), Mihai Bravu (*SCN* 1968, 373-latest issue C. Piso Frugi)

<sup>42</sup> C. Rodewald, *Money in the Age of Tiberius*, Manchester, 1976, 45-24 hoards altogether, closing with Augustus, 3 between Tiberius and Nero, 13 between Vespasian and the conquest. These hoards of course contain some Republican denarii; there is no way of knowing whether any of these came in with the Imperial denarii or not.

<sup>43</sup> C. Rodewald, 32-4, for coins crossing the Rhine probably under the Julio-Claudians; 34-7, for coins crossing the Upper Danube under the Flavians.

<sup>44</sup> Strabo v, 1, 8 (214); there is no further information in S. Panciera, *Vita economica di Aquileia in età romana*, Aquileia, 1957, 82. Note that Corsica was still a source of (bad) slaves in Strabo's day, v, 2, 7 (224).

<sup>45</sup> *Contra* N. Brockmeyer, *Arbeitsorganisation und ökonomisches Denken in der Gutswirtschaft des römischen Reiches*, Diss. Bochum, 1968, 152-3.

65-61 Curtea de Argeş (327), Peteni (329), Stăncuţa (331), Licuriciu (332), Mofleni (*Mitropolia Olteniei* XXIV, 9-10, 1972, 709, incorporating *SCIV* 1971, 124, no. 37), Garvăn (*SCN* 1971, 372), Şopotu (*SCN* 1968, 450), Secusigiu (*Revista Muzeelor* VIII, 1971, 321)  
 60-56 Alungeni (335), Amnaş (338), Frauendorf (341), Dunăreni (*Historica* I, 1970, 53)  
 55-51 Buzau (346), Călineşti (347), Sălaşul de Sus (348), Chitorani (*SCN* 1971, 378)  
 50-46 Roata (356), Locusteni (367), Satu Nou (368; I ignore the denarius of C. Vibius Varus found in the locality in 1969, *SCIV* 1971, 125, no. 44), Transylvania (369), Hunedoara (378), Albeşti (Z. Szekely, *Jegyzetek Dacia Történetéhez*, Sf. Gheorghe, 1946, 48), Brîncoveanu (*Acta Valachica* 1971 (1972), 103), Orbeasca de Sus (*SCIV* 1974, 265), Tîrnava (*SCN* 1968, 381), Ilieni (*SCN* 1971, 81), Tîrnava (*SCN* 1975, 41), Spîncenata (*Studii şi Comunicări*, Piteşti, 1972, 205)  
 45-41 Bran-Poartă (408), Prejmer (412; republished in *Aluta* 1971, 97; for disposition see *Revista Muzeelor* IX, 1972, 38), Farcaşele (420), Grosspold (426), Işalniţa (428), Jegălia (*Dacia* 1972, 303; latest issue P. Accoleius Lariscolus), Satu Mare (*Tezaure monetare din judeţul Satu Mare*, Satu Mare, 1968, 19), Islaz (*SCN* 1971, 305), Murighiol (*Pontica* 1974, 205), Nicolae Bălcescu (*SCN* 1975, 209), Zimnicea (*Memoria Antiquitatis* 1970, 491), Moroda (*Archaeologiai Közlemenyek*, VI Kötet (Új folyam, IV Kötet), 1866, 175), Suhaia (*SCN* 1968, 452), Vladeni (*SCN* 1971, 378), Stupini (*SCN* 1971, 255) Vişina (*Memoria Antiquitatis* 1971, 455)  
 40-36 Poroschia (436), Tulcea (439)  
 35-31 Beclean (449), Walachia (454), Şeica Mică (456), Costineşti (*Pontica* 1970, 131), Gura Padinii (*SCIV* 1970, 429)

## 2. Bulgarian hoards from 80 to 31 B.C.

80-76 +  
 75-71  
 70-66  
 65-61  
 60-56  
 55-51  
 50-46 +  
 45-41 + +  
 40-36  
 35-31 +/+

80-76 Trstenik (*Arheologia* 1967, 4, 53)  
 50-46 Guljancy (377)  
 45-41 Orjahoviza (*Arheologia* 1967, 4, 53), Obzor (*Bull. Soc. Arch. Varna* XIV, 1963, 39)  
 35-31 Topolovo (457), Okhoden (*Arheologia* 1972, 2, 73)  
*RRCH* 490 and 520 are Augustan.