

Coin evidence and the northern frontier in the second century AD

by D C A Shotter

The changing fortunes of the northern frontier in Britain have over the years been subject to a wide variety of interpretations; these are conveniently summarised in a recent paper by Breeze (1975, 67–78). Three lines of thought predominate:

- 1 Final abandonment of the Antonine Wall in the 180s; this view has been favoured by numismatists, arguing from the latest coins from the forts, and from the evidence provided by Roman coin hoards (Haverfield and Macdonald 1924, 123; Robertson 1973, 39; 1971, 133).
- 2 Final abandonment of the Antonine Wall in the mid 160s, after a very short second phase of occupation: this view has recently been argued strongly on the evidence of the samian ware (Hartley 1972, 36–9): the coarse ware, which appeared to be against this interpretation (Gillam and Mann 1970, 1–44), has recently been reviewed making it more compatible with the samian evidence (Gillam 1973, 55–6).
- 3 A scheme which favours a much later date for Antonine Wall II, terminating in the first decade of the 3rd century; this view is suggested initially on interpretations of the literary and epigraphic evidence (Jarrett and Mann 1970; Jarrett 1976, 19). The chief problem here is that all the *explicitly dated* inscriptions from the Antonine Wall belong to the reign of Antoninus Pius, whilst the later date of the Castlecary altar (RIB 2148) has to be inferred (Mann 1963, 487f). The literary references (Cassius Dio 72.8 and 76.12.1) are imprecise to the point where it would be safer to interpret them in the light of other evidence; both of Dio's references are to unnamed walls, which could be either the Hadrianic or the Antonine frontier.

These interpretations, as Breeze notes, are in conflict; it is not, however, the purpose of the present paper to rehearse past arguments in an attempt to step a precarious path between them; an assessment of the differing views has already been succinctly made in Breeze's paper. Rather the present purpose is to look again at the numismatic evidence; this has so far been interpreted, as we have seen, to provide one of the three possible dates of final abandonment of the Antonine Wall. The object of this review is to see whether in fact the coin evidence can be shown to lend any support to either of the other two hypotheses.

Assessment of the numismatic evidence from the Antonine Wall is assisted in one major particular – namely the regular collection and discussion of reported coins, first by Sir George Macdonald (1918; 1924; 1934; 1939), and then after his death continued by Professor A S Robertson (1950; 1961; 1971). In the present discussion, these have been supplemented by coins reported in the annual excavation summaries in *Britannia*, and by those recovered in Breeze's recent excavations at Bearsden. The contribution of the coin evidence to a discussion of the

termination of occupation of the Antonine Wall may be based on a consideration of three factors – the dates of loss of the latest coins from the sites, the evidence provided by hoarding, and the overall pattern of the coin sample from Antonine Wall sites. Attention in the past has been paid more readily to the first two of these; nor are these first two approaches unequivocal in their implications.

As to the third approach, samples for individual sites are recorded in Robertson's latest survey (1971, 138-9); it is true that these samples are not sufficiently large to permit meaningful discussion of the separate histories of Antonine Wall sites; only Bar Hill and Mumrills have produced in excess of twenty coins each – 34 and 37 respectively. The total, however, from all the Wall sites (including Camelon) is 213 coins, of which 20 are illegible; a further three – a Constantinian coin each from Bearsden and Kirkintilloch, and a Byzantine coin also from Kirkintilloch – may be regarded as irrelevant to the present discussion. The effective sample thus becomes 190 coins; although still not large, there is a reasonable expectation that the trends displayed by such a sample will not be totally illusory.

First, the latest coins from Antonine Wall sites; 15 out of the 21 sites have yielded coins, most of which are unstratified; the latest issues from each site are as follows:

SITE	TOTAL	LATEST COIN
Carriden	1	Vespasian (AV; no date)
Auchendavy	1	Trajan (AV; AD 100)
Rough Castle	2	Trajan (AE; AD 103-111)
Castlecary	6	Hadrian (AE; AD 125-128)
Westerwood	1	Hadrian (AR; no date)
Duntocher	9	Antoninus Pius (AE; no date)
Falkirk	1	Antoninus Pius (no date)
Bearsden	11	Antoninus Pius (AE; AD 154-5)
Balmuildy	15	Antoninus Pius (AE; AD 152-3); the coin of Marcus Aurelius from the site was issued as Caesar (AD 140-4); there is a further coin of Antoninus which falls in the period AD 145-161
Cadder	6	Antoninus Pius (AE coin of M Aurelius as Caesar, AD 159-160)
Camelon	64	M Aurelius (?) (There is a doubtful and undated AE coin of Faustina II from the site; otherwise, the latest coins are three of AD 154-5)
Old Kilpatrick	18	M Aurelius (an AR coin of Lucilla, c AD 164-9)
Mumrills	37	M Aurelius (AE; AD 173-4); the description of this find is a little odd (Robertson 1961, 134); otherwise the latest coin is of Antoninus Pius (AD 154-5)
Bar Hill	34	Commodus (AE; no date); the coin was identified with considerable reservation; otherwise the latest coin is a tin <i>denarius</i> of M Aurelius as Caesar (AD 140-4)
Kirkintilloch	7	Commodus (no date)

Thus of the 15 sites which have produced coins, only four (or possibly five) have examples dating later than AD 161. Of these five, a number are dubious in date; the coin of Faustina II from Camelon cannot be dated securely to before or after AD 161; there is no information whatever about the status of the coin of Commodus from Kirkintilloch (Stuart 1852, 324), whilst that from

Bar Hill was barely legible (Robertson, Scott and Keppie 1975, 172). Even if both the identifications are correct, we cannot tell whether the coins were issued for Commodus as Augustus or as Caesar; thus they could be as early as AD 172. With regard to the coin from Kirkintilloch, we should remember that a silver hoard was discovered near the site in 1893 (Richardson 1894, 276), the recorded contents of which, as well as the circumstances of its discovery, would suggest that it is not complete – thus allowing the possibility that the coin of Commodus might derive from that source. The coins from this hoard have been handed in on a number of occasions, and now consist of Vespasian (2), Titus (1), Domitian (5), Nerva (2), Trajan (16), Hadrian (20), Faustina II (1): there is no information concerning the date of the coin of Faustina II; if the recorded contents are anywhere near complete, this coin will almost certainly have been issued in the reign of Antoninus. Since, however, the hoard has been brought together over a period of years, it is quite likely that coins have gone unrecorded, and it is possible that the hoard could have terminated later in the Antonine period, particularly of course if the Faustina coin was issued in the reign of Marcus.

It is equally possible (Breeze 1975, 68) that these Commodan coins do not derive from a period when the forts were in full occupation, and may therefore not imply the continued occupation of the Antonine Wall into the later 2nd century. This will mean that the latest securely dated coin is that of AD 173–74 from Mumrills, and this was found unstratified outside the fort. Thus, whilst a case can be made on the basis of the latest coins for continued occupation of the Wall into the 180s, it should be noted that the picture presented by these coins is by no means unequivocal.

It could be suggested on the basis of a study of the latest coins that not all of the forts enjoyed a similar history; for example, a case might be made for a later occupation at Castlecary than at some other sites; the possible late dedication (RIB 2148) is to a degree matched by the evidence of samian ware (Hartley 1972, 39), whereas Breeze's extended campaign at Bearsden has failed to detect more than a single period of occupation in the fort buildings (Breeze 1974, 12–13; Maxwell 1972, 178–9).

Secondly, we may turn to hoards; as Robertson notes (1971, 133), their evidence is not as helpful as it might be. The majority of the 2nd-century hoards from Scotland are recorded very inadequately, with the result that it is usually not possible to be certain in whose reign the latest coins fell; nor is it clear in the case of those hoards terminating with coins of Marcus Aurelius whether these coins were issued in his period as Caesar or Augustus; further, in only very few cases are the coins now available for detailed examination. Such information as does survive, however, suggests a reasonably even chronological spread of hoard-terminations over the reigns of Antoninus (Lanark, Deskford, Dalry, Castledykes – AE), Marcus Aurelius (Linlithgow, West Calder, Kirkintilloch (?), Taymouth, Pitcullo), and Commodus (Braco, Drummond Castle, Rumbling Bridge, Lingrow, Strathaven). In addition, four hoards terminated with coins of Severus (Portmoak, Leuchars, Cowie Moss, Hill of Megray) and one with coins of Alexander Severus (Falkirk). Nine other hoards probably terminated during the period, but cannot be assigned a definite closing-date (Edinburgh, Greatlaws, Leven, Largo, Glamis, Fawsyde, Aberdeen, Nairn, Bean Castle).

Much weight has been attached to the hoard of *denarii* from Rumbling Bridge, Kinross-shire, which contains seven coins of Commodus as Augustus and one of Crispina, the latest coin being dated to AD 186–7 (Robertson 1957, 242–3). It has been suggested (Robertson 1971, 133) that this may imply the continuing presence of a garrison force on the Antonine Wall into the latest years of the Antonine period, on the ground that such a hoard would require a nearby source for such coins. Breeze, however, has shown (1975, 71; cf Hartley 1972, 40) that other

explanations are available for such a hoard. It might be added that there is no proposal to extend Scottish garrisons into the second quarter of the 3rd century in order to explain the large hoard of *denarii* from Falkirk, which terminated with coins of Alexander Severus and Julia Mamaea. Only one other silver hoard has been geographically closely associated with an Antonine Wall site – a very partially recorded hoard from Linlithgow from which the last coin given is of Marcus Aurelius (Macdonald 1918, 258f; Robertson 1974, 31).

In short, it is hard to see in hoards terminating with Commodan coins any necessary implication of a continued holding of the Antonine frontier into the 180s; indeed it is possible that the hoards reported as terminating with coins of Antoninus Pius and Marcus Aurelius more accurately reflect the frontier's history. Thus, as with the latest coins from the sites, a study of 2nd- and early 3rd-century hoards from Scotland can hardly be regarded as indicating an obvious conclusion to the discussion.

Thirdly, an examination of the coin samples as a whole; this can best be demonstrated in tabular form (also fig 1):

PERIOD	NO. OF COINS	%
I (-AD 41)	9	4.74
II (41-69)	9	4.74
III (69-96)	46	24.21
IV (96-117)	46	24.21
V (117-138)	41	21.58
VI (138-161)	34	17.89
VII (161-192)	5	2.63
VIII (192-222)	—	—
	—	—
	190	100.00

Although a discussion of possible 1st-century predecessors of Antonine Wall forts is not the main purpose of this paper, a note on that subject may be useful. The strong showing of pre-Flavian and Flavian coins (nearly 34% of the sample) clearly reflects some Flavian activity, although it should be noted that a large number of these coins (38 or 60%) are *aurei* or *denarii*, whose circulation-life was longer than that of 1st-century bronze and that 33 of them have come from Camelon. Apart from a number of the long-lived legionary *denarii* of Marcus Antonius, there are no Republican coins recorded from Antonine Wall sites; the evidence of coin hoards (Reece 1974, 84) suggests that we are much more likely to find these in pre-Hadrianic than in later contexts. That Camelon has a Flavian origin is generally accepted – a view reinforced by its large showing of Flavian coins. Hartley (1972, 12) has suggested that on the evidence of the samian ware Castlecary and Cadder might be included in the Flavian group; neither of these sites has yet yielded sufficient coins to permit comment, although it should be noted that out of its sample of only six coins, Castlecary has produced a Neronian bronze; as Robertson notes (1971, 132), Balmuildy, Kirkintilloch and Mumrills have also produced 1st-century bronze; indeed 25% of the Mumrills sample of 37 coins is pre-Trajanic.

Apart from the unlikely possibility that a few of the Trajanic coins may derive from occupation of a few of the sites into the earliest years of Trajan's reign, most of the coins from period IV, and all from V, VI, and (presumably) VII must be the product of the occupation which commenced in the earliest years of Antoninus Pius. The proportions occupied by Trajanic and Hadrianic coins are very close; this relationship is at variance with that which is normally found on sites in NW England, where Trajanic coins generally outnumber quite clearly those of Hadrian's

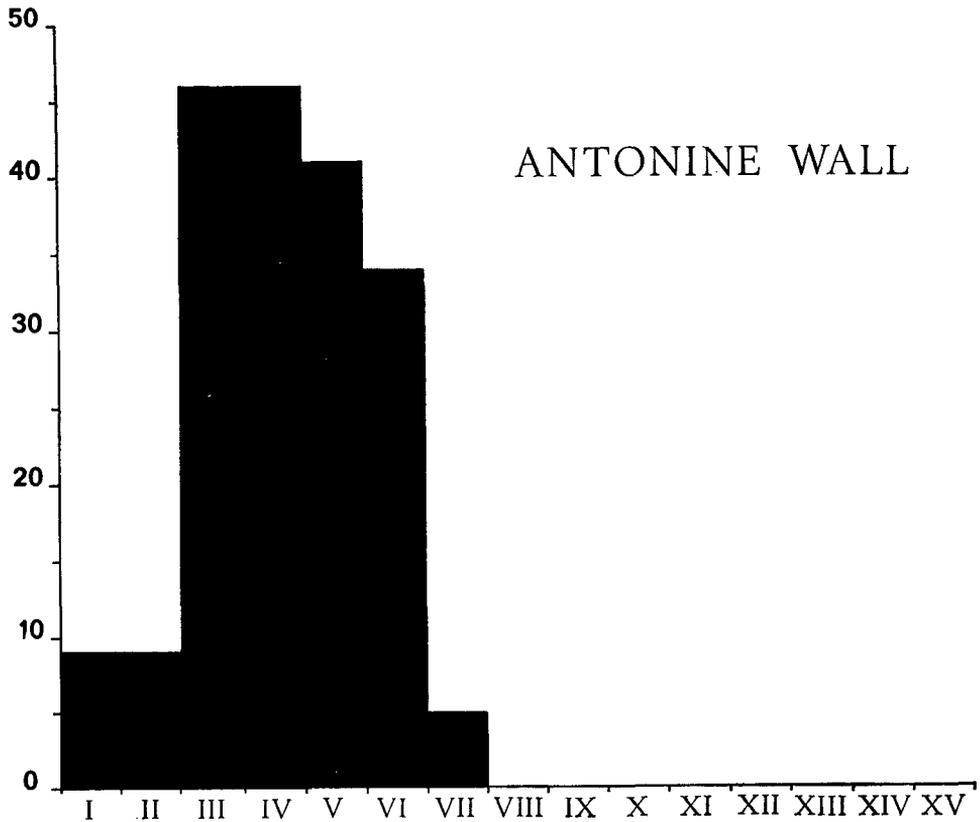


FIG 1 Chronological distribution of Roman coins from the sites of the Antonine Wall (including Camelon)

reign. In the following table, the proportions quoted relate to the complete coin-samples from the sites; it is therefore *not* the percentages themselves which are comparable so much as the relationship between them:

PERIOD	% IV	% V	% VI	% VII
Birdoswald	9.62	5.77	13.46	3.85
Castlesteads	10.53	4.21	12.63	9.47
Chester	9.49	5.14	6.85	6.59
Lancaster	5.38	2.69	5.83	4.93
Manchester	7.87	6.02	5.09	2.78
Maryport	11.72	6.25	4.69	4.69
Newstead	17.79	19.22	11.74	1.78
Ribchester	10.98	10.40	5.78	3.47
Watercrook	26.09	6.25	9.78	1.09
Wilderspool	38.32	15.57	6.59	5.39

The explanation for the relationship between Trajanic and Hadrianic coins is clearly to be found in the fact that, in NW England, Trajanic coins will have circulated most freely in Hadrian's reign, whereas in Scotland we are witnessing now far older coins having to compete with those of

Hadrian, which will have reached *their* circulation-peak in the reign of Antoninus. It should be noted that the majority (63%) of the reported coins of period IV are *aurei* and *denarii*, whilst of the Hadrianic coins 66% are bronze denominations, again suggesting, as with Flavian coins, that the bronze denominations had a rather shorter circulation-life than the silver (Reece 1973, 232).

The coinage of the Antonine period from sites on the Antonine Wall also presents a very distinctive picture. The bulk of it consists of coins of the reign of Antoninus Pius; there are 30 coins issued for Antoninus and Faustina I, to which should be added four coins of Marcus issued for him as Caesar. We are then left with one coin of Marcus (Mumrills), one of Lucilla (Old Kilpatrick), an undated coin of Faustina II (Camelon), and two of Commodus (Bar Hill (?) and Kirkintilloch) from the period AD 161-192. As noted above, most of these coins are far from unequivocal in their status and implications; indeed, we are left with only two securely identified coins from period VII (1.05%). The figures for the Antonine Wall forts and for Newstead are closely parallel in the 2nd century, although Hartley has pointed out that Newstead has produced samian ware later than have the Antonine Wall sites. It should be said, however, that Newstead has yielded *more* coins of AD 161-192 than the Wall sites, and that their identification is more secure: they include two coins of Faustina II, a worn coin of Verus (AD 166-7) and a coin of Crispina: there were two further coins of Faustina II, which cannot be definitely assigned to the reigns of Antoninus or Marcus.

If we compare the pattern of Antonine coinage on the Antonine Wall with that at other sites in the north-west, its distinctive character becomes most apparent; at a number of the sites listed in the table above the proportion of coins occupied by period VI (Antoninus Pius) displays an increase over period V - in some cases markedly so; a few display a drop; of these, Wilderspool is perhaps the most instructive (Report forthcoming), for here a sharp reduction from V to VI, followed by slower reductions to VII and VIII, seems to reflect in the pattern of coin loss the site's decline from a zenith in the Hadrianic period and the early years of Antoninus to a much smaller scale of operation, though *not* reaching the point of total abandonment.

Two points may be made about coin loss in period VII - that of Marcus Aurelius and his family; first, a decline from period VI to VII is a common feature, partly at any rate accounted for by the pattern of coin use (Sutherland 1937, 33); however, in the case of sites in NW England, the fall is far less sharp than we see at the Antonine Wall sites, where it is surely too sharp for the explanation to lie simply in monetary policy (Jarrett and Mann 1970, 198). Secondly, just as Hadrianic coins will have reached a circulation-peak in the period of Antoninus, so too the coins of Antoninus will have circulated freely in the period of Marcus Aurelius and Commodus; hence the commonly observed phenomenon of the coins of Antoninus equalling or exceeding those of Hadrian. On the Antonine Wall, we see a sharp drop between periods V and VI; this must indicate a curtailment of activity in the period AD 160-190.

The pattern of coin loss, therefore - a progressive fall through periods V, VI and VII - argues strongly against the prolongation of occupation of the Antonine Wall sites into the later 2nd century. Indeed, if we allow the possibility that some of the sites may have continued in occupation slightly later than others (thus attempting to explain the later and in some cases somewhat doubtful coins), the relationship between V, VI and VII would not be inconsistent with a general evacuation of the sites prior to AD 170, thus coming more closely into line with Hartley's conclusions.

A further inescapable observation is the total absence from Antonine Wall sites of any Severan coins; it is quite unacceptable to argue away the absence of such coins (Gillam 1953, 375); the suggestion, for example (Jarrett and Mann 1970, 198) that the absence of post-Commodan coins on the Antonine Wall may be as relevant as their absence from the group excavated at

Housesteads in 1898 lacks cogency. There is a great difference between the significance of one season's excavations on one site and finds made under varying circumstances over a considerable period at a number of sites. In any case, the overall sample of coins from Housesteads provides a corrective to impressions which may be gained from the 1898 group: nor should it be forgotten that of this latter group 44 coins (34%) were classified as illegible (Bosanquet 1904, 297f). Indeed, it is the absence of Severan coins which provides the strongest corroboration of the impression gained from the relationship of coins of periods V, VI and VII – namely that the pattern of coin loss, like the samian pottery, militates strongly against the suggestion that Antonine Wall II should be dated to the period AD 184–207.

Two other Scottish sites reinforce the point in a more positive way – Carpow and Cramond; Carpow, on present evidence, is a site probably limited to occupation in the Severan period (Robertson 1971, 116); the site has produced 13 legible coins – a sample which is obviously too small from which to draw statistically meaningful and valid observations. It is, however, worth noting that these 13 coins consisted of six pre-Severan coins and seven Severan issues, the latter exhibiting little wear, the former generally a considerable degree of wear. The effect of a Severan period of occupation is seen to be not just a strong showing of Severan coins, but coins of earlier periods – in particular almost as many coins of period VII from this one site as from all the Antonine Wall sites together.

The sample from Cramond is larger (84 coins), and is worth setting out in a manner parallel to that used above for the sites of the Antonine Wall (fig 2):

PERIOD	NO. OF COINS	%
I	8	9.52
II	5	5.95
III	8	9.52
IV	13	15.48
V	12	14.29
VI	13	15.48
VII	4	4.76
VIII	21	25.00
	84	100.00

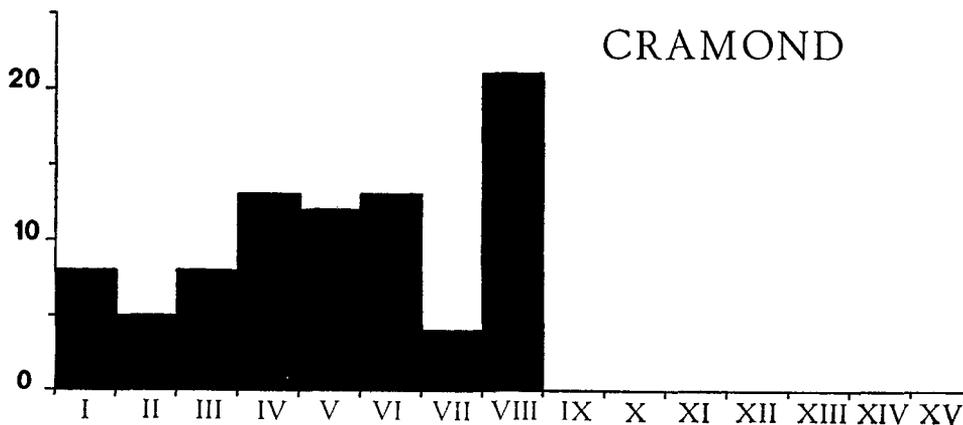


FIG 2 Chronological distribution of Roman coins from Cramond

The same two points may be made as were in the case of Carpow; the effect of a Severan phase of occupation is not only to produce a sizeable proportion of Severan coins, but also to raise the proportions for periods VI and VII in relation to those for IV and V, reflecting the continued circulation of Antonine-period coinage in the Severan period. As we should expect, this point is not so marked at Cramond as at Carpow, since Cramond saw occupation in the Antonine period also. It is reasonable to assert that the Jarrett-Mann scheme for the Antonine Wall would require that the chronological distribution of coins from Antonine Wall sites should bear some resemblance to that from Cramond.

Thus, the chronological distribution of coins from the Antonine Wall and other Roman sites in Scotland would suggest that in the 2nd century the Wall sites (possibly with a small number of exceptions) were occupied from the governorship of Lollius Urbicus until the 160s; further, it would suggest that the Severan campaigns probably made very limited use of existing – or more precisely, previously abandoned – sites, presumably relying on naval transport and avoiding the overland routes, as is perhaps suggested by Caracalla's *TRAIECTVS* type of AD 208 (RIC IV¹, p 284, nos 437 and 441; Oman 1931).

A further point of considerable consequence made by Hartley (1972, 36) is that the samian ware would argue strongly against the simultaneous holding of both Hadrian's Wall and the Antonine Wall. Here too the evidence of the reported coins appears to lend general support.

The samples of coins from individual sites on Hadrian's Wall are very variable; the statistics that are here employed are in the main those which derive from published surveys and excavations (Birley 1961, 259), and, in order to make them as closely comparable as possible to those used above for the Antonine Wall, the proportions are worked out on the basis of coins issued up to the death of Elagabalus. Because of the continued circulation of the later coins after AD 222, there will be a slight, though progressive, distortion of the comparison in periods VI, VII and VIII.

The following list includes the coins reported from South Shields and from the forts and intervening structures of the Cumberland Coastal system (fig 3):

PERIOD	NO. OF COINS	%
I	18	2.96
II	8	1.32
III	85	13.96
IV	132	21.67
V	85	13.96
VI	101	16.58
VII	89	14.61
VIII	91	14.94
	<hr/>	<hr/>
	609	100.00

There are a number of obvious points of contrast between this table and that illustrating the coins from the Antonine Wall sites; first, as we should expect, Hadrian's Wall sites display a markedly lower proportion of coins up to AD 96 (18.5% compared with 43%). However, the most important difference concerns the relationship between periods IV, V and VI (AD 96-161). The Antonine Wall showed approximately similar proportions for IV and V, reflecting presumably that the 'normal' tendency for Trajanic coins to exceed Hadrianic was compensated for by the circulation advantage that we might expect Hadrianic coins to enjoy in the Antonine period. On Hadrian's Wall, Trajanic coins markedly exceed the Hadrianic; this surely indicates that

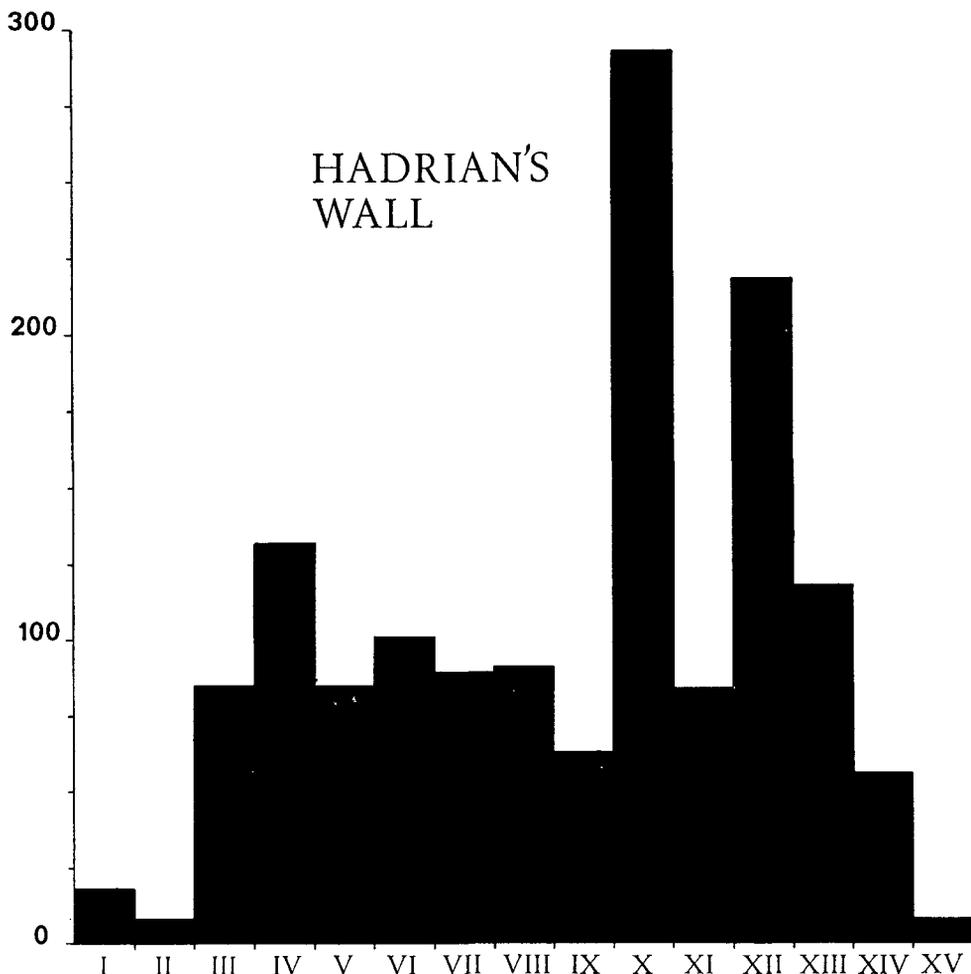


FIG 3 Chronological distribution of Roman coins from the sites of Hadrian's Wall (including the Cumberland Coastal sites)

although Trajanic coins did not have the advantage of any general occupation of the sites in the Trajanic period, this was compensated for by a factor affecting the circulation of Hadrianic coinage; the most likely explanation of this is a sharp reduction of activity on Hadrian's Wall in the early Antonine period. It may well be that such an explanation could be invoked on other sites where a sharp decline occurs between periods IV and V – for example, Lancaster (Jones and Shotter 1978, forthcoming), where a combination of evidence now appears to suggest an abandonment at least partly coinciding with Antonine Wall I.

The recovered showing of the coinage of Antoninus on Hadrian's Wall would appear to suggest a renewed and strong occupation in the later Antonine period and beyond – an impression which is confirmed by the maintained coin strength in period VII. There is no evidence in the coin sample to suggest a further occupation gap – at least before AD 122. Although beyond the scope of the present paper, the coin evidence might be used to postulate gaps in occupation at certain sites at later points in the 3rd century.

In conclusion, therefore, whilst the coin evidence cannot be pushed to indicate precise

gaps in occupation (for example, as between Antonine Wall I and II, which in itself would hint that the gap was not long), it would suggest certain general observations on the frontier picture in the 2nd century. From it we might broadly confirm (with possible reservations at a few sites) an Antonine occupation of the Antonine Wall sites between AD 143 and the 160s; it is virtually impossible to believe in the likelihood of a scheme placing Antonine Wall II in the period AD 184-207, since numismatically the signs of Severan occupation, where they occur, are unmistakable; and they are lacking on the Antonine Wall. Finally, the evidence of the coins would corroborate the idea of a gap in occupation on Hadrian's Wall, as at some other sites in NW England, which would broadly occupy the reign of Antoninus Pius.

Further confirmation of this picture appears to come from recent excavations at the Cumberland Coast milefortlet at Biglands House Farm (MF 1); these excavations suggested three 2nd-century phases of occupation – I, preceding the advance into Scotland under Lollius Urbicus; II, probably reflecting the end of Antonine Wall I, c AD 155; III, dated by pottery of AD 170-200 and a slightly worn *sestertius* of AD 170-1 (Potter 1977, forthcoming).

Breeze has argued for a flexible approach to the occupation of individual sites in Scotland; the numismatic evidence supports this. None the less, the general chronological distribution of Roman coins from sites on the Antonine Wall and from certain other sites in Scotland points strongly in a direction similar to that suggested on the basis of the samian pottery.

ACKNOWLEDGMENTS

I am grateful to Mr R C Turner, Graduate Assistant in the Department of Classics and Archaeology at the University of Lancaster, for the preparation of the figures and for making available to me the information compiled by him concerning Roman coins from Hadrian's Wall; to Dr T W Potter, for allowing me to make use in advance of publication of his report on the excavations at Biglands House Farm; to Dr D J Breeze for information concerning the coins found in his excavations at Bearsden which have been identified by Professor A S Robertson. Thanks are also due to Dr Breeze for his helpful comments upon an earlier draft of this paper.

REFERENCES

- Birley, E B 1961 *Research on Hadrian's Wall*. Kendal.
- Bosanquet, R C 1904 'Excavations on the Line of the Roman Wall in Northumberland. The Roman Camp at Housesteads'. *Archaeol Aeliana*, ser 2, 25 (1904), 193-300.
- Breeze, D J 1974 *The Roman Fort at Bearsden, 1973 Excavations*. Edinburgh.
- Breeze, D J 1975 'The Abandonment of the Antonine Wall: its date and implications', *Scot Archaeol Forum*, 7 (1975), 67-78.
- Gillam, J P 1953 'Calpurnius Agricola and the Northern Frontier', *Trans Architect Archaeol Soc Durham, Northumberland*, 10 (1953), 359-75.
- Gillam, J P 1973 'Sources of Pottery found on Northern Military Sites', in Detsicas, A (ed) *Current Research in Romano-British Coarse Pottery*, London, 53-62.
- Gillam, J P and Mann, J C 1970 'The Northern British Frontier from Antoninus Pius to Caracalla', *Archaeol Aeliana*, ser 4, 48 (1970), 1-44.
- Hartley, B R 1972 'The Roman Occupations of Scotland: The Evidence of the Samian Ware', *Britannia*, 3 (1972), 1-55.
- Haverfield, F J and Macdonald, G 1924 *The Roman Occupation of Britain*. Oxford.
- Jarrett, M G 1976 *Maryport, Cumbria: A Roman Fort and its Garrison*. Kendal.
- Jarrett, M G and Mann, J C 1970 'Britain from Agricola to Gallienus', *Bonner Jahrbücher*, 170 (1970), 178-210.
- Jones, G D B and Shotter, D C A 1978 *Roman Lancaster*. Manchester.

- Macdonald, G 1918 'Roman Coins found in Scotland', *Proc Soc Antiq Scot*, 52 (1917-18), 203-76.
- Macdonald, G 1924 'Roman Coins found in Scotland II', *Proc Soc Antiq Scot*, 58 (1923-4), 325-9.
- Macdonald, G 1934 'Roman Coins found in Scotland III', *Proc Soc Antiq Scot*, 68 (1933-4), 27-40.
- Macdonald, G 1939 'Roman Coins found in Scotland', *Proc Soc Antiq Scot*, 73 (1938-9), 241-5.
- Mann, J C 1963 'The Raising of New Legions during the Principate', *Hermes*, 91 (1963), 483-9.
- Maxwell, G S 1972 'Excavations at the Roman Fort of Crawford, Lanarkshire', *Proc Soc Antiq Scot*, 104 (1971-2), 147-200.
- Oman, C 1931 'The First Forth Bridge', *Numis Chron*, ser 5, 11 (1931), 137-50.
- Potter, T W 1977 'The Biglands Milefortlet and the Cumberland Coast Defences', *Britannia*, 8 (1977), forthcoming.
- Reece, R 1973 'Roman Coinage in the Western Empire', *Britannia*, 4 (1973), 227-51.
- Reece, R 1974 'Numerical Aspects of Roman Coin Hoards in Britain', in Casey, P J and Reece, R (eds) 'Coins and the Archaeologist', *Brit Archaeol Rep*, 4 (1974), 78-94.
- Richardson, A B 1894 'Notice of Recent Finds of Coins in Scotland', *Proc Soc Antiq Scot*, 28 (1893-4), 275-8.
- Robertson, A S 1950 'Roman Coins found in Scotland', *Proc Soc Antiq Scot*, 84 (1949-50), 137-57.
- Robertson, A S 1957 'A Hoard of Roman Silver Coins from Briglands, Rumbling Bridge, Kinross-shire', *Proc Soc Antiq Scot*, 90 (1956-7), 241-6.
- Robertson, A S 1961 'Roman Coins found in Scotland, 1951-60', *Proc Soc Antiq Scot*, 94 (1960-1), 133-83.
- Robertson, A S 1971 'Roman Coins found in Scotland, 1961-70', *Proc Soc Antiq Scot*, 103 (1970-1), 113-68.
- Robertson, A S 1973 *The Antonine Wall*. Glasgow.
- Robertson, A S 1974 'Romano-British Coin Hoards', in Casey, P J and Reece, R (eds), 'Coins and The Archaeologist', *Brit Archaeol Rep*, 4 (1974), 12-36.
- Robertson, A S, Scott, M E and Keppie, L J F 1975 'Bar Hill: A Roman Fort and its Finds', *Brit Archaeol Rep*, 16 (1975).
- Stuart, R 1852 *Caledonia Romana*. Edinburgh.
- Sutherland, C H V 1937 *Coinage and Currency in Roman Britain*. Oxford.

Postscript Mr W S Hanson has kindly informed me of two coins of Trajan from his 1977 excavations at Croy Hill; the coins (a *denarius* and a *sestertius* of AD 103-11), identified by Professor A S Robertson, are the first to be recorded from the site and serve to add further strength to the suggestions made in the above paper.