

ART. V. – *Further Evidence of Centuriation in Cumbria.*

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Introduction

CENTURIATION was the method by which the Romans surveyed and marked out agricultural land and a full account of the subject is given by Dilke.¹ Typically, the area was divided-up by a grid pattern of roads to form a block of squares or rectangles known as centuries, each of which was further subdivided by lesser tracks into smaller plots. The roads were marked out after fixing a main longitudinal axis, the *decumanus*, which was crossed at right angles by a main lateral axis, the *cardo*. The inter-secting point was the *tetrans*, the precise location of which was often a matter of some religious significance and the standard century was a square of 20 *actus*, though several variants existed, (1 *actus* = 120 Roman feet of 11·64 inches or 29·57 cms).

For a number of years, centurial systems were known only in the Mediterranean lands, but recently, examples have been identified in northern Europe.² Here, detection may be difficult because of the many boundary changes of two millennia. Any criteria for their recognition are bound to be arbitrary but in general, the occurrence of more-or-less parallel or rectangular arrangements of roads and boundaries, especially when associated with “street”, place-names, must raise suspicions. A standard number of *actus* distance between such features increases the significance of the observation, though the loss of some centurial boundaries with the survival of some intra-centurial tracks could lead to confusion.

In a recent paper³, the author presented evidence of centuriation on land just to the north-west of the Roman fort of Old Penrith and that article should be read in conjunction with the present one to preclude repetition of previously-made points. The first study was confined mainly to the parishes of Hutton and Calthwaite where the centuriated land apparently lay between the Middlesceugh – Skelton Road and the river Petteril. The *cardo* seemed to be the line which ran through a discontinuous series of lanes from Middlesceugh Hall to Barrow Mill on the Petteril. The *decumanus* was probably represented by the line of Itonfield Street – Morton Mill Road – Hutton Row, which ran parallel to the main alignment of the Roman road at High Hesket. The evidence considered in that study did not permit further conclusions but it did raise more questions. In particular, the distance from Barrow Mill to the main Roman road was 3 × 20 *actus*, hinting that the highway might be tied-in with a more extensive survey, possibly associated with centuriation south of Brougham where there is a rectilinear pattern of minor roads. A link between the two areas was suggested by the line of the Middlesceugh – Skelton Road, which could be projected southwards through Blencow, Newbiggin, Stainton, Askham and possibly Shap.

Method

The method of investigation was to pin up the relevant sections of the 1:50,000 OS

map (sheets 85, 86, 90 and 91) and to examine the possible lines with a metre-rule and set-square, checking their bearings against the OS grid-lines with a protractor. Sheets of tracing paper ruled with appropriately spaced grid-lines were used to study particular areas in detail. It was soon clear that manipulating the metre-rule over long distances led to errors in determining alignments, especially with two adjacent map-sheets. To overcome the difficulty, the suspect alignments were plotted onto graph paper on a reduced scale by simply using the OS grid references as co-ordinates. The area studied in this way stretched from Carlisle to Tebay in Westmorland and from the Calbeck Fells to the Eastern Fells.

Results

1. The long axis of the proposed Inglewood system is not in fact quite parallel to the alignment of the Street south of Brougham, as previously reported.³ At High Hesket, the discrepancy is just under four degrees but the stretch of road north from that village is parallel to the long axis. This error certainly arose from not having plotted the road's course onto graph paper in the first instance. The road plan given by Ross⁴ is a little misleading on this point of detail.
2. The discontinuous series of lanes that includes Hutton Row, Morton Mill Road, the road at Low Grange and Itonfield Street may be extended northwards to include a section or road at Unthank (OS 395 485) and shown on Hodgkinson and Donald's map

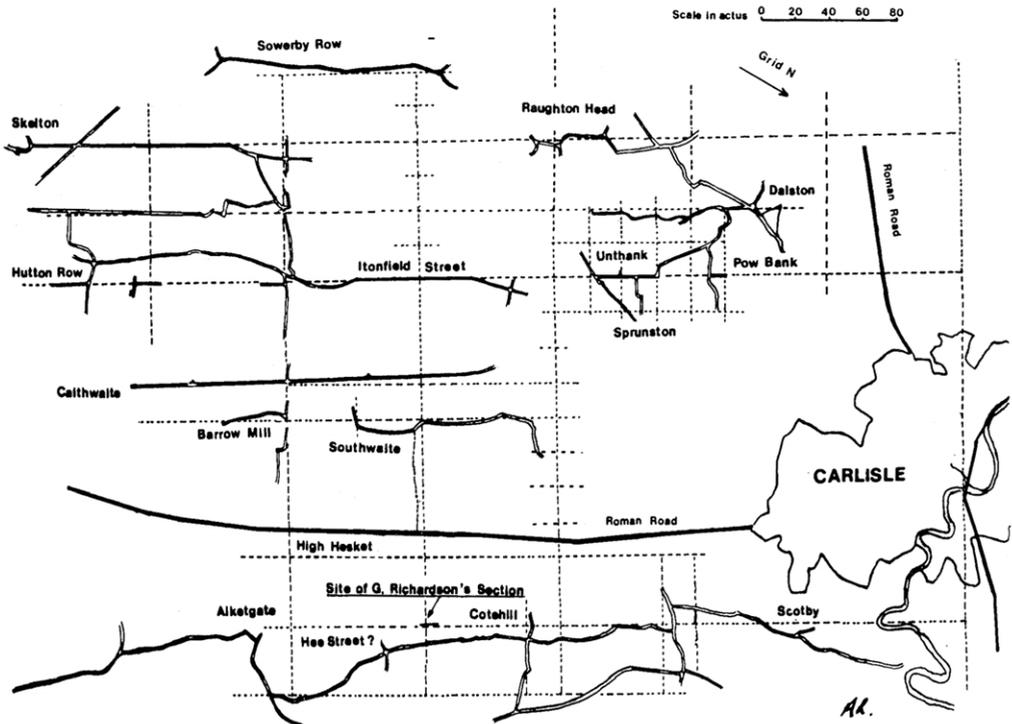


FIG. 1. - Centuriation south of Carlisle.

of 1771/4.⁵ A further extension is represented by the lane at Powbank (OS 384 502). From that place to the southern end of Hutton Row is 14.7 kilometres of which 6.6 (45%) kilometres is overlaid by modern road, in six separate sections. The disposition of the lanes in the vicinity of Unthank hints at centuries of 20×20 *actus*, (see Fig. 1).

3. The line of the Middlesceugh – Skelton road may be prolonged southwards through Blencow, Newbiggin and Stainton. These villages are aligned along streets running close to the grid-line. Roman funerary urns, often associated with roads, were discovered at Ennim, Blencow in the eighteenth century.⁶ At Newbiggin, the original old road, thought to have been a drove road⁷ lies on the proposed grid-line some 50 to 80 metres east of its modern counterpart. This grid-line may then be extended beyond the river Eamont to Askham where it is marked by a farm track at OS 504 240. Askham village seems to be shaped around a centurial square, (see Figs. 2 and 3). Further south, the grid-line might be represented by the road from Rosgill to Shap village, between OS 547 168 and OS 555 155, (see Fig. 3).

4. The road through Sowerby Row runs for 2.5 kilometres close to a line 2×20 *actus* west of the Middlesceugh – Skelton road, (see Fig. 1).

5. On the basis of the observations described above, it seems that a surveyed area extended from Carlisle to the neighbourhood of Shap, forming a corridor along the main route southwards from Carlisle to Low Borrowbridge. The distance between the lateral grid-line running through Barrow Mill and its theoretical counterpart at Carlisle, is taken up by twenty centuries, (Figs. 1 and 4). At Carlisle, the lateral line runs precisely through the point where Hadrian's Wall crosses the Eden. There is a hint here that the centuries were grouped into blocks of sixteen by relatively substantial roads, since Itonfield Street lies 4×20 *actus* east of the Middlesceugh – Skelton Road, (see Fig. 1).

6. This proposed scheme of centuriation offers an explanation for the enigmatic "Hee Strete", or High Street, mentioned in the records of Wetheral Priory in the early Middle Ages⁸ and recorded on Bowey's freehand map of 1715.⁹ It could also account for the "old drove road" at Aiketgate that folk tradition maintained was once part of a high road to Carlisle.¹⁰ P. A. Wilson¹¹ argued from literary evidence that in the early Norman period, the main route to Carlisle from Appleby did not lie along the well-known Roman roads, via Brougham Castle and the line of the modern A6. In conversation with the author, he maintained that a Roman road did run between the Eden and the main A6, but since the evidence from the Scalesceugh Roman tiler¹² indicated the latter is almost certainly a Flavian work, he admitted that two major roads so close together in space and time seemed inconceivable. In seeking the "Hee Street", the late George Richardson located an old buried road at OS 477 483, on a parish boundary that runs parallel to Itonfield Street, 10×20 *actus* to the west. He traced this road away from the grid-line and at OS 485 476 he found a thin spread of metalling, but nothing to suggest a major Roman route.¹³ He felt the "Hee Street" was probably represented by the modern road south from Cotehill village.¹⁴ The possibility of a centurial road now offers the explanation that mediaeval travellers from Appleby to Carlisle would cross the Eden at Armathwaite or Lazonby and then simply fall-in with the nearest available metalled road running north.

7. The longitudinal grid-line through Barrow Mill may be extended south-eastwards to coincide with the mean course of the Roman road south of the Street, beyond Brougham Castle. The course of this section of road given by Ross,¹⁵ straddles the grid-line at a

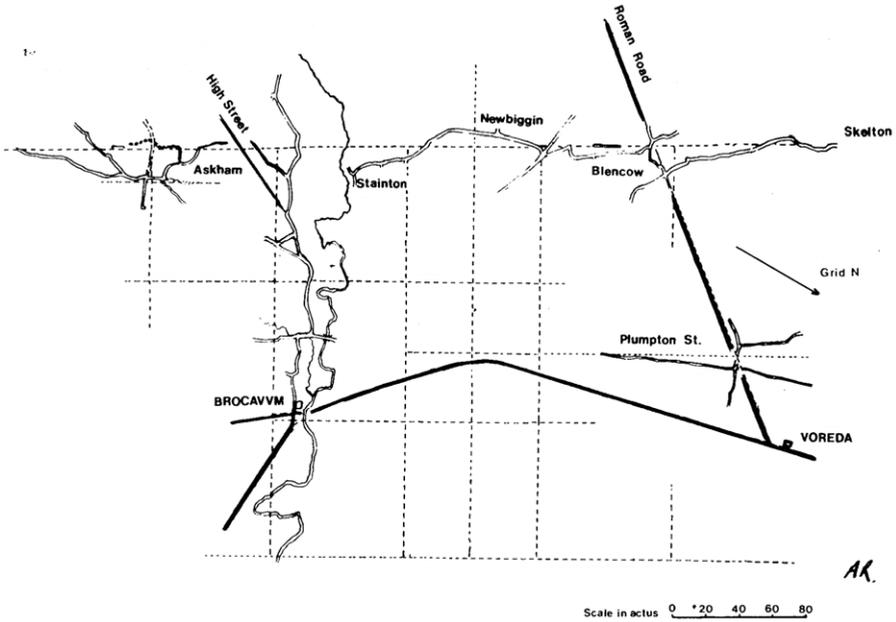


FIG. 2. - Centuriation grid lines near Penrith

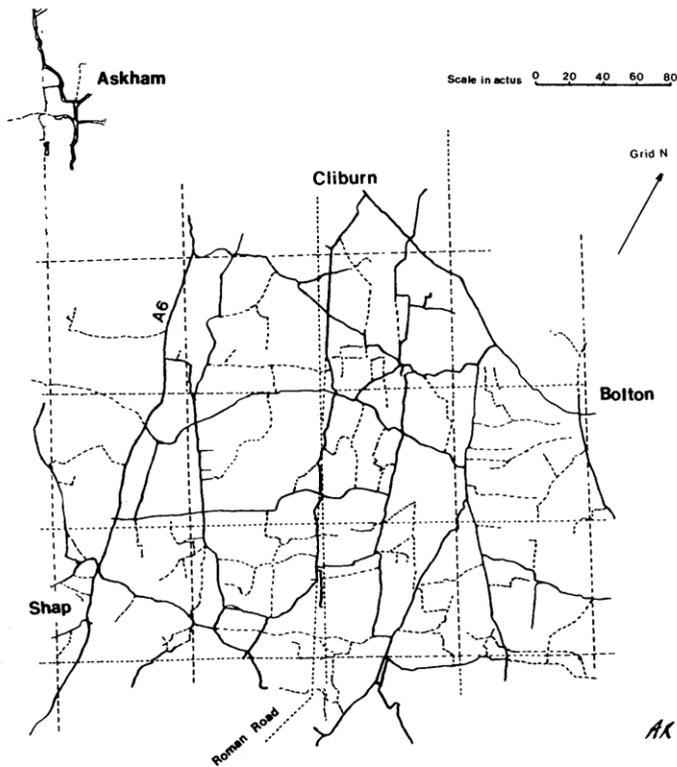


FIG. 3. - Field tracks and roads south of Brougham

very narrow angle and never deviates from it by more than a few hundred metres. The original main road may actually overlie the grid-line and Ross may have been in slight error by identifying later route modifications as the original line. In the vicinity of Morland and Newby, the rectilinear pattern of roads and field tracks strongly hints at centuriation, though not so clearly as in the Inglewood area, (see Fig. 3).

8. These observations suggest a centuriation corridor at least twelve centuries wide and sixty-four long, though the lines through Sowerby Row and Scotby-Cotehill indicate some widening at the northern end. The Eden probably formed the limit to the east, but beyond the river there is a tantalising “out-lier” in the form of a short length of road at High Northsceugh (OS 530 481). This length of road is co-incident with the lateral line through Barrow Mill.

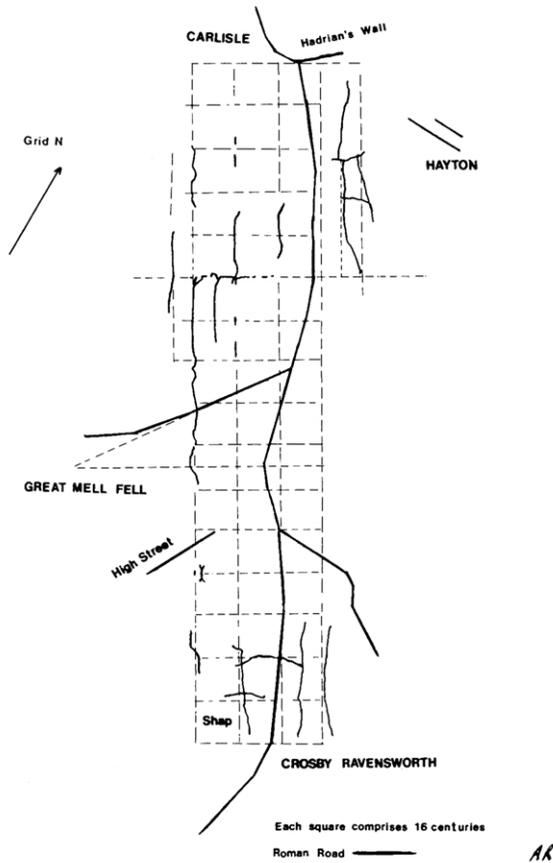


FIG. 4. – Centuriation south of Calise

9. The *decumanus* of this extensive system was probably the line represented by the mean course of the stretch of Roman road south of the Street, beyond Brougham. The *cardo* might have been aligned on Great Mell Fell, a siting point for the Roman road from Old Penrith towards Keswick.¹⁶ If so, the *tetrans* would have been at OS 5225 3225 on the modern road by Penrith golf course. Alternatively, the *decumanus* may have run through the centre of the twelve century wide corridor, which would put the *tetrans* at

OS 5100 3165 on the high ground just north of Penrith where a bungalow, "Little Steading", now stands on the Inglewood road, (see Fig. 2).

10. There was probably an unrelated area of centuriation near Hayton where a straight road known as How Street runs grid east-west and is paralleled 20 *actus* to the north by another road. An old north-south crossing of this area is represented by an old drove road, or cattle rustlers' escape route, known as Thief Street.¹⁷

11. Despite a suspiciously rectilinear arrangement of some minor lanes between Kirkby Thore and Appleby, there is not an easily recognisable centurial system near the Roman fort of Kirkby Thore.

12. There is an unusually high number of "ham" and "ton" Anglian place-name elements associated with the whole length of the western third of the corridor. From north to south they are, Great Orton, Kirkbampton, Dalston, Raughton, Sprunston, Hutton, Skelton, Stainton, Barton, Askham, Helton and Bampton. In the Eden Valley, there are similar concentrations around Hayton and between Kirkby Thore and Appleby. This suggests the Angles had a preference for centuriated land.

13. Within the corridor area, there is a vast number of man-made linear features such as lanes and field and wood boundaries which are aligned parallel to the grid-lines. As such, they appear to be the remnants of intra-centurial features.

Discussion

The reader may be inclined to regard the case for the proposed more-extensive centuriation as weak, since the supporting evidence consists mainly of a number of co-incidences, or near co-incidences, of old roads, theoretical lines and "street" place-names. Whether or not one views the hypothesis as probable will depend on one's assessment of that evidence. But it should be borne in mind that the more often that chance is invoked to explain co-incidences, the less valid it becomes, and there are a great many co-incidences recorded here. Perhaps the strongest argument against the hypothesis is that the alignment of the minor roads in this area follows the lie of the land. The Eden flows roughly north-north-westerly and piecemeal enclosure from the Tudor period onwards is likely to have been influenced by both this and the Roman arterial road system. But this does not explain the disposition of so many features in multiples of 20 *actus*. The reader must decide for himself, but if he finds the case "not proven", he will not regard what follows as legitimate speculation.

The extensive centuriated area depicted above covers at least 904 standard centuries, which is 6 blocks of 16 centuries short of one thousand. This might be co-incidental but it might indicate that the original scheme comprised a round figure of one thousand centuries. However, the case for complete occupation, evidenced by traces of intra-centurial tracks and possible centurial boundaries, is limited to the area north of Hutton-in-the-Forest on the west side of the A6, and to the area north of Armathwaite, east of that road. In the Newby-Sleagill area there is evidence of centurial features but there are no traces east of the A6 south of Aiketgate, nor between the Old Penrith-Keswick Roman road and the road which comes from Bolton, through Cliburn to Clifton Dykes, (see Fig. 3). This road is accompanied by a parish boundary near Cliburn Moss and its line may be projected straight to Pallet Hill (OS 474 307) where it joins a road which in the Middle Ages skirted north of the Caldbeck Fells and formed the boundary of the

Inglewood Forest.¹⁸ At its other end, east of Bolton, this road is aligned on Crackenthorpe and it may represent a pre-Agricolan route from Stainmore to the Irish Sea coast. The evidence for this cannot be discussed here but suffice it to say that it seems to bear some relation to the proposed centuriation. This central portion contains the hills of the Whinfell Forest and the rough ground north of Penrith, from Bowscar to Blaze Fell. It is probable this area was never chosen for centuriation, though embraced by the survey.

The presence of native farmsteads within the zone of proposed centuriation need not preclude a Roman survey, since many of the sites identified from the air may not date from the Roman period. Furthermore, squatting may have been tolerated on land not actually taken over, particularly in the central area around Penrith which may have remained a centre of local population. Higham¹⁹ has reviewed the evidence regarding the continuity of native settlement in this area and concluded that the Eamont valley had been an important native population centre from the Bronze Age. In the same discussion, he highlighted a sharp increase in the number of native farmsteads in the more upland area of mid-Cumbria during the Roman period. Pottery evidence suggests this shift began early in the second century, but was followed by an apparent drift back to the lower ground before the end of Roman rule. These changes could be explained as a displacement of natives following a Roman land takeover which perhaps was never fully exploited. The occupation dates of native farmsteads and the dates and distribution of so-called "stray" Roman finds within the apparently surveyed area will be important to our understandings of its history. The distribution of Anglian place names suggests that perhaps only "Roman" land was taken over by the Angles, and that the native Celtic people continued to occupy most of the Eden and Eamont valleys until the arrival of the Vikings.

In summary, it seems that an ambitious scheme of ribbon development with centuriation was set out along the main road south from Carlisle. It was probably contemporary with the building of Hadrian's Wall, since the survey ties-in neatly with the latter's crossing of the Eden. Hadrian's policy of making the frontiers economically sound would certainly involve the settlement of veterans on good agricultural land and this could account for the sudden increase in native occupation of the uplands which began in the early second century. Although the survey was apparently carried out unflinchingly over rough and hilly ground, the district around Penrith was probably never occupied. The main areas of Roman settlement were probably confined to between Old Penrith and Carlisle, with some lateral expansion north of Hutton-Calthwaite, as far as the Caldew and the Eden. The probable centuriation at Hayton may be of a later date and may reflect the preference for land near the city and frontier markets. The whole scheme possibly did not live up to its planners' expectations.

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