ART. IV – *The Vallum's Original Intention: a Multi-Purpose Work of Frontier Support*
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THE earthwork known as the Vallum is the major riddle of Roman frontier construction in Britain and perhaps the most puzzling monument to be found along the entire Empire's boundaries. Despite centuries of conjecture we are still unclear regarding its originally intended role.

The most obvious characteristic is size. In Collingwood's opinion this extraordinary feature cost Rome a million man/days in earthmoving alone.[1] The scale is nevertheless in keeping with Hadrian's solution for the British frontier as a whole. Though plainly there was need to protect this province, Hadrian's Wall, with its schematic symmetry, its striking choice of route, the eyecatching overprovision of its turrets and, above all, its strength relative to frontiers nearer the Empire's heart, suggests a prestige intention and a search for monumentality, perhaps as a counterweight to the Emperor's abandonment of Mesopotamia[2] and his shift to a strategy of defence. In short, the psychological climate of the moment in Britain was peculiarly suited to monument making; and it is in this spirit that the Vallum, too, may be considered.

The starting point of this enigmatic earthwork may perhaps be sought in the so-called Forts Decision, particularly the Stanegate's relinquishment as a fortified line, which left the Wall exposed from the rear. Unlike their German counterparts, whose doors were accessible by removable ladder, turrets had already been built with ground-floor doorways and milecastles probably without rearward towers. Because capture of a milecastle would open a gate in the Wall[3] and seizure of a turret could cut its signalling system, some southern safeguard would now be necessary.

Nevertheless, since construction of the Vallum was far more costly than the alternative – remedial work on turrets and milecastles – we may assume problems in addition to rearward defence. Before discussing these, however, we should recall that the Vallum is badly sited for defence of any sort, since it disregards stronger ground to north and south. Furthermore its flat ditch-bottom, offering space for concealment, is militarily unsound. There are also problems of dead ground, arising from the ditch's steepness combined with the unusually wide berms and the mounds' shallowness in relation to the ditch's depth. Scale drawings readily demonstrate that a sentry on either mound could not see a man hiding in the ditch. Similarly a sentry on either berm could not see a man crouching outside the mounds. Thorough surveillance might therefore imply three men, one on each mound and the other walking the ditch's edge: reflecting a design perversity which at once hindered trespass and helped concealment. Further, though we now see the Vallum as part of a sheep-cropped landscape, the mounds – by their exclusion of grazing animals and creation of sheltered growing conditions – must have constituted a potential security risk due to long grass, bracken etc., as well as raising the major problem of its clearance. Another irony is that while the Vallum was sufficient to halt a tank regiment (had such existed) it was less likely to have stopped an agile man: kicking footholds, grasping tufts, or aided by rope, pegs or crude ladder.

It is nevertheless uncertain that the Vallum was patrolled at all. For 70% of its length

the view from the Wall's turrets, though imperfect, would be more comprehensive than any on the earthwork itself. But patrolled or not, it is unlikely that in the dark, dusk, or mist, high standards of security could be guaranteed.

We now come to the Vallum's second possible role of frontier support: that of deterrence. This is admissible, in that the steep-sided mounds and ditch constituted a nuisance sufficient to repel casual and delay determined intruders. But emphasis upon the Vallum's hindrance function has gained strength, may indeed have been exaggerated, due to the importance assigned to its main obstacle – the ditch – by its builders. Builders are preoccupied with building problems, of which the ditch had many, the mounds few and the berms almost none. Further, the ditch is the means by which the mounds were created. I suggest that due to the ditch's difficulties and its formative place in the constructional sequence, to tackle it thoroughly, became habitual. To the modern observer the ditch also commands attention because it is the most striking object, the berms being so to speak non-objects. Perhaps it is for these reasons that the ditch, rather than the berms, has usually been thought to hold the key to the Vallum's meaning.

The third possible Vallum function – and by far the most widely accepted – is that of boundary: the mural zone's southern perimeter. This, too, raises difficulties. A fence, rubble wall or far smaller ditch of the type recently found to enclose some of the Cumberland coast defences,[4] would have sufficed for demarcation purposes. And one might also ask: why was a massive, new earthwork thought necessary to fulfil a function which could readily have been met by a patrolled Stanegate?

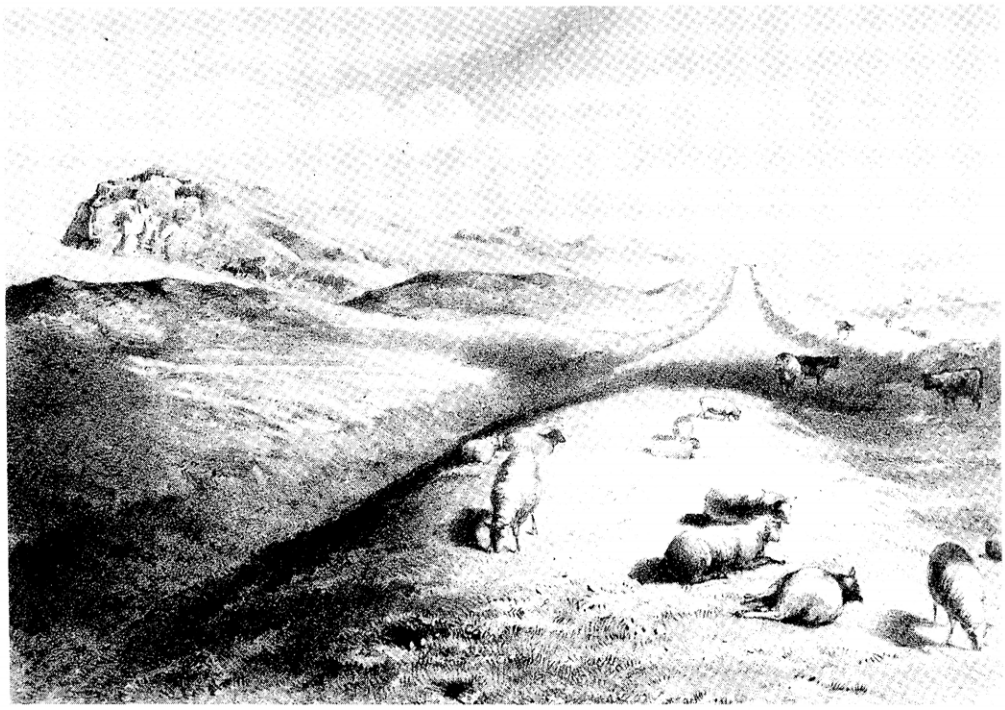

PLATE I. – The Vallum at Cawfields, from Bruce's *Roman Wall*, one of the few illustrations whose viewpoint favours berms rather than ditch or mounds.

So, of three intentions commonly proposed, that of defence from the rear has long been held untenable on grounds of route and configuration; and that of zonal boundary tenable only as a subsidiary function – or as one role among several – seeming to be insufficient reason for so big and elaborate a work. What then of the Vallum as a hindrance to intruders from the South? This too is acceptable, but again as a secondary intention; the most telling argument against its primacy being to ask first, why the entire ditch material should not have been concentrated into a single mound; and secondly why the mounds were so widely spaced? One mound would have meant an obstacle 12% more massive than Hadrian's Turf Wall. Two mounds, somewhat closer to the ditch, would have increased its effective depth by 50% and brought mound-top and ditch-bottom into a normal line-of-sight relationship. Why this failure to use the Vallum's full potential for obstruction? Evidently because obstruction was not its main purpose. Why not one large mound? Obviously because two were essential to its design. What then was the Vallum's main purpose and why did it require *two* mounds?

No answer has been found to these questions. Let us put them therefore, in another way. Could the reason for two widely spaced mounds have been the creation of two broad, enclosed berms?

The greatest puzzle about the revised plan for Hadrian's Wall is not the presence of the Vallum, but the absence of a suitable new road. A transverse road was common to all Roman frontiers and indeed the embryo of many. The Stanegate had been in this sense a classic *limes*. But now it was relatively out of touch and communication, via its spur roads, in some cases circuitous. What then of direct contact between fort and fort, fort and milecastle; and what point signalling from turret to turret without a road on which to respond quickly? Not only was there no road but none was intended, since at times the Vallum leaves no space between itself and the Wall. This deficiency – if such it was – seems even stranger in the light of the Governor's previous career. Nepos, appointed by Hadrian with the Wall as the paramount task of his governorship, was the former *Curator Viarum* of four major Italian roads.[5]

I am far from being the first to conclude that, as well as its north-south functions of boundary and barrier, the Vallum was planned for some east-west role.[6] Let me grasp the nettle and speculate that berms within mounds could be taken to imply two enclosed roadways; and that these were separated by a ditch because their traffic would be incompatible.

The Vallum is an *actus* wide. The word (from *agere* – to drive) has a double meaning: the surveyor's unit of 120 feet (37m); and also a track, especially in connection with the droving of cattle. This coincidence prompts the reflection that, though rounded mounds and V-shaped ditches might not restrain a bolting animal, a 60° or 70° ditch on one side and a steep, 5 foot (1·5m) bank on the other, would make, of either berm, the perfect drove road. Similarly, the mounds' abrupt outer slopes would prevent animals straying into the earthwork; and livestock, including horses, could more feasibly be kept within the Wall zone behind it.

Let us imagine civilians and their flocks admitted through a causeway gate and directed along the north berm to a designated milecastle exit.[7] The need for such movements, whether random or migrational, may have influenced the Vallum's author to build such provision into his design. Nor should Collingwood's battered theory of the Vallum as a customs boundary be discounted.[8] A non-military barrier close behind an imperial

frontier indeed suggests it. However, since there is no specific evidence for transhumance and since customs returns would hardly have justified a constructional effort of this magnitude; neither can be proposed as decisive Vallum roles.

As a supply route the Stanegate left unsolved the problem of provisioning milecastles; and it has been suggested that the Vallum's north berm was used in that connection. This may go some way toward explaining the berm's width, for its steep shoulder would crumble under the weight of wheeled vehicles like the army ox-cart (*clabula*). A berm 10 feet (3m) wider than a normal road would allow a safety margin of a good cart's breadth from the edge when two such vehicles passed or crossed.

Civilians, flocks, pack animals and supply wagons: all are compatible in tempo and the non-priority nature of their business. However, as any rural motorist knows, herds are the enemy of haste. Hence two berms: one for slow traffic, the other for fast; one for civilians and supplies, the other for the rapid movement of troops.

The following arguments might support an original design intention to use the south berm as a strategic through-road. Foremost, the Vallum is roadlike, both in alignment and the avoidance of obstacles. Whenever its surveyors were confronted by a choice of routing, dominant ground (for defence) and closeness to the Wall (for surveillance) were both eschewed in favour of directness, indicating a preference for speed relative to all other advantages. Compare, for example, a troop movement between Chesters and Halton Chesters: 5½ miles (9km) via the Vallum and at least 10 (16km) by the Stanegate. With the Irthing interposed, without milecastle access, divergent from parts of the Wall and apparently absent from its eastern end, the Stanegate would seem, on balance, a poor second choice. On the other hand the Vallum route could bring Carlisle within a day's ride of Newcastle, as compared with reinforcement from York, some 3½ days' march to Corbridge alone. In view of distance from the legionary bases and the dispersal of force along the frontier itself, it would be odd if there were no provision for the swing of mounted units from end to end or to threatened points between.

Next there was the need for swift intelligence, implying despatch riders and a route on which they could ride with despatch. I am not alone in questioning[9] whether information required by the Wall's commander to make a sophisticated appraisal could effectively be transmitted by signals only.

A road intention may also be inferred from the design of the Vallum's parts. Berm drainage was evidently important: hence the inward tilt, as seen at Benwell; and conduits where the route lay across a slope. The mounds can be interpreted as an accented form of kerbing, enclosing the berms and designating them as restricted roadways. Indeed a road function could be said to have determined the ditch's shape. Such broad berms, by separating the mounds from the ditch, prevented each from supplementing the other's strength. The designer was therefore obliged to abandon defence, with its obvious solution of a single turf wall plus V-shaped ditch, and settle for hindrance, militarily the second best. The steep slopes may thus be seen as an attempt to answer a south-facing defence requirement by giving the ditch maximum nuisance value within the context of an overall road-oriented design.

Finally let us recall the question of psychological climate and the mixture of opportunity and dilemma foisted upon the designer by the desire to reconcile the claims of rearward defence, demarcation, supply, customs, civilian and troop transit, with fidelity to the Hadrianic scheme and scale.

Weighty arguments can of course be brought against a strategic military road function. The concept has neither clear ancestry[10] nor progeny.[11] The berms have few characteristics of an all-weather highway, lacking the normal metalling, cambering and stone kerbing. Milestones are also absent. The Vallum does not extend east of Newcastle or west of Bowness. Finally there are specific peculiarities: the Vallum's crossing of marshes, apparently without berms; and Limestone Bank and Corner, where huge rocks clutter the berm areas.

Lack of pedigree is nevertheless inconclusive, since the Vallum is itself unique. Absence of metalling suggests mud, especially if vehicles were in use. Even so, two or three million tons of building material had recently been moved without metalled surfaces; and, of course, the Stanegate still remained available, especially for heavy traffic and in winter. With cavalry in mind and our knowledge that Roman horses were at best poorly shod,[12] metalling would be unsuitable over distances. Indeed it was common on normal roads for riders to hold the softer edges, outside the kerbing.[13] No pre-Hadrianic and only three Hadrianic milestones are known in Britain, none near the frontier.[14] In any case distance could be reckoned by reference to the Wall and its milecastles.

Regarding the Vallum's absence at the Wall's eastern end, interruption would be likely here since the riverbank at Newcastle is too steep to have permitted so large a work to pass behind the fort, sited near the edge to keep the bridge in view.[15] It may be guessed that it was not present behind the Cumberland coast because some of its functions were unnecessary and emergencies less likely there.

For two short stretches on either side of Carlisle Airport, the ditch was carried over boggy ground, embanked between two mounds and raised rather than dug. The Vallum is here a squeezed version, without berms. But this is capable of two interpretations: either that the berms were discontinued, or that here the two apparent mounds are in fact the berms, raised through the marsh. In other words these stretches could be seen as dual causeways, their two lanes separated by the ditch.

Regarding Limestone Corner, it has been suggested that such neglect may coincide with the end of a working season, changes of programme resulting in the gangs' not returning at the beginning of the next. However, a multiple intention for the Vallum does not mean that all its roles were successful or fully applied in practice. On the contrary, in attempting to combine several aims it was perfect in none. This white elephant quality, which did not take long to strike its users, may already have occurred to its builders; and foot-dragging could account for the failure to complete at Limestone Corner or extend to Wallsend.

Discussion of the Vallum as an intended trunk road must include the three river crossings, where decisive evidence could depend on whether it crossed by a ford or ended with no means of crossing. River shift, plus disturbance at Stanwix, has obscured the west banks of Eden and North Tyne. Rather than descend the steep west slope to the Irthing, the ditch terminated at the top in a square butt-end. Here no northern mound existed because of closeness to the Wall and erosion has obliterated the southern. However, this is an exceptional instance, in which the Vallum "would have formed a watercourse potentially productive of serious damage by erosion".[16] On the eastern banks, though indistinct, the Vallum seems to have ended near the bridges. Although cavalry movement implies fords – and we may assume these on all rivers crossed by Hadrian's Wall – their coincidence with the Vallum's *termini* is unproven, even if the name Willow-

ford might imply it in one instance. The Vallum does appear to have "crossed" the Poltross Burn, in that it was not terminated before reaching the stream.[17]

Nor, to date, is it clear how the Vallum began or ended. In the east it is believed to have turned towards the Tyne a mile short of Newcastle fort;[18] in the west to have run down to the Solway shore close to the end of the Wall.[19] These opinions suggest the Vallum sealed the frontier strip to the water's edge, but they shed no light on other functions. In short, conclusive evidence on the Vallum's behaviour at river crossings or at either end is presently lacking.

The return from Forth-Clyde provides an insight into what was thought to have worked and what to have failed on Tyne-Solway. With Hadrian some twenty-five years dead the army would not revive features of his frontier which they had found of little value. Conversely, they were now free to augment his scheme in ways which both walls had shown to work. Accordingly, gaps cut in the mounds and causeways made across the ditch were not – or were now only partly – remedied. The Military Way was built, involving some adaptation or demolition of the north mound. Taken together these factors demonstrate that the Vallum had been found wanting; its hindrance to interlopers perhaps outweighed by the nuisance it caused to those stationed in its vicinity. Finally, whatever the intended road functions, we must suppose their failure, or at least partial failure, in order to justify construction of the Military Way.

How far the Vallum had been used by military or civilian traffic during the decade or more between completion and Hadrian's death is entirely surmise. Indeed its cross-country capability may never have been needed. In the case of civilian traffic the system may have proven too elaborate for tribal shepherds and the Wall's six probable road exits[20] sufficient for migratory and commercial purposes. We can, however, assume that the Vallum was used for supply, since there was no other route between forts. It is perhaps in this way that its weakness as a road would begin to show itself. In just over a quarter of its course, where topography forces it to diverge up to half a mile (800m) from the Wall, the Vallum achieves little more contact than the Stanegate had done. For the needs of a fast, strategic through-road and a flexible, local service road are different; and the Vallum was an uneasy compromise between them. There was conflict too between speed and defence; for the rearguard requirement, from which the whole idea may have germinated, was not always best served by a choice of route which favoured rapidity. In short a strategic road intention could be considered responsible for the Vallum's failure, since this was given priority and in the last resort proved incompatible with all except demarcation and hindrance.

The last half-century has seen the eclipse of a military[21] and the corresponding ascendancy of a delineational view of the Vallum, as a patrolled southern boundary;[22] a thesis which indeed answers some of the questions posed by this curious earthwork and is *faute de mieux* feasible. It may, however, be insufficiently receptive to hints in other directions: excessive width of berm; obsessive shortness of route; a configuration resistant to easy policing; absence of a satisfactory alternative road system; and the scale, which a boundary function alone appears not to justify. It therefore seems more rational to interpret both the Vallum's size and its design contradictions in terms of a multiple intention. Perhaps in terms of a plural authorship too; for though I have spoken of its "designer", the Vallum could suggest a committee product: an unsuccessful attempt to reconcile a number of behind-the-Wall problems, seen from a number of viewpoints,

into one impressive solution, whose monumentality would be worthy of the mural barrier it was intended to serve.

## Notes and References

[1] R. G. Collingwood and J. N. L. Myres, *Roman Britain and the English Settlements*, (Oxford, 1937), 135.

[2] Though 150 years separate their actions, both Hadrian and Aurelian abandoned a major Trajanic conquest and built a famous wall.

[3] J. Morris, CW2, l (1950), 51.

[4] G. D. B. Jones, "The Westward Extension of Hadrian's Wall", *Britannia*, vii (1976), 236-43.

[5] R. Chevalier, *Roman Roads* (London, 1976), 158.

[6] e.g. J. Horsley, *Britannia Romana* (1733), 120; J. P. Gibson, PSAN 3, ii (1906), 306. E. Birley, *Centenary Pilgrimage of Hadrian's Wall* (Kendal, 1949), 24, in which Prof. Birley discusses whether the Vallum may have followed a pre-existing service road, so explaining convergences with the Wall. *Contra*, however, the Vallum's sweeping alignments do not seem to suggest a service function. An alternative explanation for these close encounters could be that a decision to widen the Vallum was taken after its course had been surveyed.

[7] D. J. Breeze and B. Dobson, *Hadrian's Wall*, (London, 1976), 51.

[8] Collingwood and Myres, *op. cit.*, 135.

[9] Breeze and Dobson, "Hadrian's Wall, Some Problems", *Britannia*, iii (1972), 186.

[10] Unless ancestry can be discerned from *Balbus' Exposition to Celsus*, *Schriften der Römischen Feldmesser*, ed. Blume etc. (Berlin, 1848), 92: *erant dandi interveniente certo itineris spatio duo rigoris ordinati, quibus in tutelam commeandi ingens vallorum adsurget molis*. (We were required to plot, with a certain spacing between, two straight lines, on either side of which huge mounds could be raised as a protection for those travelling). Piganiol, "La Notion de Limes", *Vth Congress of Roman Frontier Studies*, (1961), 119-22, interprets this as a request by Trajan for the design of a mound-flanked road on which his army might penetrate Dacia more securely. Piganiol was, incidentally, first to describe the Hadrianic Vallum as "une voie stratégique." (*ibid.*, 122).

[11] The annexes to Antonine Wall forts have been regarded as echoing the Vallum, though the resemblance has obvious limits. Breeze and Dobson *op. cit.* (1976), 92.

[12] Chevalier, *op. cit.*, 223.

[13] *Ibid.*, 178.

[14] J. P. Sedgley, *The Roman Milestones of Britain*, (B.A.R. Oxford, 1975), 2.

[15] Grace Simpson, "Some Aspects of the Work of F. Gerald Simpson on the Hadrianic Frontier in Northumberland", *Limes, XIth Congress of Roman Frontier Studies*, (Székesfehérvár, Hungary, 1976), 15-16.

[16] CW2, lvi, (1956), 25.

[17] *Ibid.*, xiii (1913), 393.

[18] Bruce/C. M. Daniels, *Handbook to the Roman Wall*, (Newcastle upon Tyne, 1978), 64.

[19] F. G. Simpson etc. CW2, xxxv, (1935), 218.

[20] E. Birley, *Research on Hadrian's Wall*, (Kendal, 1961), 110-11; Breeze and Dobson, *op. cit.*, (1972), 50.

[21] F. G. Simpson and R. C. Shaw, CW2, xxii (1922), 357-60: ". . . the 'inscrutable' Vallum . . . inscrutable only when its purpose is held to be military".

[22] Held by a formidable succession of scholars including Simpson (*supra*); I. A. Richmond AA4, xvi, (1929), 274; B. Heywood, "The Vallum – Its Problems Restated", in *Britain and Rome*, ed. Jarrett and Dobson (Kendal, 1966), 89.