

Thinking about Alnwick's origins

Giancarlo Cataldi, Dipartimento di Architettura, Università di Firenze, Via San Niccolò 89a/95, 50125 Firenze, Italy. E-mail: giancarlo.cataldi@gmail.com

In his analysis of Alnwick's town plan, M. R. G. Conzen does not consider the morphological phases of the prehistoric and Roman ages, maintaining that 'Alnwick began its existence relatively late in the Anglian period of Northumberland, possibly some time in the seventh century' (Conzen, 1960, pp. 7-8). We have endeavoured to bridge this gap with some hypotheses that stem from Muratorian thinking. These concern the formative processes of towns and territories and are predicated on the fact that the processes relating to the initial plans of settlements generally condition their subsequent transformation, remaining 'inscribed' as a sort of DNA of their urban form. The initial plans can be conjecturally reconstructed. In the absence of archaeological evidence the accuracy of the reconstruction naturally depends on the degree of congruence between the initial plan and subsequent transformations.

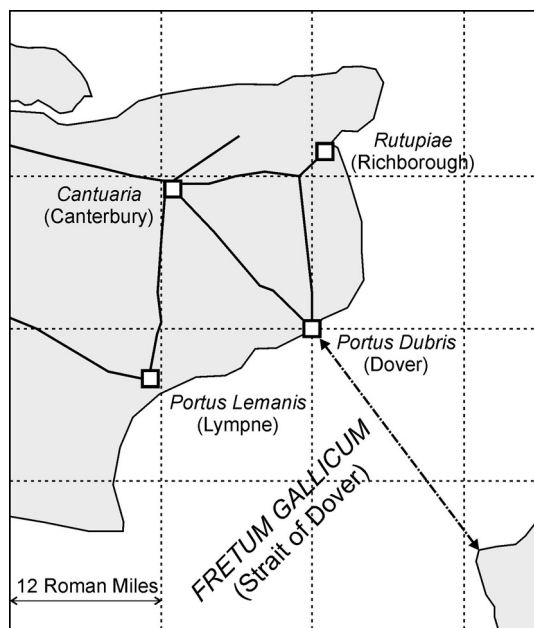


Figure 1. Hypothetical reconstruction based on *Forma quadrata Britanniae*. Geodetically (and topographically) orientated squares with 12-mile sides. The diagonal Roman road runs between the vertices of Dover (*Portus Dubris*) and Canterbury (*Cantuaria*). Topographical source: Ordnance Survey 1: 650 000, Roman Britain, 5th edn).

The ridge-path theory (Murator, 1967) maintains that the first groups of human beings, in their continual search for food, usually followed the watersheds. These paths offered walkers numerous advantages: they did not sink in the mud, they did not require bridges and they enabled bearings to be obtained from a height. Applied to Great Britain and, more specifically in this case to Northumbria and the Aln valley, the delineation of ridges on Ordnance Survey maps highlights the importance of the ford across the River Aln on which two important ridge paths converge. The strategic control of this convergence seems to be the basis for the choice of Alnwick's site, reflected in both its place name and its enduring territorial

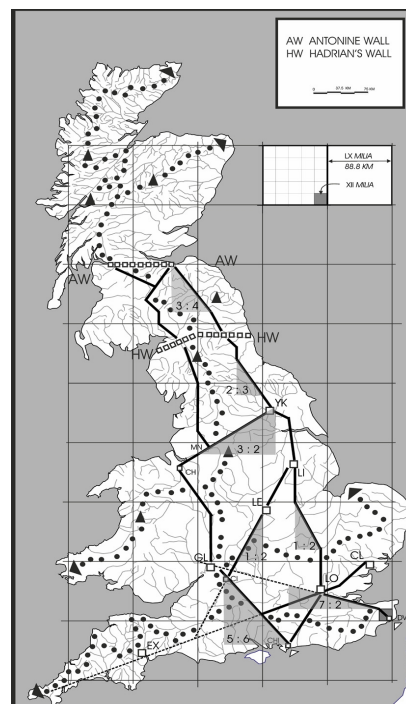


Figure 2. Hypothetical reconstruction based on *Forma quadrata Britanniae*. Basic oriented grid of squares with 60-mile sides with superimposed Roman road network and geometrical ratios. Topographical source: Ordnance Survey 1: 650 000, Roman Britain, 5th edn).

importance.

As for Roman planning, metrological checks of the *Forma quadrata* hypotheses (Cataldi, 1993, 2004, 2007; Cataldi, Iacono and Merlo, 2000; Cataldi and Lavagnino, 1987), conducted on the Ordnance Survey's excellent map of Roman Britain, could open up a new avenue of research within territorial studies. The composite basis of Great Britain's measured cartography (*Forma Britanniae*) can be reconstructed using much the same sort of topographical evidence of Roman traces that has been used in Italy (Cataldi, Maffei and Marzot, 2004). The relative positions of these traces may have been conditioned by reference to a composite network of co-ordinates, orientated

towards cardinal points, with a square modular grid of side 12 miles re-subdivided into five by five parts. This system of co-ordinates seems to have originated in the first Roman landing-place of Dover (*Portus Dubris*) which, on the present maps, is to be found in the south-eastern vertex of a large 12-mile square (*ager*), delimited by rectilinear roads orientated *secundum caelum* and diagonally crossed by the road to London between the Dover and Canterbury vertices (*cantuaria*) (Peterson 1992, esp. Fig. 6) (Figure 1). Through this basic virtual grid, it is possible to reproduce accurately (using the 'squaring' technique) both existing territorial elements (such as mountains, rivers and settlements) and planning elements (for example, borders, roads and settlements) for which, in particular, planners had to fix the most convenient hydrographic direction of the squared planned modules, geometrically conceived as the tiles of a large, continuously updated mosaic. To ensure that each module adhered to the nature of places (in particular to the direction of the rivers and coastline), its rotation angle (*ratio*) determined the

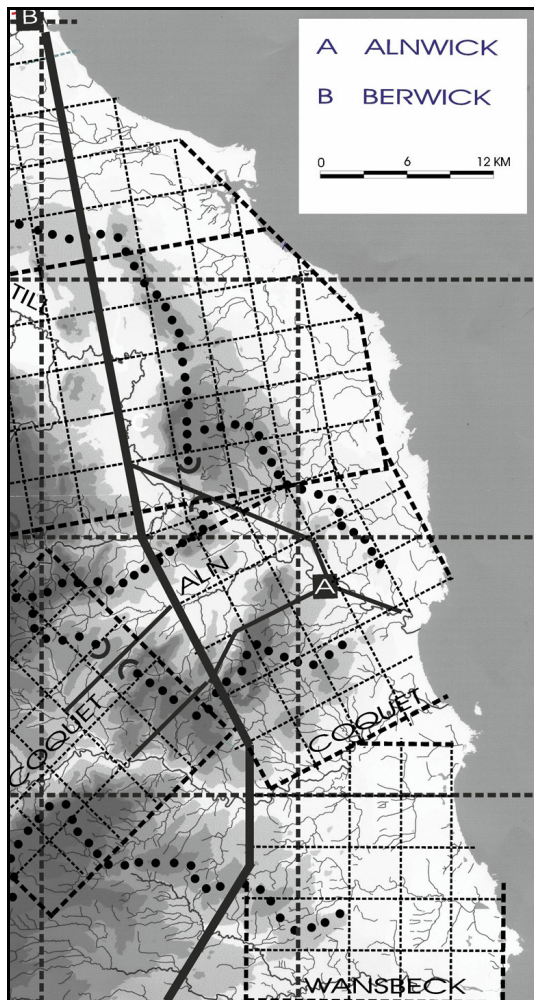


Figure 3. Hypothesized Roman planning of eastern Northumbria, between Alnwick and Berwick. Topographical source: Ordnance Survey, 1: 50 000 : sheet 75 (Berwick upon Tweed) and sheet 76 (Alnwick and Morpeth), editions of 2002.

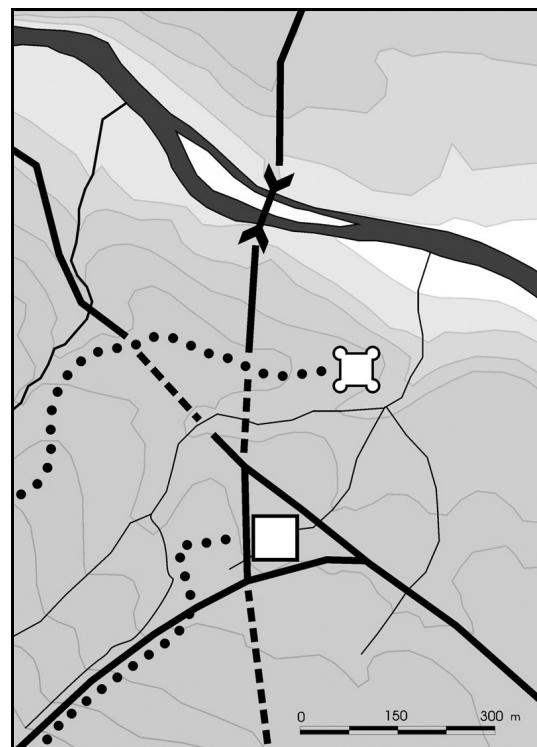


Figure 4. Hypothesized Roman Alnwick, showing a square Roman nucleus, presumably a garrison. The Norman castle controlling the river ford from high up is also shown. Topographical source: Conzen, 1960, p. 26, Fig. 4).

main intersection of orthogonal roads on the basic grid. This had numerous advantages, both military and civic: primarily the possibility to legally record on a system of maps, called *formae*, various public and private structures, such as road networks, administrative districts, land divisions and settlement locations. Hadrian's and Antonine Pius's large walls seem to have been designed on this basic orientated grid, which they tend to follow in an east-west direction: in particular, Antonine Pius's wall seems to follow one of the geographical parallels of the 60-mile super-grid (Figure 2). Evidence of the Roman presence is considerable in this region: in particular, using present maps, it is possible to reconstruct the lines of most of the major longitudinal roads, which in the Middle Ages were often given the anti-pagan name 'Devil's Causeway'. In planning, these rectilinear roads must have acted as the carrying axes of the square modular systems. In the valley of the Aln (*Alaunus Flumen?*) and in the adjoining valley of the Coquet, the stretch of broken-line of the Roman road follows the coastline, from which it is 12 miles distant on average (Figure 3).

In its name, Alnwick (Figure 4) reveals its

Roman origin, at least if it is correct that the Anglian *wick* suffix derives from the Latin *vicus*, which in the Roman world indicated a compact settlement that differed legally from the settlements scattered throughout the countryside which were called *pagi*. In this case *Vicus Alauni* would be Alnwick's Roman name: a place-name clue that raises questions about Conzen's hypothesis about the town's Anglian origins. Other names in Alnwick's urban area could be added, such as Agger flats and Augur flats (Conzen, 1960, pp. 86-7), which bring to mind the sacred-technical foundation practices of Roman towns (Dilke, 1979; Rykwert, 1981). In this light it would not be strange if, in the present urban peripheral zones, the metrological analysis of the rural area were to highlight the remaining signs of Roman land square divisions (*centuriae*) (Figure 5).

Hence we offer the hypothesis of the existence of an older Roman nucleus, presumably a square garrison, orientated *secundum caelum*, controlling the river ford from high up. This hypothesis does not shed doubt on Conzen's medieval chronology but proposes an earlier starting point, lengthening the sequence of development by postulating a

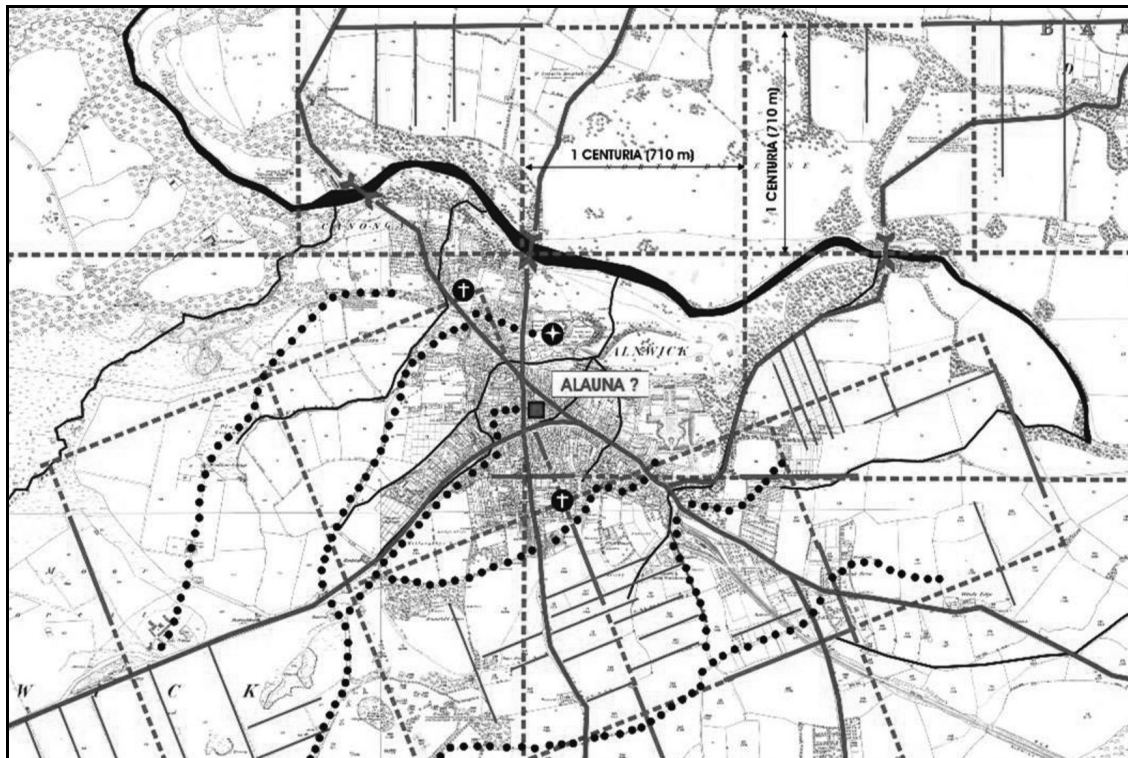


Figure 5. Hypothesized territorial planning in Roman Alnwick: the hypothetical nucleus of Roman Alnwick is at the geometrical intersection of the centuriated *secundum caelum* (according to the sky) and the centuriated *secundum naturam* (according to nature).

possible pre-Anglian stage. It is suggested that the *burgage* pattern of the medieval period around what is now the central market triangle may have formed along the bypassing routes of the central nucleus, which was later to become a market. The military control function would have become assigned to the Norman castle, significantly situated midway between the bridge and the Anglian village. The central triangle's three routes would thus have formed lineaments of Alnwick's oldest inner fringe belt. This interpretation accords with one of the fundamentals of Conzenian theory: the explication of present forms in terms of their sequential development from initial human imprints in the landscape. In combination with the shared principles of the Muratorian school, this hypothesized revision of the origins of Alnwick could provide a spur to working towards a more unified theory of urban morphology.

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What is urban morphology supposed to be about? Specialization and the growth of a discipline

Karl Kropf, Urban Morphology Research Group, School of Geography, Earth and Environmental Sciences, University of Birmingham, Birmingham B15 2TT, UK and Built Form Resource Ltd, UK. E-mail: karl.kropf@builtformresource.com, and **Sylvain Malfroy**, Ecole d'ingénieurs et d'architectes de Fribourg, CP 32, Boulevard de Pérolles 80, 1700 Fribourg, Switzerland. E-mail: sylvain.malfroy@bluewin.ch

Michael Conzen's keynote address at last year's ISUF conference in Delft triggered a vibrant discussion on what urban morphology is about. The trigger was the definition of urban morphology that Conzen gave in his address: 'urban morphology is the study of the built form of cities,

and it seeks to explain the layout and spatial composition of urban structures and open spaces, their material character and symbolic meaning, in light of the forces that have created, expanded, diversified, and transformed them' (Conzen, 2012).

That urban morphology deals with the built form