The urbanization of the North-Western provinces of the Roman Empire : a juridical and functional approach to town life in Roman Gaul, Germania inferior and Britain

Pellegrino, F.

CHAPTER 6: THE SECONDARY AGGLOMERATIONS OF GERMANIA INFERIOR AND BRITANNIA

Introduction

This last chapter will be concerned with the analyses of the secondary agglomerations within the provinces of Germania Inferior and Britannia. There are several reasons for dealing with these two regions together, the most obvious being that they both lie at the edge of the Empire and - at their borders - hosted a chain of Roman military camps and watchtowers. These lines of frontier fortifications - the *Limes Britannicus* and the *Limes Germanicus* - had a huge impact on the life of the people who inhabited this land, and, in turn, they have deeply affected the subsequent settlement location strategy.[724] These two provinces were also regions of high demand for imported products and - especially in the early stages of their conquest - the bulk of the local needs was sustained by goods that were imported and transported via Rhône-Rhine or Rhône-Moselle. As a side effect, the movement of the troops and traders/suppliers meant that these main axes became pivotal to the regional economy and, as a consequence, a high proportion of agglomerations developed along these axes (often in the form of ribbon-developments). An emphasis on the infrastructures related to the transport and communication of people and goods and aimed at improving and expanding the mobility of travellers and businesses (e.g. baths and - more controversially because they are more difficult to identify - *mansiones*) also indicates the important link between settlement's location and major supply routes.

The secondary literature concerning the subordinate settlements within these provinces is abundant. In Britain, the discussion has revolved around the concept of 'small towns', which is *per se* a very problematic notion. First of all, it places too much emphasis on the highest ranks of settlements whilst - by definition - excluding those settlements that were not town-like but still performed important roles as central places. In fact, paradoxically, in the typology proposed by several scholars (e.g. Burnham) settlements that have the connotations of rural villages are still included although the evidence is far from depicting them as town-like, only because from a practical and scholastic point of view, they are too important to be left out. Second of all, the discussion was soon hijacked and - as Millett rightly pointed out - it 'has led to an explosion in the identification of "small towns" across Roman Britain, with little or no attempt made to provide further evidence for the conferment of urban status.'[725]

In Belgium and in the Netherlands, the equivalent of the English 'small town' is the word '*vicus*'. There it is still widely used to indicate any secondary settlements, regardless of whether an inscription mentioning it as such was ever found. In light of the above and of what has been

[724] As we have seen when discussing the temporal patterns in building constructions in chapter 4, Britain cannot be seen as a unique entity. Here we will take a case study from the north of England, one of the parts where military influence was prolonged compared to the south. As for Germania Inferior, the whole area will be taken into analysis, although particular attention will be devoted to those settlements between Cambrai and Cologne.
[725] Fulford 2012: 8.

argued in chapter 1, the more neutral and inclusive French definition of 'secondary agglomeration' will thus be deployed. This definition includes a large spectrum of settlements, ranging from town-like settlements to rural villages. In this study, however, we will be interested only in those that present at least several 'urban features' (i.e. display at least some monumentality, occupational diversity, or it can be assumed that a substantial percentage of inhabitants were involved in the secondary and tertiary sectors). As discussed in chapter 1, it is difficult, if not impossible, to establish a clear line between purely agrarian and town-like settlements, for the obvious reason that such a dividing line does not exist. However, it should be noted that the maps below will show only those places that have been regarded as 'urban'. On the other hand, for example, settlements for which we have evidence only of ceramic production will not be taken into account for the time being (and therefore will not appear on maps).

A final element of discussion relates to the key concept of 'garrison settlements' (also known in the literature as 'military *vici*' or 'extra-mural settlements'). In our study area, this category of sites - which often take the form ribbon developments that emerge along the roads that radiate from the forts - is confined to these two provinces. Garrison settlements made up a considerable proportion of settlements (*c*. 20% in Britain and 30% in Germania Inferior), and for this reasons the case studies selected will both deal with them later in this chapter (Table 9).

Province	Self-governing cities	Secondary agglomerations	Garrison settlement	Total number of agglomerations attested
Britannia	21	119	32	+172
Germania Inferior	5	54	21	+80
Totals	**26**	**173**	**53**	**+252**

Table 9: The number and type of settlements in Britannia and Germania Inferior.

As the map below shows, they were geographically clustered in specific areas, i.e. Wales, northern England, and the eastern border of Germania Inferior (Figure 148).

In geography, urban clusters are a well-known phenomenon. However, they are usually known for developing around specific natural resources (e.g. a mine, a quarry etc.). The garrison settlements along the *limes*, however, have a more distinctive Roman mark and mirror the defensive techniques and geopolitical strategies (i.e. static defence) of ancient Rome.[726] Since it was deemed important to look closely at garrison settlements and their influence on the landscape, the case study selected for the analysis of Britannia is the region of Eastern Yorkshire, in northern England. In the south of England and in the Eastern Midlands the impact of the army on the settlement pattern appears to have been less. As seen in chapters 3 and 4, by the end of the 1st century AD the self-governing cities of south-eastern England were already politically integrated into the Roman Empire and were equipped with the same civic and religious buildings as their Gaulish counterparts.

[726]A combination of the two aspects can be seen in the establishment of some forts close to natural resources, such as the fort of Dolauchothi-Pumsaint in Wales, which developed close to a gold mine.

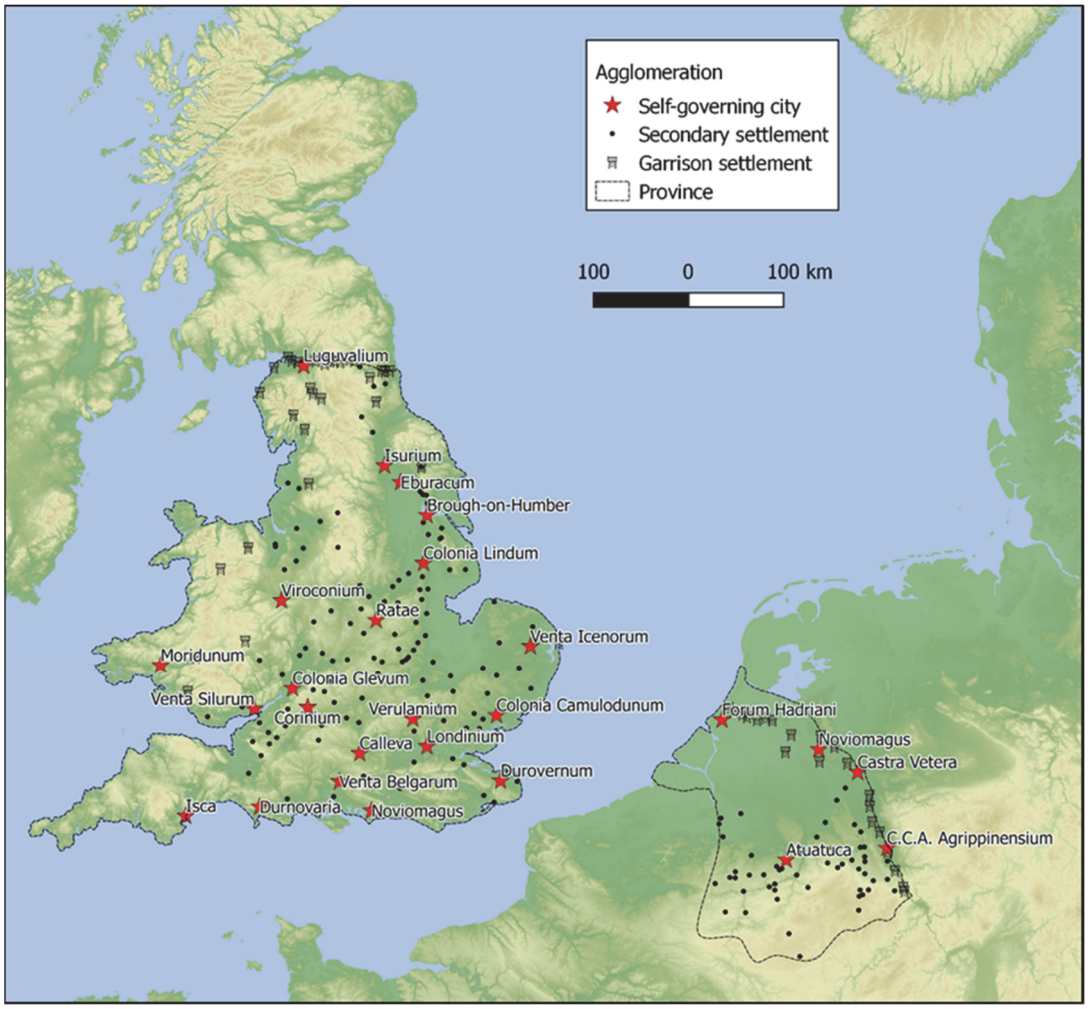

Figure 148: The self-governing cities, secondary agglomerations and garrison settlements of Britain and Germania Inferior.

6.1 Germania Inferior

This province of Germania Inferior had several peculiar characteristics. From a geographical point of view we see that two different landscapes can be distinguished (Figure 149). Geographically speaking, Germania Inferior can be divided into three regions: i. the Northern Lowland, ii. the Central Uplands, and iii. the Ardenne. The Northern Lowland comprises the dunes, the polders, and low and flat plains. The narrow, almost continuous strip of sand dunes between the French and Dutch borders had almost no agricultural importance. Whilst the closeness to the sea meant there was a constant influx of salty water which hindered agriculture, the presence of *salinatores* (saltmakers) indicate that soon this resource was being exploited.[727] Behind the dunes, to the south, along the coast and the Scheldt estuary, we find the marshy sedimentary clayey terrains

[727] An inscription (CIL XI 390) found in Rimini and dating to Flavian times mentions the *salinatores* of the *civitas Menapiorum*.

These terrains were unsuitable for intensive agriculture, and only in their southern areas, close to the central plains, do we see a slight improvement in the soil. The Central Uplands include the most important agricultural areas, and in Roman times they were scattered with Roman villas (thus, villa landscape). This was a smooth, slowly rising area which was irrigated by many waterways. The significant factor that made these valleys very fertile was the fact that the underlying layers of clay, sands, and chalk were covered by alluvial soils that were relatively rich in organic matter, and thus both fertile and easier to work. The third geographical region, the Ardenne, is a thickly forested plateau, very rocky and not very good for farming, which extends into northern France and in Germany where it is named Eifel.[728] These regional variations had important consequences for the settlement system of this area. For example, while in the north the most common types of dwellings were the Germanic-style long-houses, to the south villas were attested, too. Moreover, from a historical point of view, this province differs from those described in the previous chapter because it was, at least partly, occupied permanently by the army (on its eastern border) and by auxiliary camps (in the west).

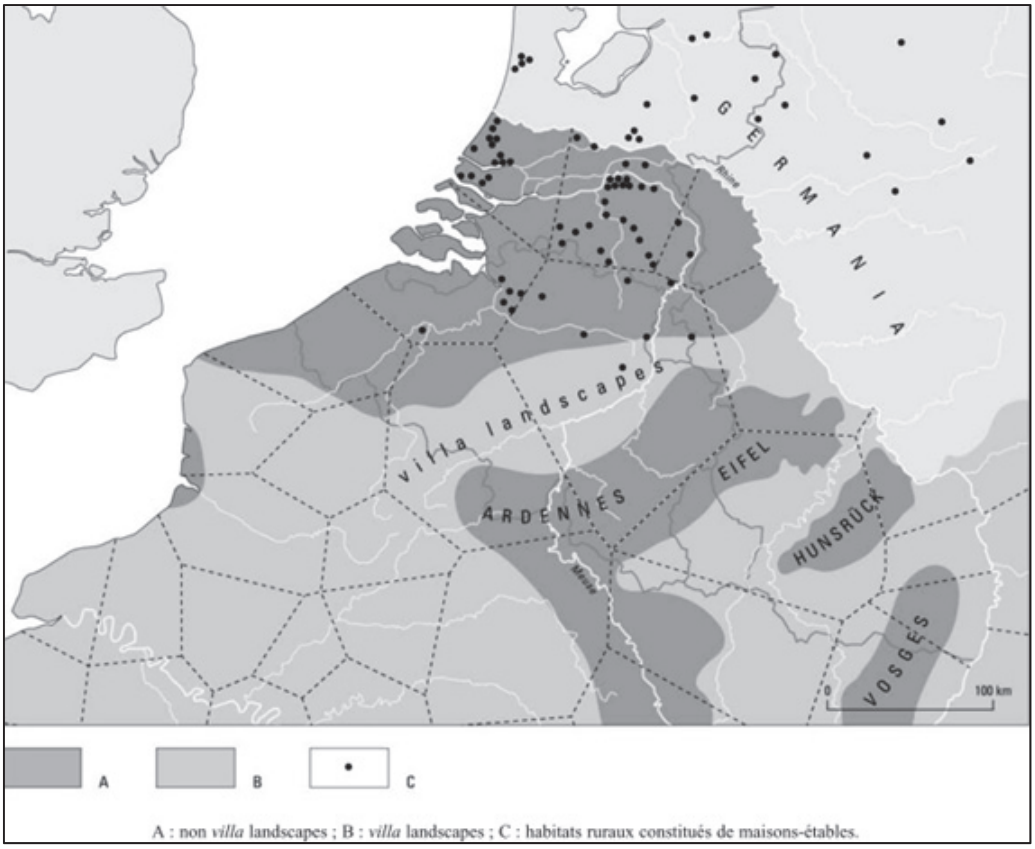

Figure 149: The landscape of Germania Inferior (Roymans and Heeren 2004: 23).

In Roman times, very few agglomerations had developed in the area of the Netherlands and northern Belgium, and these were small. They are also characterized by an indigenous type of occupation of the land, with settlements that were rarely inhabited for more than three generations and consisting of one or multiple habitations built according to the native tradition (*maisons-étable*). While they have pre-Roman origins, they continued to be the most common

[728] Naval handbook of Belgium: 233-241.

form of dwelling in Roman times (Figure 150). These buildings were characterized by a rectangular hall (which could be between 20-40 m long and 4-8 m wide) which, on one side, was devoted to living quarters and on the other end had a stable used for livestock. Palynological studies have shown that the economy of the dwellers was characterized by a combination of farming and animal husbandry.[729] From Flavian times, probably as a consequence of an intensification of breeding, these buildings were built with below-ground floors for keeping an increased amount of livestock, mainly cattle.[730]

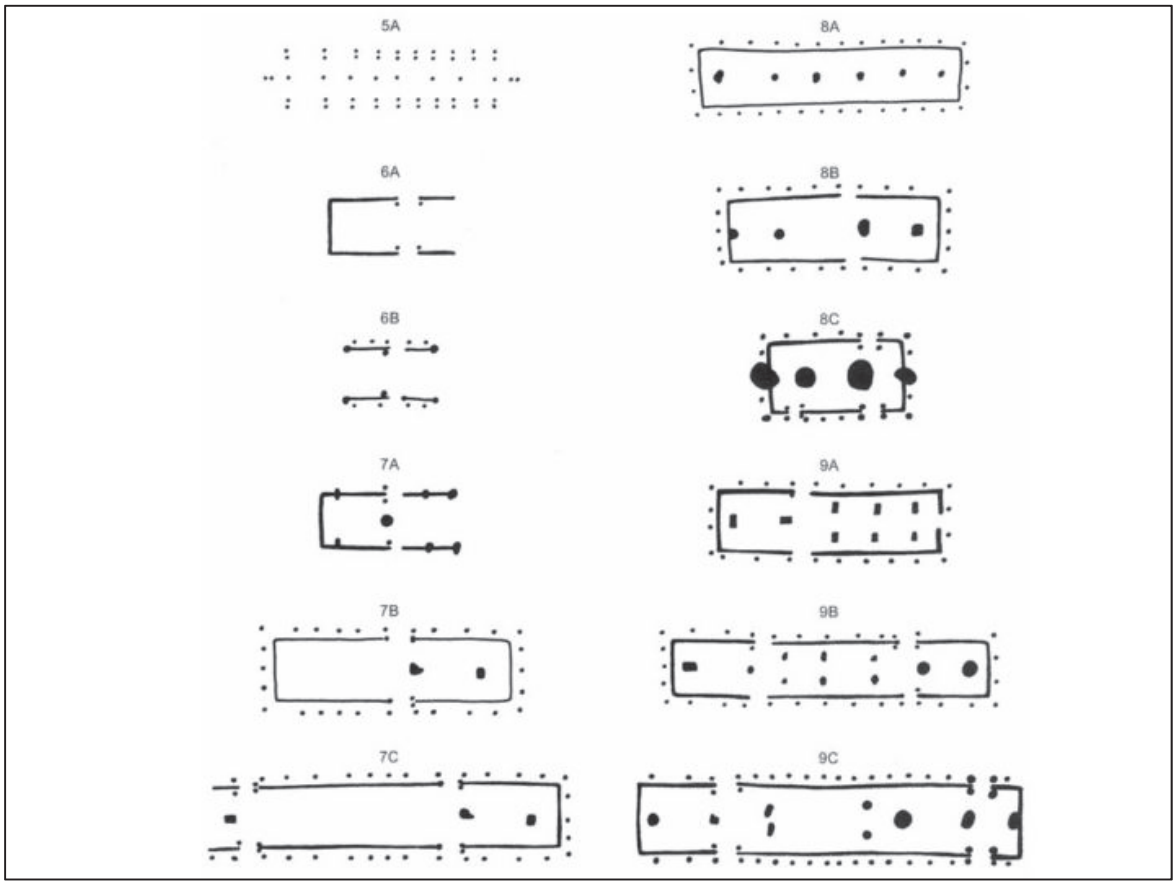

Figure 150: The variation between the stable-houses of Roman times excavated at Oss (Roymans and Heeren 2004: 24).

However, the settlement pattern did not drastically change, and agglomerations remained being rare.[731] Most of them developed along communication axes, and for this reason, Belgian bibliography often refers to them as *mansiones*, *stationes*, or *vici*, without any definitive evidence supporting this terminology (Figure 151).[732] Several developed on or near the junction of two major roads (e.g. Arlon, Asse, Tienen, Velzeke, and possibly Blicquy-Camp Romain). Magerman looked at the agglomerations of Flanders and observed that 40% of the agglomerations lay on a river (e.g. Wervik, Kort, Destelbergen, Namen, Huy, Amay,

[729] Roymans and Heeren 2004.
[730] Bayard and De Clerq 2013.
[731] Slofstra 1991.
[732] Hiddink 1991: 207-213.

Pommeroeul en Waasmunster-Pontrave).[733] Sixty% were located on a plateau (e.g. Asse, Kester, Elewijt, Velzeke, Kontich, Grobbendonk, Braives, Liberchies, Vervoz, Arlon, etc), and several developed in transitional zones, such as Asse and Velzeke (transition from sand to clay loam), and Kruishoutem, Grobbendonk and Elewijt (transition from sand to sandy loam).

Figure 151: The settlement system in Germania Inferior.

Some of these settlements appear to have had a street grid (e.g. Braives, Liberchies, and Grobbendonk). Other settlements may have had such a grid (e.g. Velzeke), although several may have consisted of multiple cores (e.g. Amay, Huy and possibly Blicquy) (Figure 152). Comparative research has revealed different layouts. A clear majority of the so-called *vici* were characterized by ribbon development: Braives, Grobbendonk, Liberchies, Pommeroeul, Taviers, Vervoz, Waasmunster-'Pontrave' and Waudrez.

[733] Magerman 2006. We can assume that ports were located along their banks. However, only in Pommeroeul have traces of port activities been detected. For the Scheldt, we know that some agglomerations were supplied with many goods from other regions, and other were shipped out (Strydonck and Van de Mulder 2000: 71-76).

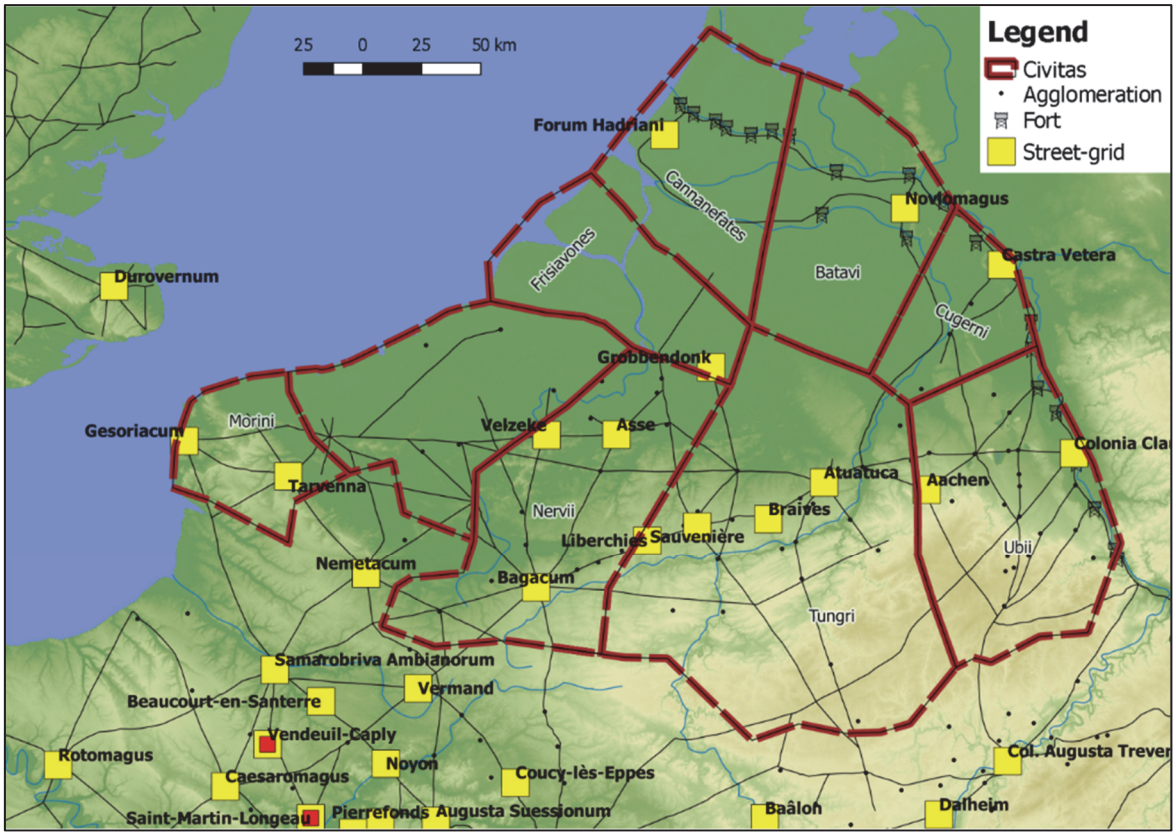

Figure 152: Street grids in the agglomerations of Germania Inferior.

South of this area, agglomerations developed in strict association with two important supra-provincial routes: the one passing through Velzeke, Asse[734], and Elewijt, and the one a little to the south that went through Kester. They probably joined at Tienen. This region is also characterized by the presence of indigenous houses.[735] The only public buildings attested so far (except for temples) are baths (Velzeke, Grobbendonk, and Tienen).[736]

[734] According to tradition, this was the place where the military camp of Quintus Cicero was established. However, excavation in the 1970s did not provide sufficient evidence to prove it. Thus, the theory that sees the Roman settlement arising around this military camp is controversial. The settlement of Asse developed during the 1st century AD at the junction of Roman roads. The agglomeration reached its peak from mid-1st to 3rd century AD. Several strip houses were found, along with wells. Traces of white plaster were found, too, but no public buildings (at least, so far) have been found. Great care in the construction of the foundations (limestone and mortar residue) is attested. Based on a preliminary review of the findings and dendro-chronological analysis of the wood found in a well excavated in 2010, it is thought these buildings date from the second half of the 2nd century AD and/or beginning of the 3rd century AD. Production of pottery (including imitation of *terra nigra*) and metalworking is attested. Several villas have been found close by. Many small finds, also related to religious cults (especially clay figurines) have been found.

[735] Habermehl 2014.

[736] In many *vici* some hints were found, such as clay figurines (Asse, Elewijt, Kester and Rumst). In Kruishoutem the presence of a temple remains unclear. The square gravel foundation from Velzeke was perhaps part of a temple and the presence of more than 30 bronze idols could confirm this hypothesis. Shrines were found at Velzeke, Grobbendonk, and Kontich (Magerman 2006).

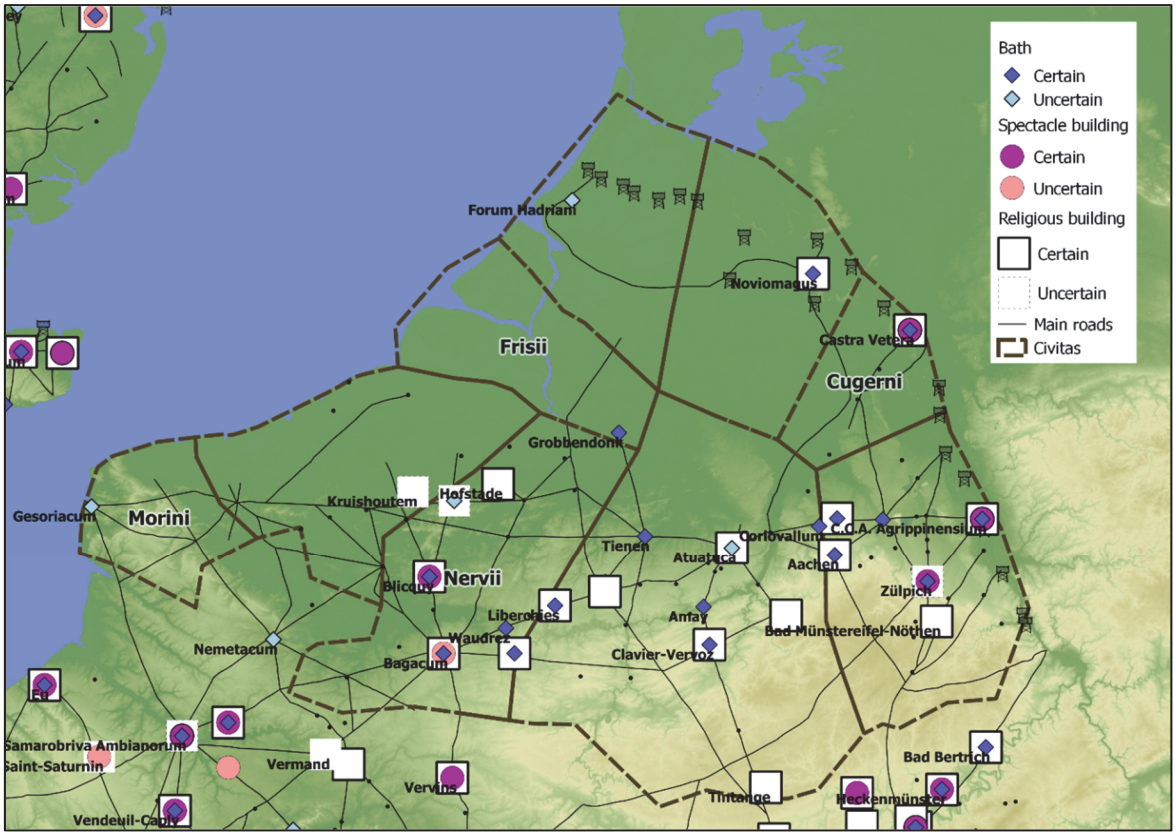

Figure 153: The monuments in the agglomerations of Germania Inferior.

Artisanal activities, like metalwork, were present at all sites. However, it is striking that only the *vicus* of Tienen had a continuous ceramic production. The agglomerations on the road Bavay-Cologne were regularly spaced with an inter-distance of *c.* 20 km. Several showed signs of complexity and luxury (marble is attested at Givry, Waudrez, and Liberchies). They all lay in a lime and fertile land and were surrounded by villas. A higher number of them were equipped with religious buildings and baths (Figure 153).[737] Economic activities are attested, too.[738]

The origin of these agglomerations is still debated. Kontich developed during the Iron Age, and maybe Asse, Blicquy, Kester and Kruishoutem did too. The regular distance between them might be a sign of Roman implantation, although a displacement of pre-existing sites cannot be ruled out. No settlement has shown signs of a military origin, apart from the *civitas* capital of the Tungri (Tongeren). This is perhaps due to the difficulty of finding traces of temporary

[737] The most common public buildings within the secondary agglomerations of Germania Inferior were temples and baths. Baths can be found at Grobbendonk, Aarlen, Liberchies, Tienen and Vervoz and possibly at Verzeke. Spectacle buildings were very rare (only found in Bliqui and Zulpich). Often the bibliography associates them to their role of *mansio*. Two buildings found at Velzeke and Clavier-Vervoz remain undetermined.

[738] Waudrez: evidence for metalworking and pottery. Liberchies: the surrounding land was intensively farmed (10 villas lay within a range of 5 km). Along the main road, dwellings were aligned and faced the road with a *porticus*. There is evidence of storage, pottery production, metalworking, glass, bone-working, and boutiques. Presence of marble and painted plaster is attested, too. Sauvenière: evidence of workshops (metalwork). Taviers: evidence of shops. Jülich: iron, bronze, glass and bone-working, textile industry, and production of domestic pottery.

camps or to the lamentable state of the evidence, but it could also mean that the role of the army has simply been over-estimated. Moreover, agglomerations did not arise all at once, although they all came into existence during the 1st century AD. Some settlements emerged in the Augustan period (e.g. Liberchies, Braives, Blicquy, Velzeke and, based on coinage, maybe also Asse, Kruishoutem, and Grobbendonk). Others in Tiberian-Claudian times (e.g. Pommeroeul, Taviers, Tienen, Givry, Clavier-Vervoz, Kester, and Elewijt). Only at Kontich, Waasmunster, Pont Rave, and Huy did occupation seem to have started after the Batavian uprising (AD 69). Most *vici* flourished between the Flavian periods and the 2nd century AD. It is often during this time that some of their wattle-and-daub buildings (or at least their foundations) were re-built in hard materials.[739] Continuity of settlements from Roman times to the Early Middle Age is also rarely attested. During the last quarter of the 3rd century, the pressures coming from invading peoples and the general political instability of the Roman Empire increased. In particular, from AD 275 several agglomerations were abandoned and disappeared (especially those in the north). Only Kruishoutem and Asse appeared to have been occupied for a longer time. Along the road Bavay-Cologne settlements endured, and this is partly due to the establishment of military posts along the road. However, several of these settlements disappeared during the 4th century AD, whilst other survived until the early 5th century AD.

Overall, in Roman times, these settlements were places for religious and artisanal activities.[740] In almost all agglomerations, metal industry is attested: when the iron was available it was extracted; otherwise, it was brought from elsewhere. Traces of crafts and food processing are also attested: bakeries, wood- and bone-working, textile industry, tile production, glass production possibly at Liberchies, Rumst and Tienen. It remains unclear whether these goods were intended only for a local market. Exports cannot be ruled out, at least for some products (e.g. glass).

Not all these activities were carried out in a single settlement. After all, the size of these sites was quite modest (Figure 154). It could vary widely from 2-3 and 10-12 ha (e.g. Amay, Baudecet, Grobbendonk, etc.). Notable exceptions are Elewijt, Waasmunster-'Pontrave', Velzeke and Waudrez (15-35 ha).[741]

---

[739] Hiddink 1991: 216 suggested that the transition from timber to stone construction in a settlement could be related to the disappearance of the agricultural function of a settlement. However, this is very unlikely. Such a change in construction method is better explained by the cultural change the dwellers have gone through, rather than an actual change in the functions performed by the building.

[740] For most temples their exact date is unclear. We can therefore say only with caution that the shrines in most *vici* knew their origin in the second half of the 1st AD - beginning of the 2nd century AD. An exception is Blicquy-'Ville d'Anderlecht', where the temple may have already emerged in the Augustan period. Most temples known prove to have a wooden predecessor. Temples are in most cases located away from the actual core of the *vicus*. Their distance from the actual settlement and their location vary. The majority of the temples had a NW-SE orientation. The entrance to the building is, in most cases, along the south-eastern side. This corresponds to other temples in the rest of Gaul and Britain that were built according to indigenous tradition. In most cases, they are the typical Gallo Roman *fanum* with a central *cella*, a *porticus* and a possible *temenos*. In any case, they clearly differ from the Classical Italic temples described by Vitruvius.

[741] The size of Tienen has been estimated to be 60 hectares (Martens 2012: 303) but this very high figure needs revision.

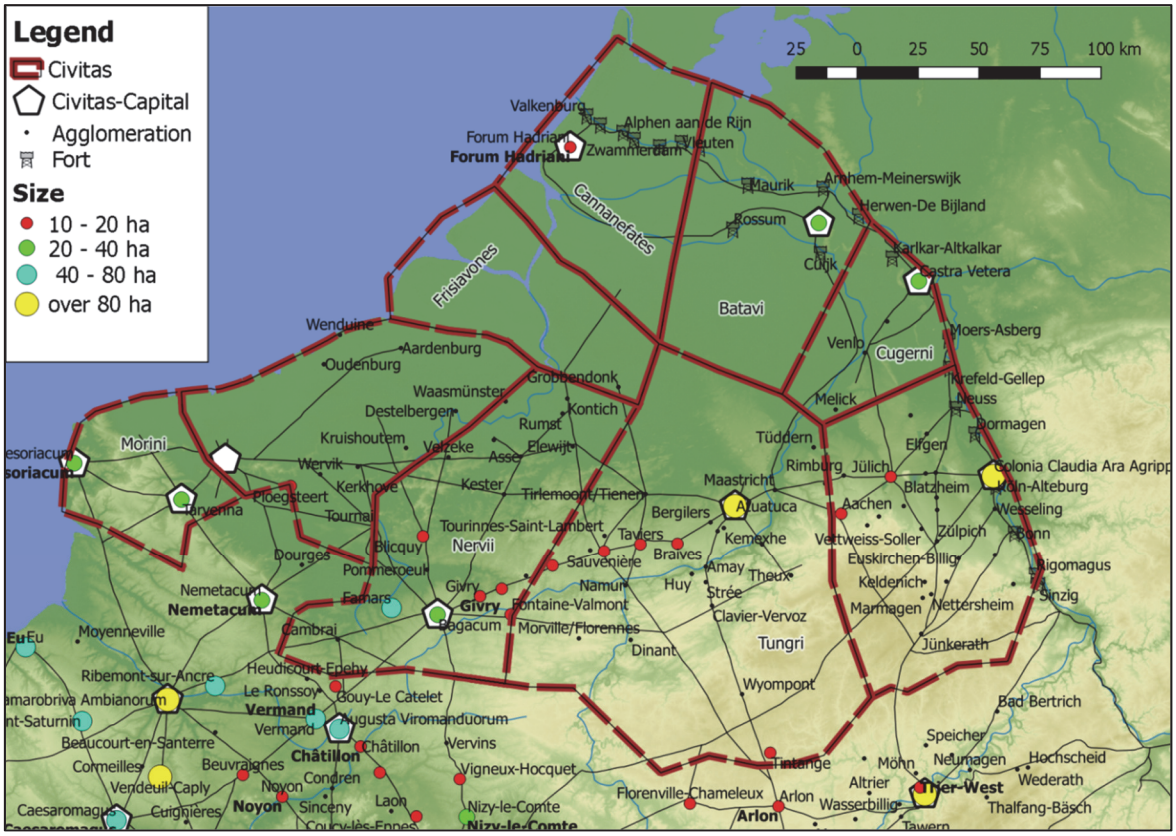

Figure 154: The size of the agglomerations in Germania Inferior.

Finally, it can be said that in the *necropoleis* most graves were very simple and modest. Nevertheless, elite burials may also be present (e.g. tumulus or a monumental construction).[742]

Topography was indeed also very important in the establishment of Roman forts on the *Limes*. For example, those built from AD 40 onwards in the western part of the Lower Rhine were built remarkably close to each other, at irregular distances but always only a few kilometres apart. They were meant to control the routes that provided a natural access to the river, such as the estuary (Katwijck, Valkenburg) or the bifurcation of the river Vecht (Utrecht). The mouths of the numerous minor tributaries were also watched over (Woerden, Bodegraven, Zwammerdam, Alphen aan den Rijn). Thus, a safe corridor was created to supply the Roman army invading Britain which only later on, presumably after the creation of the province of Germania Inferior in Flavian times, became a permanent frontier zone.[743] During the 1st century AD, no traces of any extramural settlements (so-called 'military *vici*') have been found near these forts, except for the one located outside Vechten, (dating to the beginning of the 1st century AD) and the one at De Meern (middle of the 1st century). The absence of 'military *vici*' has been explained by a lack of research or disturbances of the subsoil. It is also possible, as argued by De Weerd, that during the 1st century AD forts were still being occupied only

[742] Most of the stone monuments are located in the more southern *vici* (e.g. Vervoz, Amay, Taviers and Braives). This may not be surprising because stone was more readily accessible. In northern and central Belgium tumuli are more common (e.g. Braives, Tienen).
[743] Van Dinter 2013: 26; Kooistra *et al.* 2013; Polak *et al.* 2004: 249-250.

sporadically, when strictly necessary.[744] Some forts, however, must have been occupied because the Romans controlled the shipping on the Lower Rhine (at least during the shipping season, i.e. from March to October).[745]

As in the case of Britain - as we will soon see - a sustainable frontier required a well-organized food supply and appropriate supplies of, for example, building material. The presence of permanent troops residing within forts along the borders of the Empire has been long recognized as stimulating the economy of those regions. Groot calculates that, including Katwijk and Bodegraven, ten forts were established between Vechten and Katwijk. Based on an occupation of maximum 1 *cohors*, approximately 480 men per fort and possibly twice as many for Vechten, the maximum size of the delta army is estimated to be around 5000 men. After the creation of the province of Germania Inferior the countryside to the south of the Rhine developed quickly and the number of settlements increased.[746] Scholars have been looking at the changes in the landscape of Roman Netherlands after the establishment of the *limes* and have been eager to ascertain whether the arrival of the Roman troops had an impact on the production of agricultural goods, farming and perhaps industry. The results of these studies showed that after the Batavian revolt (AD 69-70) most of the cereals required to feed the troops were still imported from outside the region and that the number and size of the rural structures still suggested a subsistence economy, where no surplus was produced. But over time, farming in the region seems to have increased, and this has been explained by an attempt (whether forced or spontaneous) to meet the army's demand for cattle and possibly, but to a much lesser extent, sheep.[747] Farmsteads like the one found at Houten, 3 km away from the Roman military site of Vechten, seem to have been integrated into the Roman surplus economy. In return for supplies, they imported items of daily use and building materials such as timber, silver, fir, pine, roof tiles, pipes (*tubuli*), and tufa stone.[748]

6.2 Eastern Yorkshire

This case study will take into consideration the region that nowadays corresponds to eastern Yorkshire. This region did not include a military frontier; however, the presence of the army appears to have had considerable influence on the evolution of settlement patterns from pre-Roman to Roman times. It has been traditionally thought to be occupied by the Parisi, a community mentioned by Ptolemy,[749] who also wrote that they migrated from Gaul to Britain. Much ink has been spilt about the possible continental origin of this people, particularly in relation to their use of square barrows and chariot burials (which are very rare in the rest of Britain but can be found in high concentrations in some parts of France and Germany).[750] We

[744] Kooistra *et al.* 2013.
[745] De Weerd 2006; Groenhuijzen and Verhagen 2015; for shipping season see Fulford 2000: 42; Vegentius, Book 4, 39.
[746] Groot *et al* 2009; Heeren 2009; and Vos 2009.
[747] Cavallo *et al.* 2008.
[748] Carroll 2001: 65-66.
[749] Geography 2.3.17.
[750] In France they are typical of the Marne and Champagne; in Germany they are found in the Hunsrück -Eifel region (Halkon 2013: ch. 4).

cannot say whether this region coincided with a Roman administrative region, but it can be seen as a unified entity because of its geography. In fact, the region is crossed by three river systems - those of the river Hull, the river Derwent, and the river Ouse - all of which drain into the river Humber.[751]

This region has recently been the object of a good number of well-run investigations which provide us with very intriguing evidence which has the potential to (re)shape and deepen our understanding of Roman imperial policy and the attitude of indigenous communities towards it.[752] Geographically speaking, this region consists of four different landscape units (Figure 155): i. the generally poorly drained plains of Holderness and the wet areas surrounding the Hull River (coastal erosion has worn away large tracts of the coastline, and it is difficult to reconstruct the ancient coastline); ii. the fertile and well-drained chalk plateau of the Yorkshire Wolds; iii. the large, flat Vale of York which is traversed by the river Drevent and its many tributaries as well as by the river Foulness; iv. the Vale of Pickering, a low-lying flat area oriented in an east-west direction and drained by the river Derwent that separates the Wolds from the North York Moors.

The Roman army conquered this region in the 70s AD; and soon afterwards a legionary fortress (York) and other smaller forts such as the ones at Hayton, Malton, and Brough were founded. 'So far as we know' - writes Martin Millett – 'there was no great battle for East Yorkshire when Roman military units overran the region in the AD 70s.'[753] Thus, these forts should not be seen as bases from where attack sorties were launched, but rather as parts of a military infrastructure created by Rome to keep recently subjugated territory under control. The site of Hayton, which has been the object of both geophysical surveys and excavations, was established along the Iron Age path that runs through Brough and led to York, at the junction with the road which connected the lowland to the Wolds.[754] However sudden and disruptive the foundation of a military fort may have been for people's lives, its presence lasted for a relatively short time (*c*. 20 years).[755] Overall, it does not seem to have caused any sudden drastic changes in the settlement pattern.[756] Soon after its foundation, two large roundhouses were built just next to the fort. Given that 'there is some evidence that a few farmsteads further up the valley were going out of use,' Martin Millett speaks of a 'relocation' of individual households. According to him, this may have been a sign that locals were cosying up to the newly dominant

[751] Roskams and Whyman 2005.

[752] The geology and the property of the soils that cover this region affect not only the resources and the environmental conditions this land offered but also its settlement pattern. They also have a huge impact on the 'visibility' of the sites on the terrain. 'The chalk and limestone bedrocks of the Wolds and Pennine foothills, and the extensive arable agriculture practised on them over the past two centuries, have led to the recognition of archaeological sites both on the ground and from the air […]. In contrast, large areas of drift geology in the lowlands, and swathes of 'piedmont' gritstone landscapes, used primarily for pasture and often subject to extensive re-organisation in the 18th and 19th centuries, are far less well researched and understood archaeologically.' (Roskams and Whyman 2005: 5-6).

[753] Millett, *Current Archaeology* 314: 26.

[754] Both these cities are thought to have become - during the course of the 1st and 2nd centuries - two self-governing cities, even though for Brough we do not have definitive evidence.

[755] Millett calculates that it could host a maximum number of 500 soldiers (Millett, *Current Archaeology* 314).

[756] Halkon, Millett and Woodhouse 2015.

authority.[757] However, soon after the fort was abandoned, more changes occurred. By then it had probably become clear that the Romans were going to stay. The northern frontier was supplied with an improved road network, capable of coping with the constant demand generated by the presence of the army on the *limes*. The Iron Age route, which up to then was key to Roman's military operations, was replaced with a Roman road. At the same time, more and more people - but still a small minority of the population from the surrounding countryside (or perhaps from further away, e.g. Lincolnshire) relocated closer to the abandoned forts or to new small secondary agglomerations that sprouted along the road.[758]

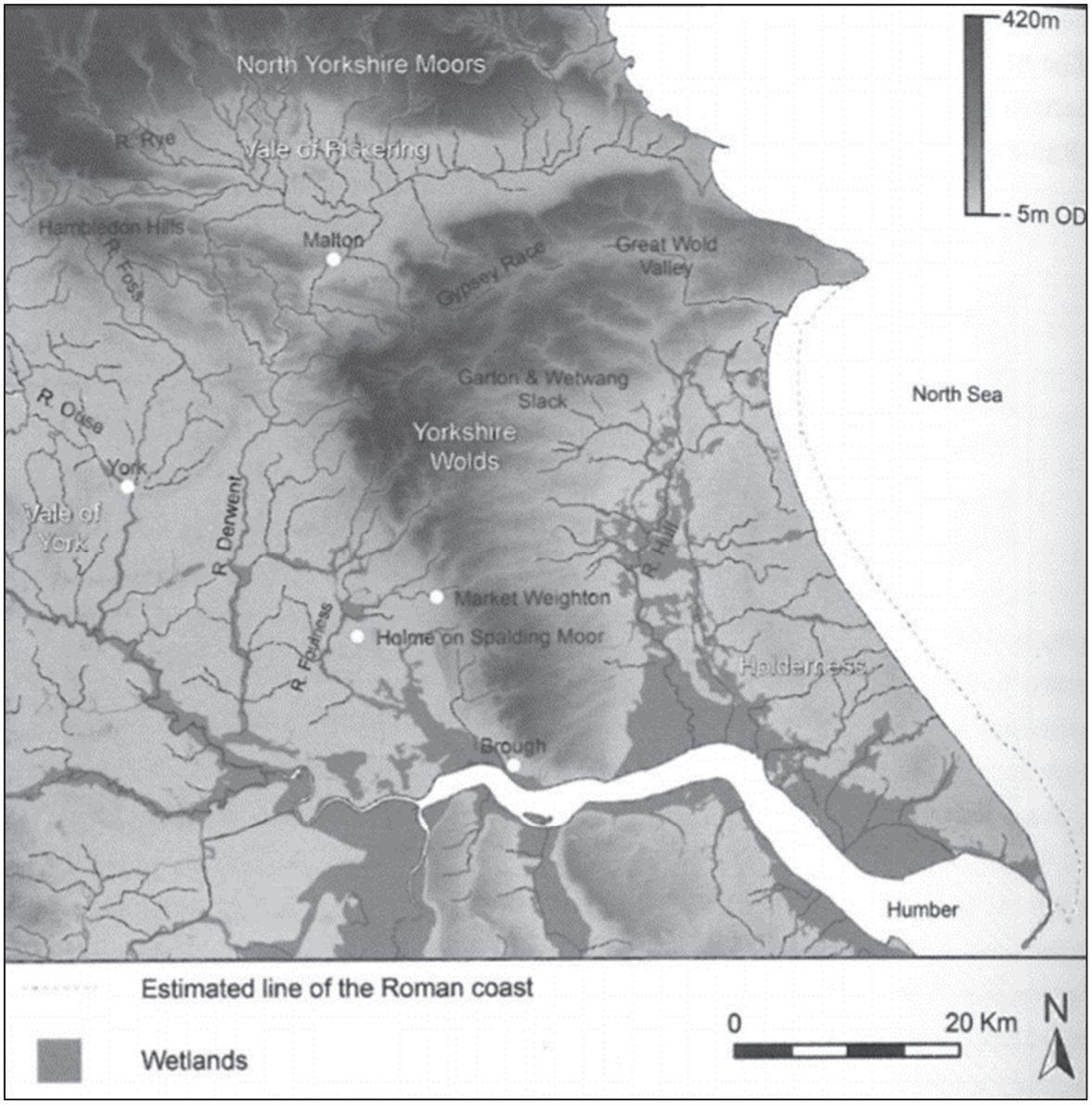

Figure 155: The major topographical features of eastern Yorkshire (Halkon 2013: 44).

At Hayton, a substantial concentration of metal-detected finds has been discovered, which has been interpreted as evidence of a seasonal market or fair, where livestock brought down the

[757] Millett 2016.

[758] They appear to have brought with them their traditional way of dwelling and managing land (roundhouses and enclosures) and re-built them in a new context.

valley might have been sold. The metal finds include many objects associated with horse harnesses and carts, as well as a number of items associated with the military, including a lead seal of *Legio VI Victrix*, which was based at York from the time of Hadrian. These finds indicate that there was probably a lot more to the fair than just the selling of sheep, and we may well envisage a more varied event. This phenomenon can be clearly seen in Hayton but may have also occurred at Malton, Shipthorpe, Rudstone Walk and other small secondary agglomerations. Except for the colony of York - which grew to *c*. 40 hectares (military garrison excluded) - all the rest of the agglomerations, including the supposed *civitas* capital of Brough, are unlikely to have measured more than 10 ha (Figure 156).

As mentioned above, these small settlements were located at strategic positions along key trade routes. Dringhouses - a potential settlement of which we know very little - was located *c.* 3 km south of York, along the major route that linked the legionary fortress to Tadcaster.[759] Malton and Stamford Bridge were both located at the crossing of the river Derwent while Hayton, Shipthorpe, Goodmanham and Rudstone Walk were all positioned along the road that linked Brough to York and which, in Roman times, was of logistic importance for the supply of the army on the northern frontier. So far, no substantial settlement has been found within the region of the Hull Valley and the Holderness. Lower site visibility and fewer fieldworks and excavations undertaken in the area might partially explain this void. However, given how wet and potentially afflicted by flooding this region was, it is also possible that the main form of land occupation continued to be individual farmsteads, for which we have evidence in the archaeological record.

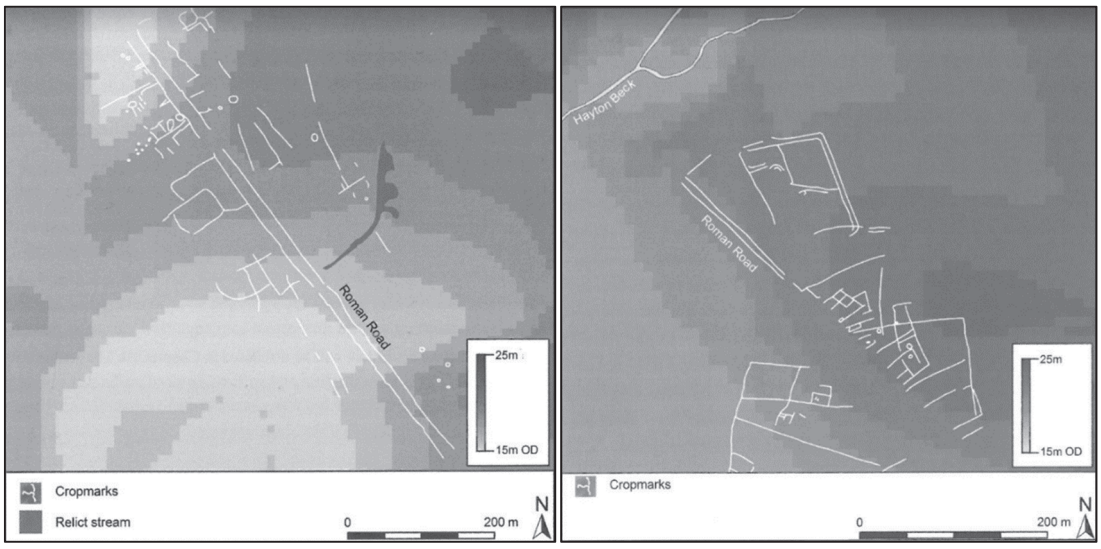

Figure 156: The agglomerations of Shiptonthorpe (left) and Hayton (right) based on crop marks (Halkon 2013: 139 and 141).

As was the case with Germania Inferior, all of these secondary agglomerations appear largely as ribbon developments, and their internal morphology (orientation of buildings and enclosures) seems to have been largely organic and focused along trackways - whether they

[759] In mid-2 nd century AD, too, there is evidence for two masonry strip buildings aligned adjacent to the road, which are not very long lived. Roman rural settlements project.

were established close to a military fort (e.g. Hayton, Malton) or not.[760] Secondary agglomerations within this region do not show any sign of monumentality, and they also have no traces of pre-existing religious cults, leaving an origin associated with economic factors more plausible.[761] Traces of various economic activities, ranging from farming, manufacturing, food processing and most likely trade, have indeed been recognized at the best-researched sites, and most evidence can commonly date to late 2nd – 3rd centuries AD.[762] At Malton, for example, greyware pottery manufacture reached a quite significant scale in the 3rd century AD, when it was attested by a half dozen kilns. An intriguing inscription (also dated to the 3rd century AD) mentions the presence of a goldsmith (RIB 712), and the small golden finds discovered by metal detectorists in the region - and recorded in the Portable Antiquities Scheme - makes this possibility realistic. In Hayton roundhouses and enclosures were transformed during the second century with the construction of two new-style rectangular timber buildings, a small courtyard house, and an aisled hall within a new enclosure. Shiptonthorpe appears to have been a less wealthy agglomeration (most houses continued to be built in timber), but at the same time, it might have been a central place for the redistribution of crops. As this area is not one with much evidence for large-scale intensive cereal farming, we might tentatively suggest that it acted as a gathering point between smaller-scale producers and consumers (or intermediaries). This agglomeration, which lies *c.* 6 km south-east of Hayton, began to develop soon after the road was built in the early 2nd century AD. A series of enclosures was built on both sides of the road for *c.* 800 m, which may have been used for settlement, gardening, farming or even funerary depositions.[763] Millet estimated that around 20 families were living in the agglomeration, that is around 480 people.[764]

The chronology and evolution of Hayton and the rest of these agglomerations are of particular interest. As mentioned above, Hayton started to develop soon after the military abandoned the fort and after the road was built. This suggests that the presence of up to 500 soldiers *per se* did not make the fort attractive for indigenous people to move close by. Interestingly enough, in Germania Inferior we witness a similar phenomenon (see above). In fact, there is a lack of evidence of extramural settlements (so-called military *vici*) dating to the 1st century AD. As had been the case in Germania Inferior, the local economy in Yorkshire may have started to contribute to the supply of crops and animal by-products (meat, wool, leather) only at a second stage. This might explain the presence of 43 quern stones discovered at Shiptonthorpe. This evidence, together with the fragments of writing tablets found at this settlement, hints at a centralization/optimization of the harvest and at a crop redistribution so extensive that

[760] In literature they are referred to as roadside settlements and do not show any sign of monumentality

[761] Religious activities are attested, e.g. a statue of an altar base has been found in Malton (RIB 711), but we do not know whether it was in a private or a public context. A shrine - or possibly a temple - might have been located at Eelmswell and Millington. Unfortunately, definitive evidence is lacking (*Current Archaeology* 326: 25).

[762] The Roman Rural Settlements of Britain project has observed that in Britain agglomerations do not seem to have attracted large number of farms in their proximity. In fact, only one-fourth of farms lie within 20 km of agglomerations. It is possible that, since there is evidence of farming both within self-governing cities (see chapter 4) and secondary agglomerations, there was less need for farms in the neighbourhood to supply agricultural goods.

[763] Halkon 2013: 140. The presence of field systems around some of them (e.g. Dringhouses) indicate that they were integrated with small-scale farming.

[764] Millett 2006: 311.

bureaucracy and bookkeeping procedures were required in order to manage surplus agricultural resources and/or to supervise tax collection.[765]

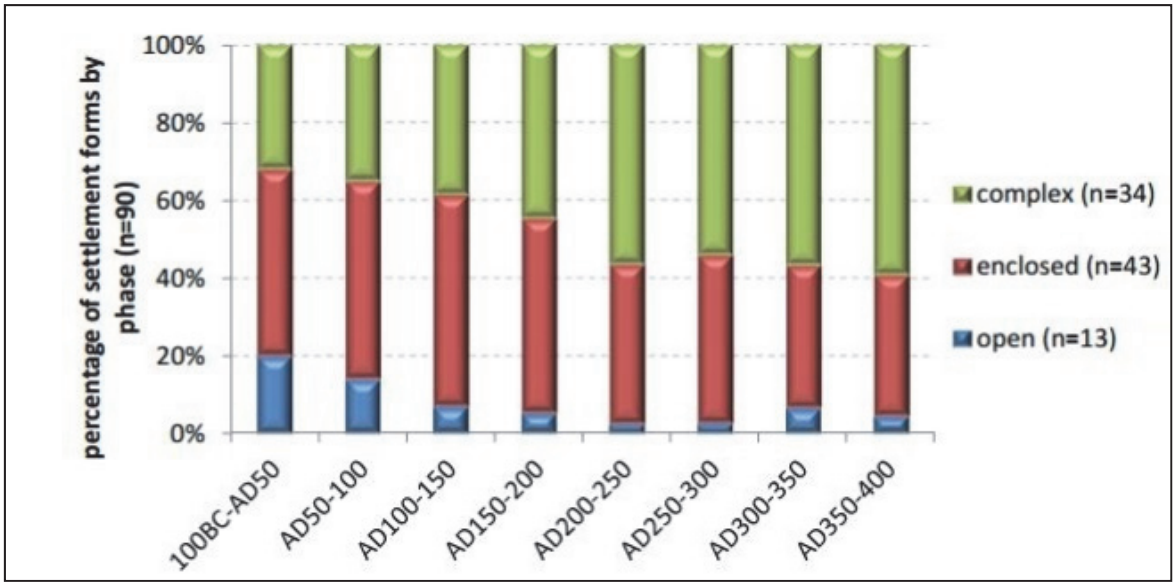

Figure 157: Temporal changes in the frequency of settlement in north-eastern England.

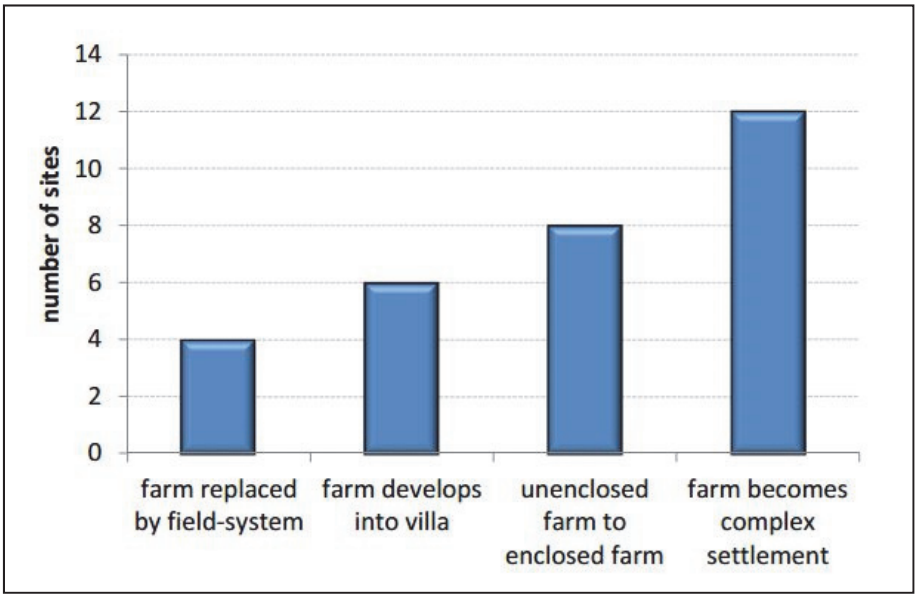

Figure 158: Types of changes in farming settlements in north-eastern England.

A major project dedicated to the study of rural agglomeration of Roman Britain766 looked at the rural settlements of north-eastern England (thus, the data presented below concern a much wider territory that stretches from North Yorkshire and County Durham in the north to north Lincolnshire and Nottinghamshire), and we can see some of the patterns this project was able to identify. The graphs in Figure 157 and Figure 158 show how the complexity of individual farms increased over time. Farms became more enclosed and gradually more complex with the

[765] Millett 2006: 309.

[766] The Rural Settlement of Roman Britain (http://archaeologydataservice.ac.uk/archives/view/romangl/index.cfm, last accessed: 12/03/2018).

addition of internal subdivisions or conjoint enclosures which 'tend to reflect the desire to keep livestock, storage, processing, industrial and domestic activities separate from each other, and often appear to be the result of careful planning and take the shape of villas.'767

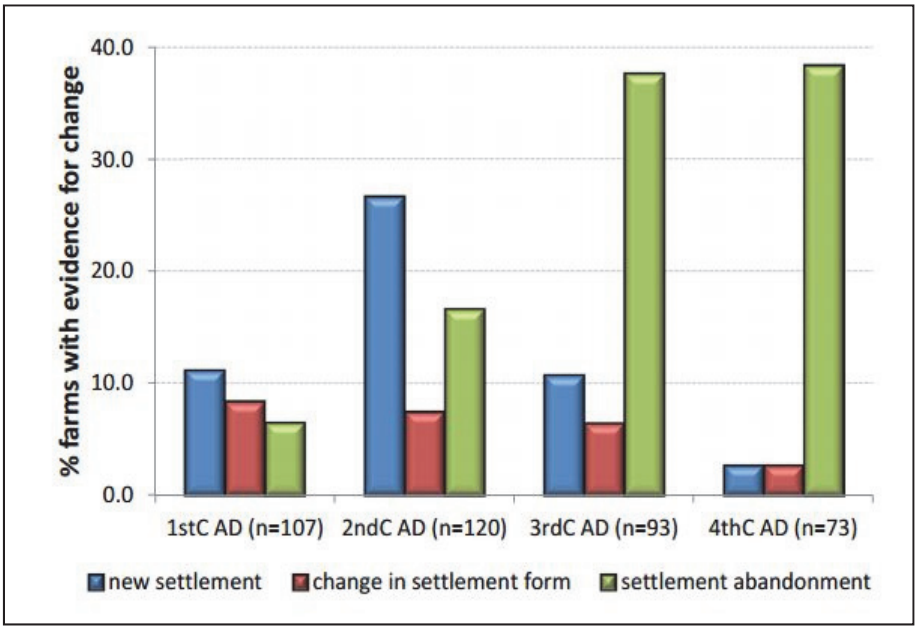

Figure 159: Settlement development and dynamics of change in the North East.

The graph in Figure 159 indicates three main things: i. there was a strong continuity from the Late Iron Age - *c.* 93% of farms occupied in later 1st century AD had an Iron Age origin; ii. the 2nd century AD witnessed the largest number of farms while the periods of the greatest abandonment were the 3rd to 4th centuries AD (disproving the old idea - based on the evidence from villas - that the Romano-British countryside flourished in the 3rd to 4th centuries AD); iii. in the first two centuries AD, the countryside was much more dynamic than during the periods that followed.

While more and more circular buildings were being replaced with rectangular ones (which have the intrinsic architectural advantage of allowing a higher degree of diversification and extension), new varieties of forms of settlements (e.g. villas, agglomerations etc.) and buildings started to appear, too. For example, buildings with a sunken cellar ('cellared farms') which resemble the sunken *maison-etablés* excavated in Belgium. They were used for a variety of activities, including crop and meat processing, grain drying, cooking, and smithing and, as was the case in Belgium, could be an answer to an increased productivity.[768]

[767] *Current Archaeology* 326: 23.

[768] In Britain 105 have been recognized so far. At Wattle Syke (West Yorkshire) 15 Roman cellared buildings were found (*Current Archaeology* 326: 27).

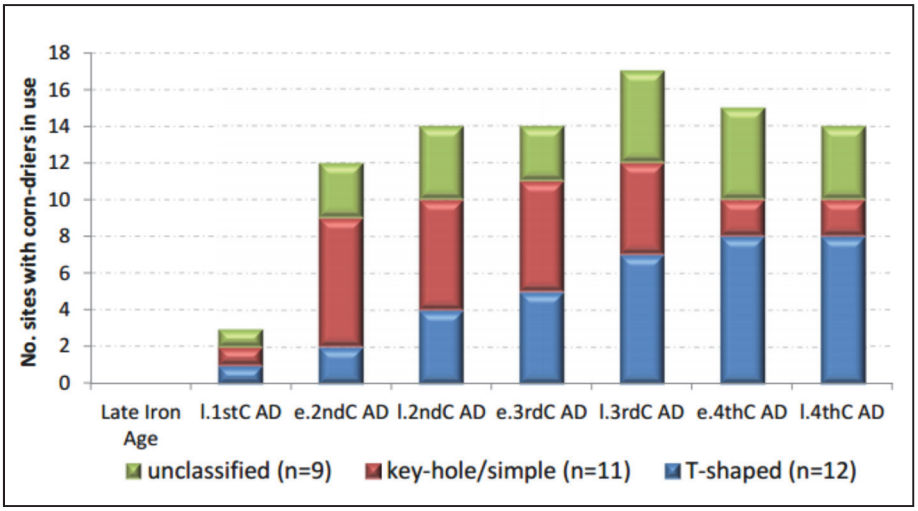

Figure 160: The increased use of corn-drying ovens through time in north-eastern England.

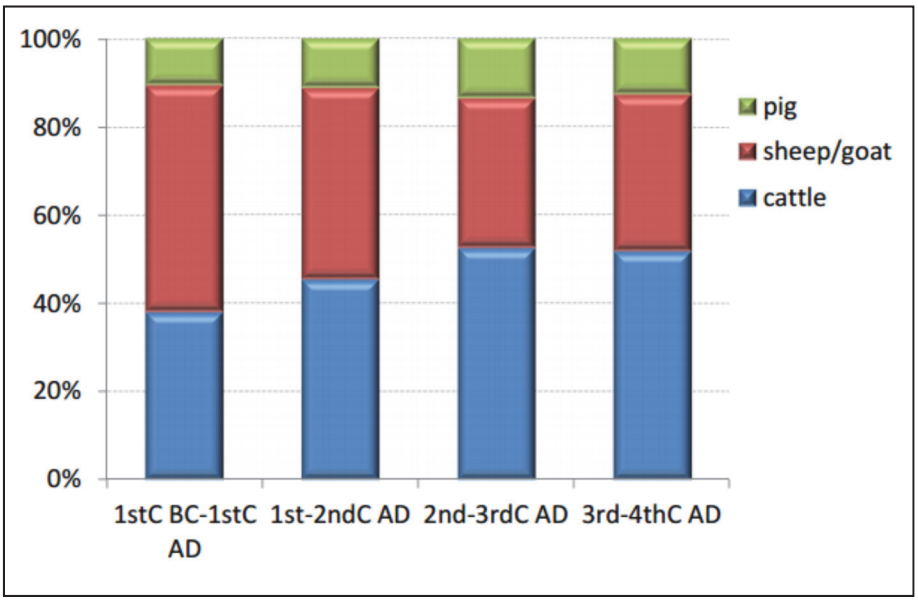

Figure 161: The increased farming of cattle and pig over sheep in north-eastern England.

Another interesting discovery of this project was the identification of chronological trends in local husbandry and agricultural practices. Figure 160 shows that an increase in the use of corn-drying ovens occurred between the 2nd and 4th centuries AD. Figure 161, on the other hand, shows an increasing preference for cattle and pigs over sheep. A proportional increase of cattle has also been noticed in Germania Inferior where it has been explained as a response to a rapidly increasing demand for livestock to supply the army and for taxation.[769]

[769] Groot, by examining 30,000 animal bones collected during the excavation of two rural settlements at the site of Tiel-Passewaaij, was led more or less to the same conclusion. Evidence showed an increase in the proportion of sheep bones; the animals were also killed at an older age, suggesting that in the second half of the 1st century meat and wool started to become important and were produced in surplus, most probably meeting the demands of an increased market. A similar pattern is found in other settlements around the Dutch River Area, where high percentages of sheep are common in the 1st century AD, although not everywhere (a possible explanation could

Thus, the gradual change in the settlement pattern was not a mere response to the construction of the road; rather it represented an adjustment of the relationship between the indigenous people and the newcomers and their increased contribution to the army supply. As such, as in the case of Germania Inferior, the Roman conquest did not have an immediate effect on the local settlement pattern and economy (i.e. animal husbandry, farming). Changes become more evident at a later stage, in the second half of the 1st century AD. Indeed, we should not forget that within the north-western provinces a steady increase in the number of settlements reflects the continuation of a long-term trend that had started in pre-Roman times.[770]

It is possible that it was the steady presence of the Roman army nearby (in the legionary fortress of York and on the northern frontier) that boosted the local economy. This, in turn, might have enabled the local population to amass a trading surplus, opening up opportunities for those ready to take the chance to accumulate wealth. This process was gradual but can be perceived by looking at the evolution of dwellings (several of which, in their later phases, were rebuilt with stone and mortar, and were provided with underfloor heating, and embellished with mosaics and painted plaster) and by the increasing number of small finds recovered there (metal objects, jewelry, coins, etc.). It is clear that the inhabitants of eastern Yorkshire came to enjoy some level of comfort. Whatever economic activities they engaged in (e.g. farming, iron metallurgy, bronze crafts, bakery, and pottery manufacture), it appears that the owners of these houses were making profits from their work, which they could re-invest into renovating them.

It remains complicated to reconstruct how this wealth was accumulated, although continuity in field systems and land divisions suggest that social hierarchies were not disrupted. At the site at Welton Wald, four different roundhouses lay next to each other and might have belonged to four different families, one of which already appeared to have been dominant. On the same site, an early *villa* was built, no later than the beginning of the 2nd century AD, along with a new roundhouse (built in traditional Iron Age style). This *villa* was a small cottage-style corridor structure, accompanied by the laying out of an extensive complex of enclosures, an aisled building, another stone building, two timber houses, two stock pens, quarries, trackways, field-systems, at least nine corn-driers, a well, a five-poster granary, and a possible shrine/mausoleum. The complex stretched over 8-10 ha. The activities on the site were mostly farming, combined with the exploitation of chalk quarries whose stone was probably needed to make the mortar that was used to build the nearby cities of Brough and York.

6.3 An overview of the settlement systems of Germania Inferior and Britannia

The case studies presented in this chapter dealt with regions whose settlement patterns have been strongly influenced by the presence of the Roman army. In accordance with the 'transport principle', theorized by Christaller, in both cases small central places (measuring less than 10 ha) were located on the main transport routes linking the higher-order secondary settlements

be differential specializations among settlements, perhaps related to the differences in the landscape) (Groot 2008).

[770] Millett, *Current Archaeology* 326: 28.

and self-governing cities. In this system of nesting, the alignment of places along a road was compelling, and it had a direct impact on the shape that settlements took. In fact, the majority - if not the totality - of the secondary agglomerations described above were ribbon-developments.

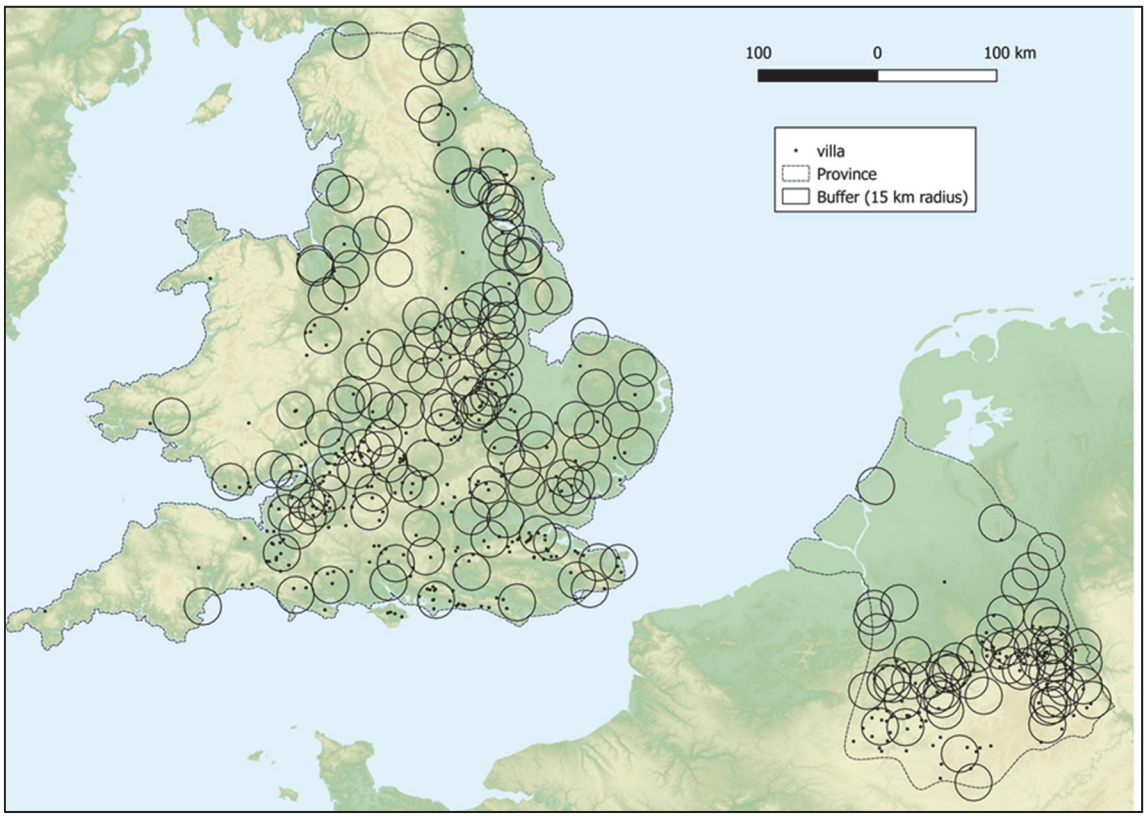

Figure 162: Map showing the distribution of villas and buffers of 15 km radius around the self-governing cities and secondary agglomerations of Britannia and Germania Inferior.

However, if we broaden our perspective, it can be observed that, as with Gaul, the distribution of secondary settlements in these provinces was noticeably unequal (cf. Figure 148).

As in Gaul, in Britannia and Germania Inferior the most important fertile areas were, by far, the most densely settled. In the former, the Central Belt - which was irrigated by some major rivers such as the Severn, Avon, Thames, Trent, Nene, and Ouse - and in the latter the Central Uplands, were densely scattered with agglomerations and villas (Figure 162).

Regions with poor, acidic soils (such as Cornwall, Wales, the North-West, and the High Weald in Britain; the Ardennes in Germania Inferior) appear to have been less settled. Finally, the wetlands areas - such as the Washes in Britain and the coastal area of Belgium and the Netherlands in Germania Inferior[771]- were even less settled (or completely empty) since they were largely unsuitable for agricultural purposes.[772]

[771] The area in the north of the *civitas* Menapiorum and more generally in north-western Gallia Belgica andthe south-west of the Netherlands.

[772] Here we will not dwell too long on the subject of demography. However, settlements need to be reachable by the people who use them. Hence, their location (and size) is linked to general population distribution. In fact, few would argue, apart from nuances, with the following statement: ‘population must become dense enough for the

The map above, also shows how certain regions (e.g. East Anglia and the Cheshire Plain) although being void of villas were still quite rich in agglomerations. To draw the conclusion that these regions were under-populated or economically underdeveloped would be, however, incorrect. In fact, they were both densely scattered with farms, and several agglomerations (Figure 163) have left important traces of industrial productions.[773] Among those lying in the north-west, a few have produced evidence of quite large productions of salt (i.e. Middlewich, Nantwich) and metalwork (e.g. Heronbridge, Wilderspool). Similarly, in East-Anglia at least two secondary settlements have been proved to be the focus of important artisanal pottery production: Brampton (where evidence of at least 132 pottery furnaces has been discovered) and Hacheston.

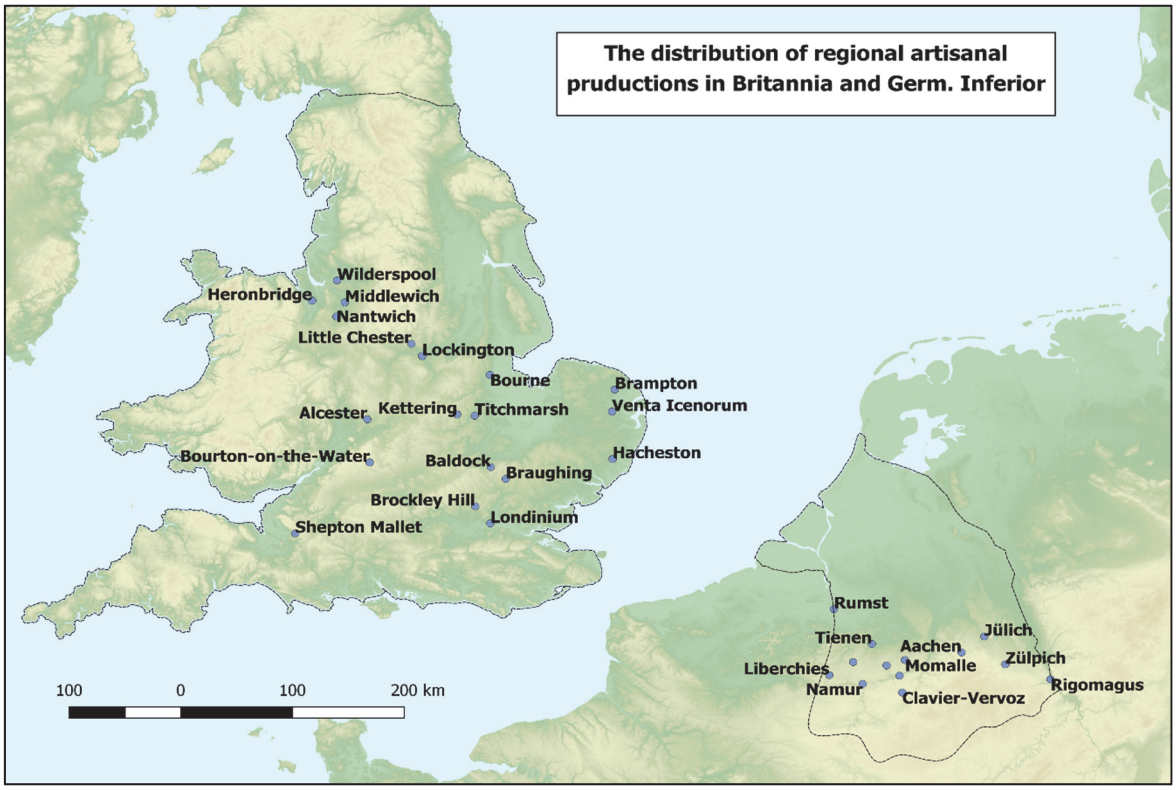

Figure 163: The secondary agglomerations of Britannia and Germania Inferior in which evidence of considerably large artisanal/industrial productions has been discovered.

division of labor to expand through the emergence of new cities' and the number of cities increases with the size of the total population (Fujita and Thisse 2002: 384). In places where the population is usually low, it is impossible for cities to grow. Adam Smith was referring to the same principle when he wrote that 'in the lone houses and very small villages which are scattered about in so desert a country as the Highlands of Scotland, every farmer must be butcher, baker and brewer for his own family' (Smith 1965 5th edition: 17). This means that when resources are unevenly distributed, then the population - and consequently the settlements which serve it - will also be unevenly distributed. Areas like Brittany, Lower Normandy, the Massif Central, Wales, and Cornwall have been persistently less urbanized than other areas throughout history. Geography - specifically poorer land with a high pastoral tradition - can explain this long-term pattern. Highly fertile land can feed more people.

[773] See the recent contributions of Smith 2016 and Brindle 2016 within the project 'The Rural Settlements of Roman Britain'.

What we have just observed suggests that agglomerations could develop even in areas where agricultural surplus was not optimized (or, better, where the economy had an extensive character).

However, it is now time to look more closely at the character of the secondary agglomerations of Britannia and Germania Inferior. The case studies that have been presented earlier in this chapter emphasized the aspects that these provinces had in common. However, the box plot for Germania Inferior (Figure 164) suggests that in terms of settlement-size distribution large differences exist between the two. In Germania Inferior, secondary settlements' size is quite homogenous. Half of them (the middle 'box' in the graph) were smaller than 10 ha and none of them larger than 20 ha.

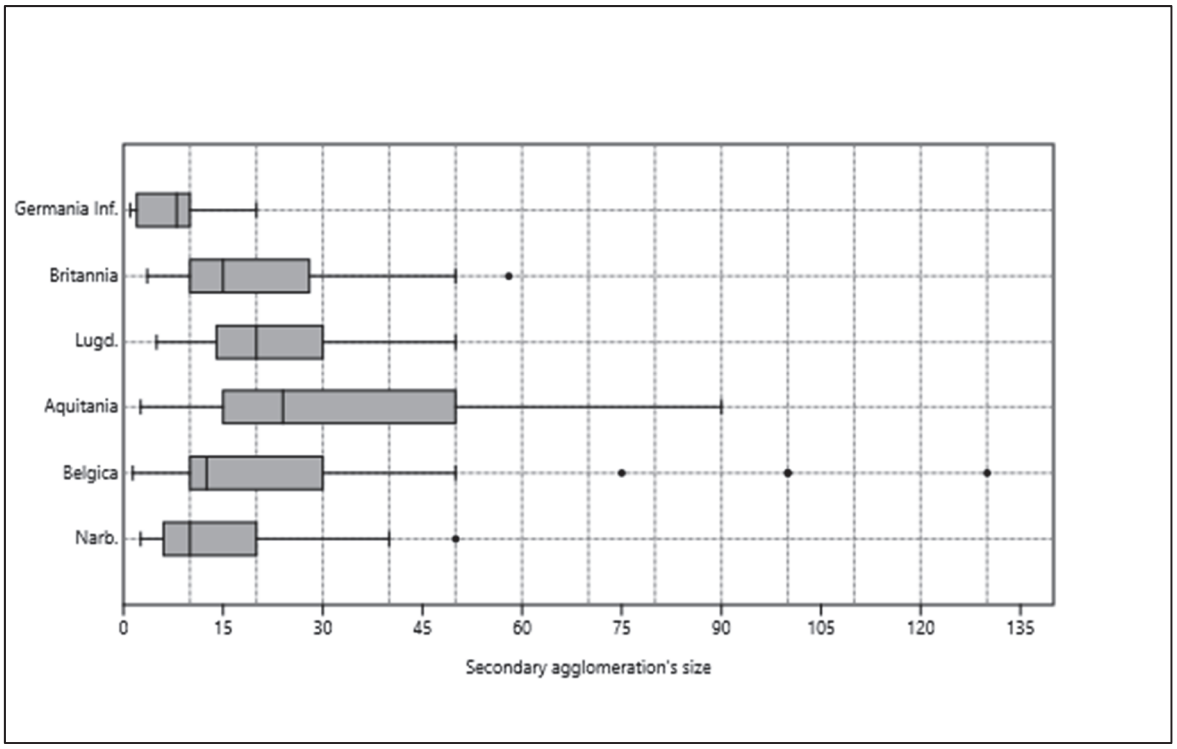

Figure 164: Box plot comparing the size of the secondary settlements (i.e. garrison settlements are excluded) of the north-western provinces.

The size distribution of secondary settlements in Britain, on the other hand, resembled more closely those of Lugdunensis and Belgica. In fact, they present a much larger variability in terms of size. Moreover, they are on average larger: around a half of their agglomerations range from *c.* 10-30 ha. There is much greater variability among them, especially in Belgica which has a larger proportion of settlements that measure between 10-15 ha but also has anomalously large secondary settlements. Thus, the size of the secondary agglomeration in Britain and Lugdunensis appears to be more homogenous than that in Belgica.

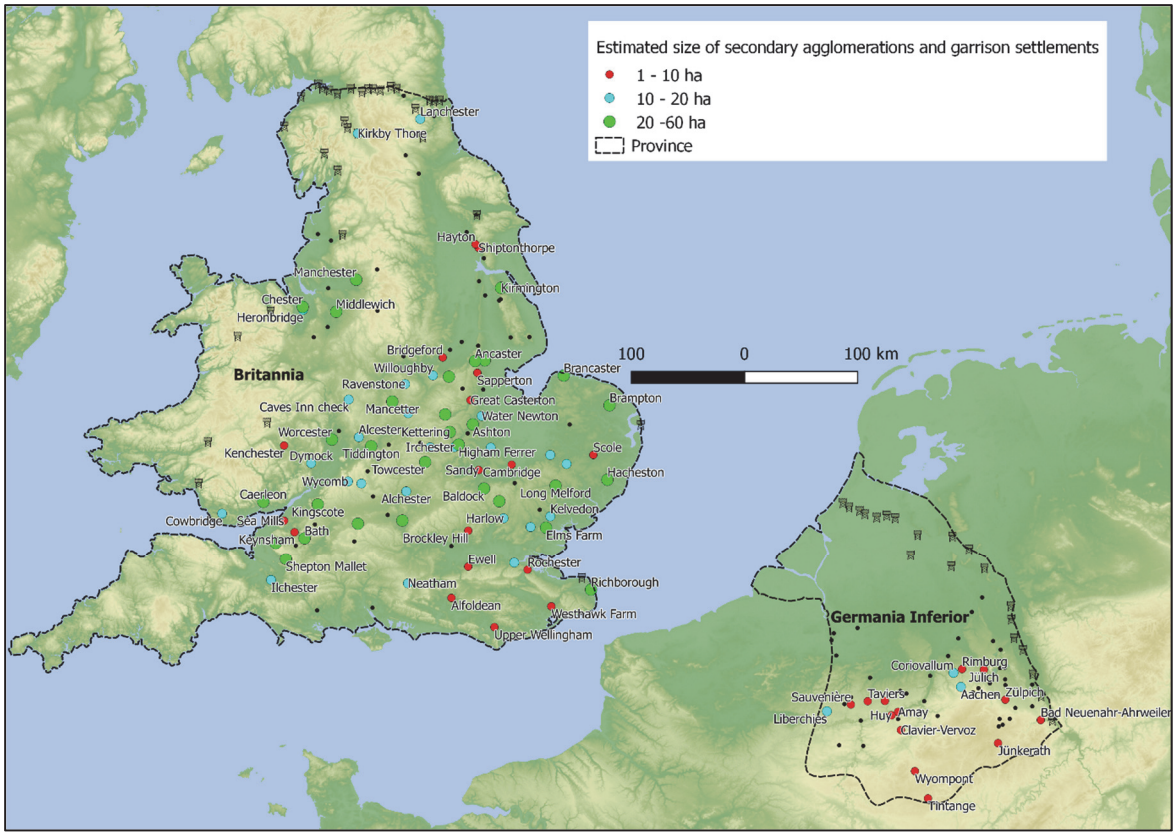

Figure 165: The size of secondary agglomerations of Britannia and Germania Inferior.

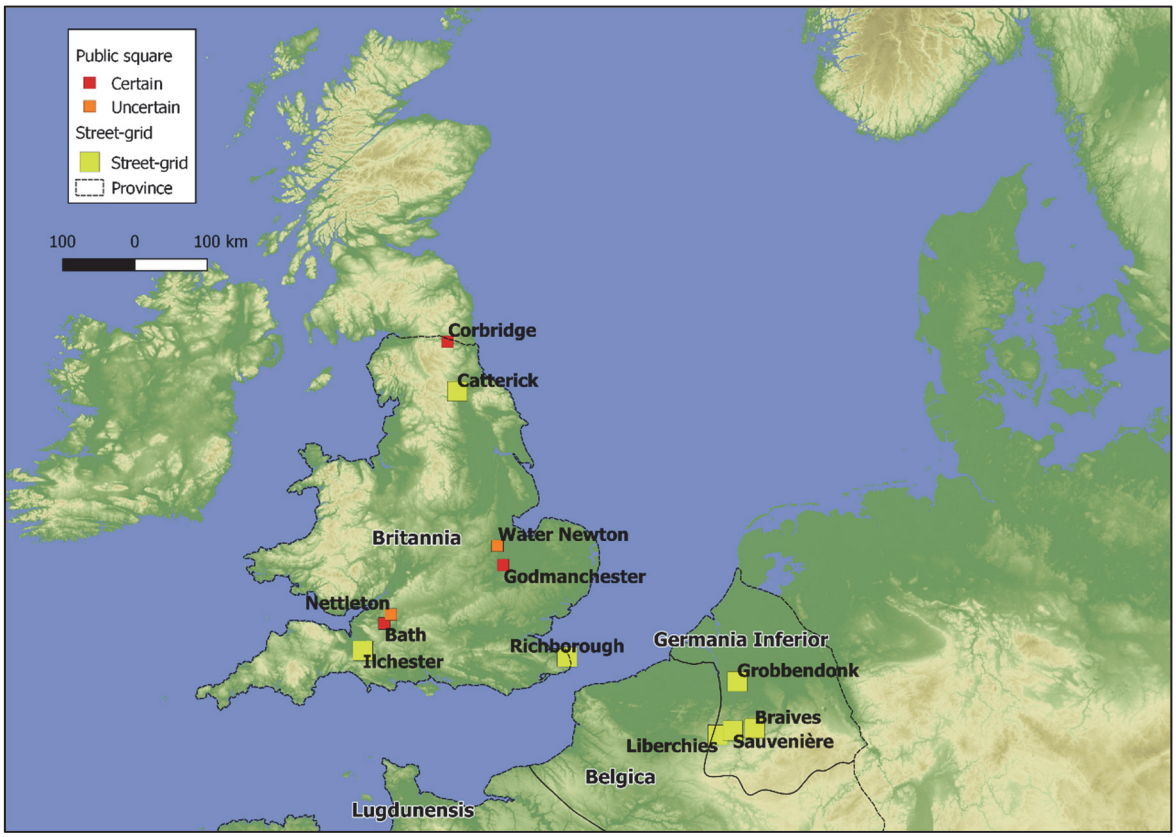

Figure 166: The layout of secondary agglomerations and the distribution of the ascertained public squares and street grids.

However, unlike Lugdunensis (except for its western part), neither Britain nor Germania Inferior had a large proportion of settlements that stood out for their monumentality, the complexity of their layout or the heterogeneous socioeconomic stratification of their society (Figure 166). They all present substantial evidence of dwellings and manufacturing/commercial structures, but only a minority of them have yielded evidence of elite dwellings or of a complex division of labour involving people practising many different occupations. In other words, only a few of these settlements stood out in terms of economic complexity or social stratification. At the same time, few of them displayed spatial features typical of 'urban' townscapes, such as orthogonal street grids (suggesting some sort of deliberate planning) or separate areas devoted to public, private and religious activities (for example, a central, public square). Finally, only a handful of the secondary settlements of Britain and Germania Inferior provided a large variety of services to the inhabitants of the surrounding region, as evidenced by religious or recreational buildings.

Figure 167 shows that, apart from the legionary fortresses of Caerleon and Chester and the town of Richborough (which in chapter 4 we have identified as a potential self-governing city), spectacle buildings are completely absent from secondary settlements of Britain, and one was perhaps found at Zülpich in Germania Inferior.

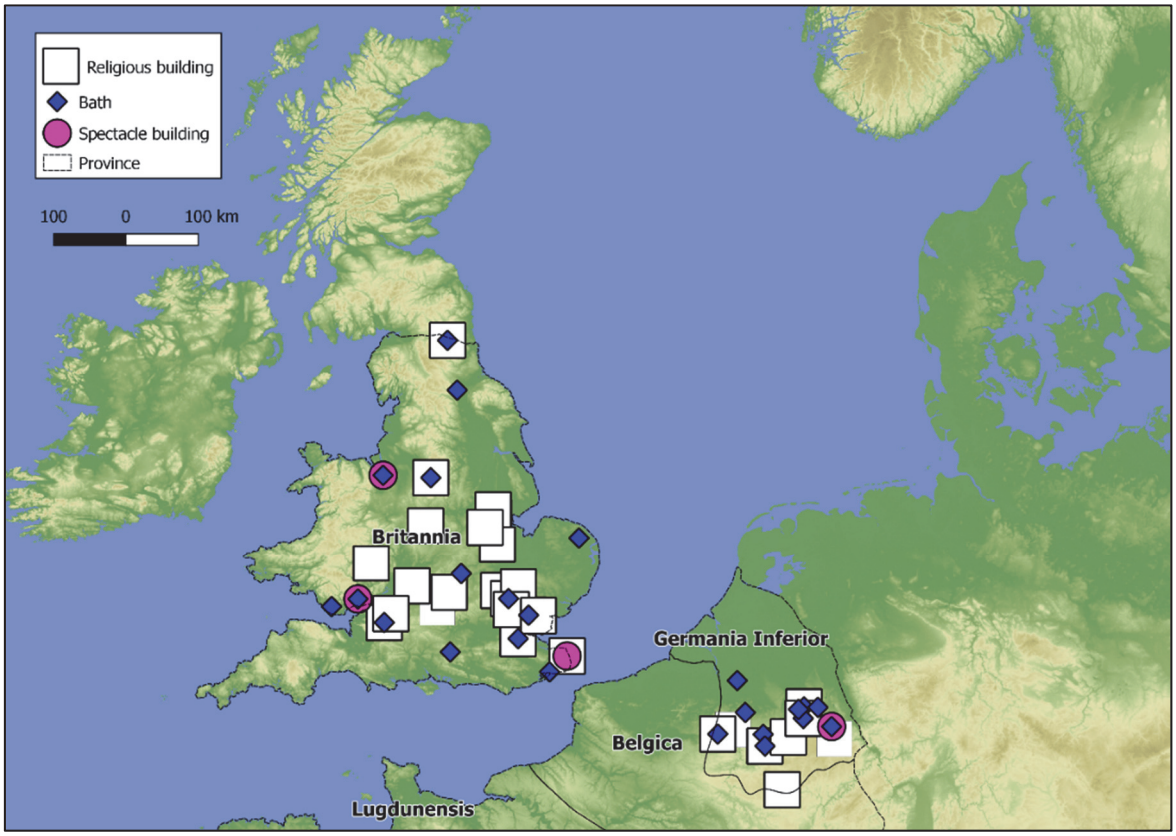

Figure 167: The monumentality of secondary settlements. Distribution of the ascertained i. religious buildings (temples and sanctuaries), ii. spectacle buildings, iii. baths.

In both provinces, however, the number of thermal complexes is particularly high. While it remains difficult to establish if - especially for Britain - these structures were public or more

likely belonged to *mansiones*, it is still of interests to observe how these facilities (so important for travellers) were so common along the main routes that crossed these provinces.

Overall, the number of public building within these two provinces was relatively low. A major factor was probably played by the different attitudes the elite had with regards to the rest of the population and the place they were living. This has probably its roots in pre-Roman times and could be explained either by the low level of centralization reached by the Iron Age communities living in these areas or (less likely) by a political fragmentation that was implemented by the Romans.

As we can see from the graph below, Britannia, unlike Gaul, was dominated by a single city: the capital Londinium. Compared to Gaul, a larger percentage of 'urban' settlements (96%) were middle-sized towns (10-60 ha) and only two cities could be considered as large (Corinium and Verulamium).

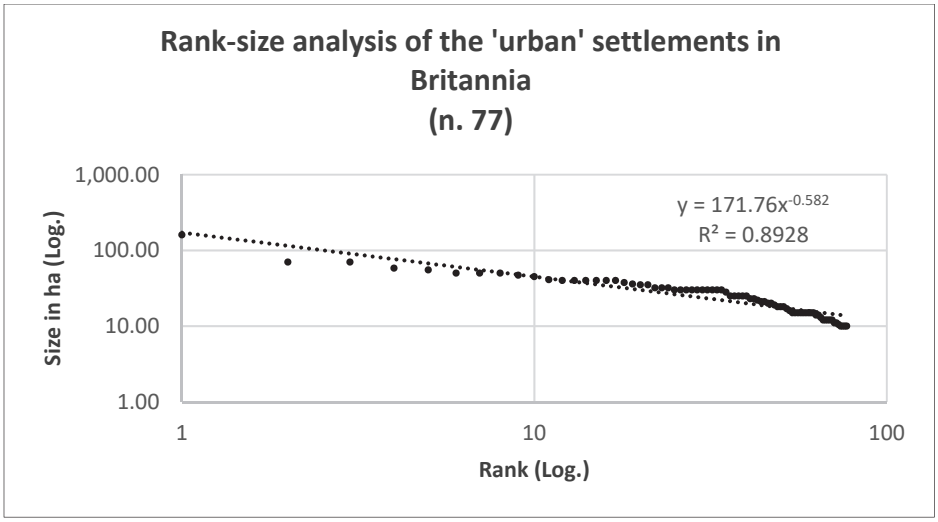

Figure 168: Rank-size analysis of the whole "urban" system of Britannia

Londinium remained unparalleled in the whole province in terms of size, and this is reflected in the map below, where the 'ideal' territory of London (in red) can be seen to extend over places unreached by other agglomerations (e.g. Cornwall, Wales, and the present-day Lake District) (Figure 169).[774] Apart from the undisputed supremacy of its capital, another point of interest is how relatively small the territories of the three veteran colonies (Colonia Glevum, Colonia Camulodunum, and Colonia Lindum) and - in general - the self-governing cities were, compared to those of the three legionary fortresses (Isca, Deva, Eburacum), the self-governing city of Viroconium, which had hosted the legionary fortress before it was moved to Deva, and the auxiliary fortress of Luguvalium. Overall, the provincial settlement hierarchy of Britain appears to be dominated by the provincial capital, legionary fortresses and other settlements with a deep military connection, leaving relatively little space for manoeuvre to the rest of the agglomerations.

[774] It should be kept in mind that the model in Figure 169 is an idealistic, impressionistic view of an unknown reality. More about the techique and its limitations in footnote 723.

Figure 169: The settlement system of Britannia analysed through a weighted Thiessen polygon analysis. Each polygon is defined by the distance between agglomerations and their size.