

VILLAS OF THE BRIGANTES AND PARISI: CRITERIA FOR SITE LOCATION

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of Continuing Education in Celtic Studies**

I certify that this dissertation is my own unaided work, and has been personally researched and written by me.

Signed:

Date:

Cover: Engraving of Hovingham Roman Villa, 1747, drawn by Charles Mitley, engraved by G. Vertue.

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Attached Disk containing:	
• Gazetteer of Villa Sites (Excel format)	
• Working spreadsheet, containing statistical test workings (Excel format)	
• Folder containing Visual Basic source code (some experience required to use, plus Visual Basic program)	

ABBREVIATIONS

Arch Ael	Archaeologia Aeliana
CPD	County Planning Department, Northallerton
BRIT	Britannia
ERAS	East Riding Archaeological Society
JRS	Journal Of Roman Studies
K-S Test	Kolmogorov-Smirnov Test
SMR	Sites and Monuments Record
TIR	Tabula Imperii Romani: Britannia Septentrionalis
YAJ	Yorkshire Archaeological Journal
YAS	Yorkshire Archaeological Society

Other Terminology;

Numbers after villa names (eg 1.3) refer to my own numbering system as in the Gazetteer of Villa Sites (see appendix 1 and disk).

Numbers after Roman road references refer to the numbering system of Margary (1955, 1957).

INTRODUCTION

Overall Objectives

The overall aims of this study were in two main parts;

- i) To record all villa sites in the North of England, specifically focusing on information relating to possible reasons for site locations. At the start of this research, it was not clear how much evidence or what patterns would be present. For this data gathering stage, I therefore collected wide-ranging information on every factor that might have influenced location, together with contextual information, it being easier to begin with too much information than have too little and have to repeat data collection. The span of this information can be seen in appendix 2 and appendix 3. The data itself is produced in Appendix 1 (list of villa sites, with references) and on the attached disk, which contains the Gazetteer of Villa Sites.
- ii) To analyse the aggregated data, possibly statistically, in order to establish patterns within sites to account for their distribution. This is purposely not an aim related to any one specific theory or test, as it was clear that trends would not become apparent until the first half of the study was complete.

Villa Definitions: Criteria For Inclusion Or Rejection

Just what qualifies as a villa has always been something of a problem, and one that will not be solved here. Without embarking on a survey of proposed schemes, none that I have seen seems completely satisfactory, particularly with regard to the North of England, where the level of sophistication in villas is somewhat less than elsewhere.

In the similar study conducted by staff & students from Birkbeck College (Green et al (1997)) on villa sites in the South-East of England, a scale for the amount of evidence for villas was established. I have used a broadly similar scale here to classify sites, which gives some background to analysis, and shows in general terms which sites are likely to be reliable, but does little to help establish what is a villa.

On that point, I have rather than follow a set definition used a list of indicative, non-indicative and contra-indicative features to help decide which sites to include.

Indicative features:

- ***Mosaic***
- ***Listing by other sources as villas***
- ***Obvious villa layout***
- ***Other Roman design features (apsidal building, bath suite, painted plaster etc)***
- ***Strong presence of high status Roman artefacts***

Non-Indicative features:

- ***Presence of coffins in vicinity***
- ***Presence of altars in vicinity***
- ***Rectilinear building***

Contra-Indicative features:

- ***Urban setting***
- ***Evidence for site function is clearly non-agricultural***
- ***Site lacks any evidence of high status Romanisation***

This is no 'hard and fast' list: common-sense must be applied. Where I feel that there is some doubt (possibly because of a lack of proper excavation) the site is generally included.

All sites which have at some point been identified as villas were initially included, but with further investigation it became clear that certain sites could be excluded. These exclusions generally occur where an early interpretation of a site as a villa is superseded by later re-evaluation, or where the evidence is simply too slim. There is a tendency in less Romanised regions for sites to be designated as villas with virtually no evidence. This leads to a problem of differing standards between areas. I have tried to list most major cases of exclusion in appendix 1, apart from sites listed by Eleanor Scott (Scott 1988), which are too numerous.

The non-indicative features are perhaps more tendentious. Coffins are seen by some as indicative of nearby villas, but this is difficult to substantiate. Branigan (1980) lists of sites where coffins have been found as potential villa sites, on the grounds that these sites are highly Romanised, rural, and non-military in nature. However, there are not a large number of villa sites in the North where coffins have been found, and I have not generally included sites with only coffins as evidence. Hood (6.5) is the only exception, as the coffin is inscribed, and has some corroboration in the form of accompanying cropmarks nearby.

Altars should surely be seen in a similar way: they may occur near villas, or they may not. Certainly they indicate a Romanised presence in an area, but it is beyond the limits of this study to establish what if any correlation exists.

The contra-indicative features are perhaps a less arguable and more reliable guide, but even here there is room for debate. It can be unclear where urban areas end (Baines Farm and Clementhorpe could be debated), and as stated earlier not every commentator would view evidence of high status as a villa criteria, particularly in the far North.

The Gazetteer Of Villa Sites

At the end of the data collection phase of this exercise, I was left with a corpus of 65 sites, which between them form the most complete and reliable list of Northern villas that has to my knowledge ever been assembled. A full listing with sources can be found in the gazetteer (Appendix 1 and disk).

This forms the first half of this project, and despite the few reference to it in this document, none of the work within it could have been done without it.

The following table shows how sites are grouped together by area (see “Analysis By Area” later), and gives a reliability rating for each group (average of ‘category’ scores for sites in group (see appendix 2: low numbers more reliable.)

Group	Number of Sites	Reliability	Comments
1	6	2.7	North Of Catterick.
2	7	2.4	Catterick to Aldboro'
3	1	1.0	Kirk Sink: Only 1 site, reliability figure little meaning
4	12	2.9	York and SW
5	7	3.4	Far South and West. A disparate group of questionable sites
6	9	2.6	North of Malton
7	7	2.6	Suburban Malton
8	5	2.4	Bridlington Hinterland
9	11	2.1	Brough Linear. Highest Reliability bar group 3
Total	65	2.6	

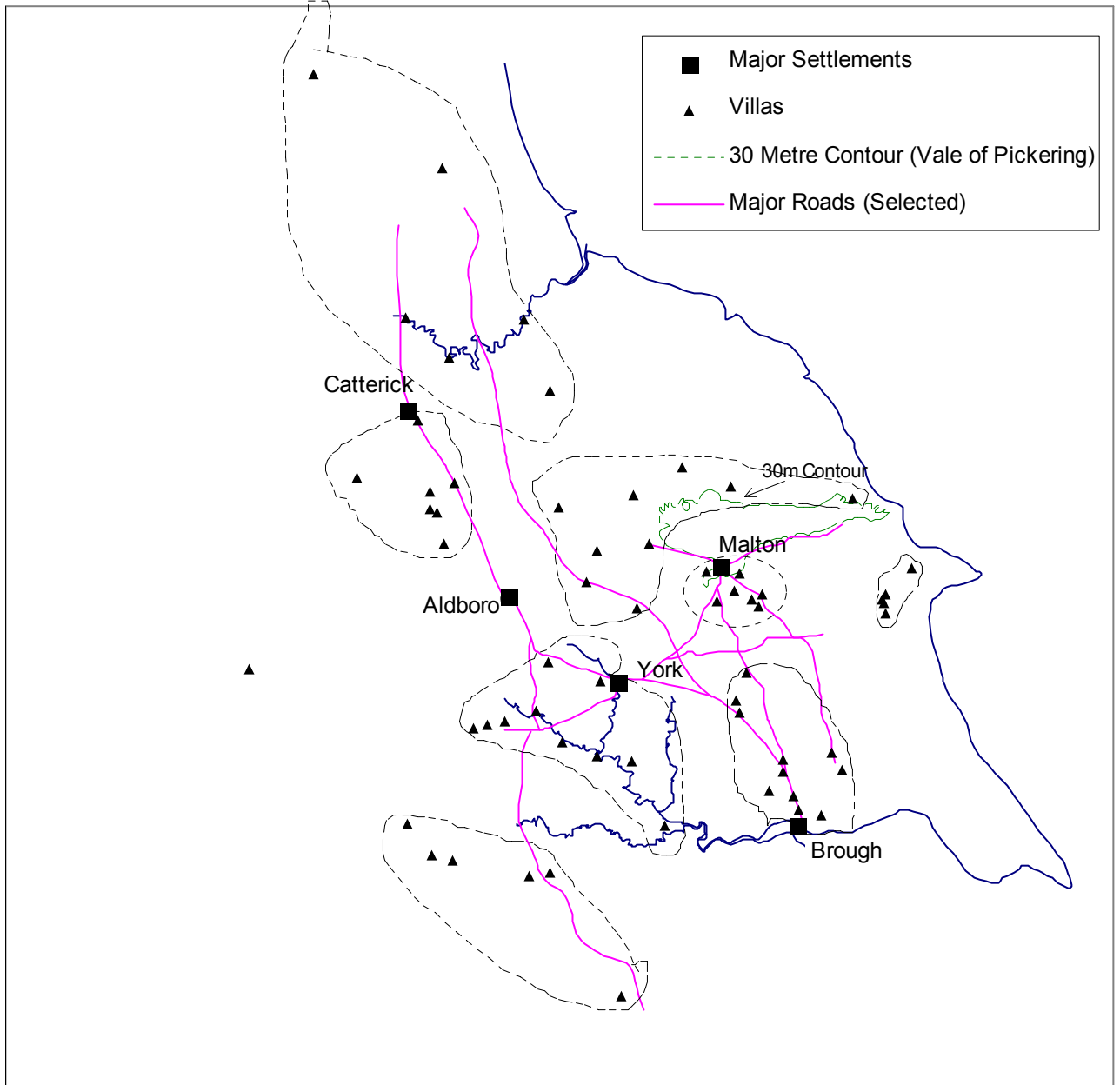
Data Sources

The amount of information readily available varies dramatically not just from site to site but also from area to area. Most well documented sites are either published individually, or within the Yorkshire Archaeological Journal. Where available, regional archaeological surveys can prove invaluable: notably West Yorkshire (Faull & Moorhouse (1981)) and East Yorkshire/Humberside (Loughlin & Miller (1979)) and Mary Kitson Clark's pioneering Gazetteer of 1935). Malton itself is also covered (Robinson (1978)), as is York (by a bewildering variety of publications, but particularly 'Eburacum'). North Yorkshire and South Yorkshire/Sheffield are sadly poorly covered, to my knowledge.

SMRs are another important regional information source, although here again the quality of information varies greatly from area to area. The other regional organisation whose records I used was of course the Yorkshire Archaeological Society, whose staff were most helpful. There are also a few more general sources that proved useful. TIR provides a useful database of Roman sites provided care is taken to examine the somewhat error-prone information, which is prone to errors that should have been spotted before publication, and Eleanor Scotts work (Scott (1988 or 1993)) is also most useful, with a similar proviso to that of TIR above.

Finally, information is increasingly available through the Internet. While this is in it's infancy as a research tool, the ADS site (<http://ads.ahds.ac.uk/catalogue/>) provides invaluable access to a number of dedicated archaeological databases, including the RCHME excavations index and an invaluable archive of the British And Irish Archaeological Bibliography.

Villas In The North Of England



ANALYSIS BY AREAS

For ease of recording, and for possible sub-area analysis, sites were divided into discrete area groups. In most cases, these groupings are easily distinguished on a map (see previous page), and many earlier researchers have attempted similar divisions (eg Eagles (1979) pg 196+). The aim of this section is to discuss the locational features of each grouping, and the justification for grouping the sites together as I have. Full references for each site are given in the List of Villa Sites (Appendix 1) and full details in the Gazetteer (on disk), so for reasons of space are given here only where especially relevant. Note that not all number sequences are complete, due to some sites being excluded from analysis as too weak..

1. Sites North Of Catterick

- 1.1 Old Durham (Shincliffe Bridge)
- 1.2 Holme House (Piercebridge)
(Manfield) (Cliffe)
- 1.3 Whorlton
- 1.4 Apperley Dene
- 1.5 Dalton On Tees
- 1.6 Ingleby Barwick

A loose group of sites with few common features. Sites in this region are very few, despite Clack's efforts (Clack (1982)). His suggestions of Escomb and Woodham as sites have not been taken up here, mainly as they do not appear to be more than marginally Romanized farmhouses. Apperley Dene looks more likely to be a military site, and Whorlton hardly has much evidence, but both are included on balance. Recent finds in Cleveland at Ingleby Barwick and Dalton On Tees seem to show more promise: there appear to be locational factors at work which differ from those in the rest of the Yorkshire: these sites are both situated on high ground immediately beside the river Tees, and this is shared to a lesser extent by Holme House. These 3 sites thus form a wholly new pattern for the North of England which seems to more parallel the promontory sites of the Manchester area than anything in Yorkshire. Additionally, while it does not appear to have been commented on previously, but the Dalton site bears a striking similarity of form to that at Beadlam: layout and orientation are very similar, with the main difference being that the middle range at Dalton stayed as a single open hall, while that at Beadlam was subdivided into smaller rooms, and gained mosaic floors. The difference may well be due to Beadlam being closer to Malton, and able to gain wealth from links with it, whereas Dalton is isolated, and its owners would have had no such opportunities.

I understand there is also another recently discovered possible villa site in Co. Durham, (pers comm. Co. Durham SMR) but no information is presently available on this.

2. Sites between Catterick and Aldborough

- 2.1 Middleham
- 2.2 Well
- 2.3 Langwith House
- 2.4 Gatenby (Gate) (Theakston Grange)
- 2.5 Snape (Thorpe)
- 2.6 Bainesse (Farm) (Catterick)
- 2.7 Castle Dikes/Dykes/-Dykes(North Stanley)

With hindsight, this should perhaps have been called sites between Ripon and Bedale, because Dere Street itself has only two possible villas, Bainesse and Gatenby, and both of these are in some respect dubious, Bainesse as it could be seen as almost suburban, and Gatenby as it appears from antiquarian description (limited as it is) to be somewhat odd for a villa: the suggestion of a roadside shrine or temple may be closer to the mark (pers. comm. Linda Smith, NY SMR.)

Certainly we have a consistent (if ill-documented) series of sites stretching North of Ripon, and need to look for some reason for this. Hartley & Fitts (1988 pg 72, fig 21) imply that the villas are sited on magnesian limestone, thus giving an agricultural imperative, but this is not convincing, as few sites actually lie on the limestone.

As for form and siting, this region is erratic and highly unusual. Well, Castle Dikes and Snape, the three sites with the best evidence, are respectively built partly in a waterlogged valley (with possible religious usage), built on a North facing slope by a swamp (and on potentially a different scale than any other Northern villa), and in a style which according to Branigan (1980) has only continental exemplars, while Langwith House (if villa it is) is on the edge of a mire. Anywhere else, it would very tempting to discard, but given the waterside position of Well & Castle Dykes, it is impossible to be sure without further investigation.

3. Mid Pennines

3.1 Kirk Sink (Gargrave)

While Kirk Sink is isolated, it bears comparison with sites like Langton in terms of the ditch system around it and the quality of the villa, but is quite different from most sites in terms of its position. It is unusually situated on the floor of a valley, despite the existence of fairly flat ground slightly higher up and off the flood plain immediately to the South.

In my view, there is a striking similarity to the siting of the fort at Ribchester. It has been frequently remarked that as a veterans settlement we might expect to find villas in the vicinity of Ribchester, but none have ever been located: Perhaps Kirk Sink could be one such. The distance between the two appears great, but they are linked by Roman Road 72a (Kirk Sink falls about 3km North, on the connected 722.), the main cross-Pennine route from Ribchester. While the two sites are on opposite sides of the Pennines, both are in the area known as Craven, a territorial division of probable Celtic origin which could well have existed as a sub-tribal area of the Brigantes in the Romano-British period.

Villas of the Brigantes and Parisii: Criteria for Site Location

If this (extremely tentative) linkage is correct, it may be that other villas lie between Ribchester and Gargrave.

4. York Vicinity

- 4.1 Cave Road
- 4.2 [3km W. of Dalton Parlours]
(Bardsey/Rigton?)
- 4.3 Newton Kyme (Moat House)
- 4.4 Kirkby Wharfe (Ladyflats) (North Milford)
- 4.5 Cawood
- 4.6 Drax (Scurff Hall Farm)
- 4.7 Dalton Parlours (=Collingham)
(=Compton)
- 4.8 Acomb
- 4.9 Clementhorpe (York)
- 4.11 Biggin/Harewood
- 4.12 Wilstrop Hall
- 4.14 Riccall

There are a larger number of villas in this group than might have been expected, but it is interesting that they do not extend uniformly in all directions around York, but on the whole in a broad arc to the South West (although as always there are exceptions). This may be mirroring the civilian settlement at York, which was to the South West, but it may simply indicate that this pattern of villas is not centred on York itself, a possibility that recurs later in this work.

One potentially important sequence within this grouping is formed by villas along the banks of the Ouse and Wharfe, at what almost seem to be regular intervals: Newton Kyme, Kirkby Wharfe, Cawood, Riccall and Drax. The intervals are quite large, and I find it hard to believe that it could be a matter of deliberate ‘parcelling’ of land into large estates, although that may be possible (a recently discovered case in Kent was along a river (British Archaeology 53, June 2000, pg 7.)

It may be more likely that there were regular landing sites along the river which proved lucrative locations (certainly the Riccall villa site is linked by a straight path to ‘Riccall Landing’, which is suggestive.) Transport up these rivers is discussed again later.

5. Far South/South-West

- 5.1 Bingley (Gawthorpe)
- 5.2 Birstall (Batley) (Gomersal)
- 5.3 Wakefield (Snapethorpe Hall)
(Alverthorpe with Thornes)
(near Ossett) (Lupset)
- 5.6 Stancil(l) (near Tickhill)
- 5.7 Conisborough (near)
- 5.8 Ackworth (Low Ackworth)
- 5.9 Darrington

This acts as something of a catch-all category. As such, it would be inappropriate to analyse these villas as a group. It is also debatable whether far Southern sites should be included within this exercise at all, as they may not even be Brigantian in nature.

Additionally the villas in this group are rather sparse, and in many cases poorly evidenced. There are only about four in South Yorkshire, and little evidence is available for them as a group. Likewise, the 3 West Yorkshire villas are poorly evidenced, and their positions are hard to establish with any certainty.

6. Rural Sites North Of Malton

- 6.1 Beadlam
- 6.2 Oulston(Burton House Farm) (=Pond Head (Farm)) (=Yearsley)
- 6.3 Hovingham
- 6.4 Crayke
- 6.5 Hood (Hood Grange) (Sutton-Under-Whitestone Cliff)
- 6.6 Crossgates, Scarborough (Seamer)
- 6.7 Spaunton/Hutton Le Hole
- 6.8 Blansby Park (Pickering)
- 6.9 West Lilling

This group of sites, while widespread, is clearly distinct from the close-knit group next to Malton. It is a diverse group of sites, but in general all sites are likely to serve Malton rather than any other centre, thus I think the grouping is justified.

The possible exception is Hood, which is isolated from the other sites by a cliff line which would have made transport of grain to Malton very tricky. It lies in a different river basin (the Foss) which would also weigh against any Malton links, and lean towards a link with perhaps Aldborough or York instead. Most of the other sites seem to form a pattern stretching around the edges of the Vale of Pickering, all ideally placed to serve Malton. In order clockwise these are Hovingham, Beadlam, Spaunton/Hutton le Hole, Blansby Park and finally Cross Gates/Seamer.

7. Suburban Malton

- 7.1 Musley (Bank)/Rowborough
(=Mosley Bank) (=Roughborough)
(=Huttons Ambo)
- 7.3 Settrington (b)(=Brough Hill)
- 7.4 Langton(East Farm, Middle Farm & Whin Hill/Dale Bottom)
- 7.5 Burythorpe(=Kennythorpe?) (Fox Covert)
- 7.7 Wharram Le Street
- 7.8 Wharram Grange
- 7.9 Wharram Percy(North Manor)

This group of sites is tightly clustered and relatively distinct from group 6 above, which is puzzling as it might well have been expected that the presence of a roman road linking the two would have heralded

more villas between Hovingham and Malton. In terms of height, and sophistication there is a much stronger link with group (8), indeed as both lie on the Wolds it may have been appropriate to join the two together as one larger group. Given their position, there seems little doubt that these villas gained their wealth serving Malton.

As it stands, this group only contains 7 sites, but given the small area they cover, the density is very high. Given that this area, and especially Wharram, appears to have been covered by archaeologists in some depth, we must surely be approaching maximal knowledge of villas. The only other site in the Wharram area (quite a large area) which looks to have villa potential is Cowardy Hill (Hayfield (1987) pp 173-5): there is no evidence of villa buildings, but the field walking finds show a high proportion of high status roman amphora, Samian ware and tegulae.

8 Bridlington and Surrounding Area

- 8.1 Grindale (=Grindall)
- 8.2 Rudston
- 8.4 Harpham
- 8.9 Kilham (N. of Tuft Hill)
- 8.10 Tuft(s) Hill

This grouping might with hindsight be better described as Rudston, rather than Bridlington centred. There is a very tight cluster of villas in that area, although evidence is in many cases quite poor. For that reason, these are not a particularly interesting group (which is not to say that individual sites aren't interesting), and few trends are apparent.

9 Brough Linear

- 9.1 Sangton
- 9.2 Bishop(s) Burton (=South Burton)
- 9.3 North Newbald
- 9.5 North Cave (=Dryham)
- 9.6 South Cave
- 9.7 Brantingham (Cockle Pits)
- 9.8 Welton (Wold)
- 9.9 Millington
- 9.11 Fishpond Wood, Risby (Rowley)
- 9.12 Hayton
- 9.13 Pocklington

With 11 sites, this is quite a large group, and has a clearer distribution than most. There is a clear linear patterning along the Brough-York Road (2e), characterised by sites sandwiched between the foot of the Wolds and the marshy ground to the South and West. If we split that road in half along its length, it is noticeable that almost all the villas are closer to Brough than to York.

Of the villas that don't follow this road, we have 3 to the East (2 following another road to Malton), and Millington to the North. Millington may be a temple rather than a villa, if accounts of a circular building are accurate.

The North-West

When this research project was started, it was intended to cover the whole of the north of England, although I was not aware of any villas in the North West at that time. Having investigated all possible reports, I am still not aware of any villas North of Cheshire, which was on reflection decided to be too far South and too disconnected for inclusion.

To summarise briefly (as these sites are not included in Appendix 1, references are given), there is no real sign of villa building in Lancashire and Cumbria (even in the apparently prosperous Eden valley): the supposed site on Belle Isle in Windermere (Scott (1988) pg 65) seems dubious to say the least: although there was certainly some Roman military activity in the lakes, it is not easy to see how a site on an island could have a serious agricultural basis. There may perhaps be hopes of villas near Ribchester.

Likewise, no villas are known in the Manchester area. What sites there are seem to be simple subrectangular structures, often in promontory positions. The only two sites which remain as possible villa sites are associated with Castlefield Roman fort in Manchester. A small piece of mosaic was found at Albert Park in Salford (Scott (1988) pg 126: the find may be in the Manchester Collection, owned by Manchester City Council, but the collection is in storage and given staff apathy I was unable to progress further). This is a slight promontory site, adjacent to a river, and it is just possible that it may be hiding higher status buildings.

EXISTING THEORIES ON VILLA LOCATION

ECONOMIC AND SOCIAL FOCII

Keith Branigan (Branigan (1980, pg 20)) includes as one of his main determinants of villa location “the provision of an accessible *economic and social focus* (which usually means a town.)” The other determinants he proposes are the means and desire to build villas, which are perhaps harder to quantify. In combining all 3 factors, he seems to consider York, Catterick, Aldborough, Brough, Malton and Bridlington as possible centres. The cases for the first 5 of these will be considered here: Bridlington is quite conjectural as a centre, and its coastal position makes it difficult to work with under the sort of analysis I am conducting. This does not invalidate the analysis of other centres, as they are being mainly analysed separately, not comparatively. In the analysis that follows, while some statistics are used, it is important to use common sense in the interpretation of results: archaeological data is never perfect, and can at best point us in the right direction.

Expected Distributions

In order to examine how strong the case is for each centre, I have measured (by spreadsheet, using map reference data in the Gazetteer) the distance between these centres and villas, to a 30km radius around each centre, which would seem to be a large enough distance to cover the limits of any economic or social effect.

On the following page is a bar chart of the expected pattern around any centre: it shows that the number of villas in each 3km band outwards should increase. This assumes a uniform plain, and uniform villa distribution: it thus forms the null hypothesis for most of what follows.

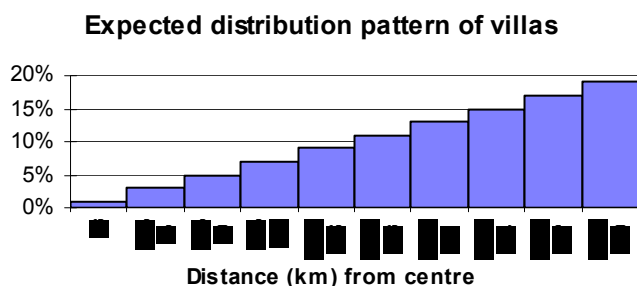
By simple area calculations, the percent of villas within a ring of n to $n+3$ km (percent of the total within 30km) will always (under the assumptions above) be equal to $(\frac{2}{3}n + 1) \%$;

(Explanation: area within 30km = $\pi \times 30^2$

area within ring n to $n+3$ km = $\pi \times (n+3)^2 - \pi \times (n^2)$

Taking the second term as a percentage of the first, we get after simplification $(\frac{2}{3}n + 1) \%$. As with a uniform distribution we expect villa numbers in proportion to area, it follows that this is the equation for expected percentage.)

Perhaps counter-intuitively, the percentage expected increases ring by ring in linear fashion. It should be noted that this shows only the expected *distribution*: the actual numbers cannot be predicted by this method.



As a very low proportion of villas should be close to the centre, so even relatively small numbers appearing can actually be ‘bucking the trend’. Graphs have been made to visually show patterns of villas relative to centres, which can be compared to the idealised model above, but it was felt desirable to also try more scientific approaches.

The Kolmogorov-Smirnov Test: Testing the Patterns

While the graphs (which follow after these descriptions) do give some indication of patterns, numbers of villas are low, and it was not clear whether patterns were truly significant or not. As such it was necessary to find a way of testing significance. For some sites, Chi-squared tests were attempted, but for most centres villa numbers were too low to give required sample sizes. So the Kolmogorov-Smirnov (henceforth K-S) test, which copes well with small sample, was used. This is a relatively common and simple statistical test (see for example Fletcher & Lock (1991) chapter 9.)

This test was not used to find whether the number of villas close to each urban centre was significant, but whether the *distribution* of the villas (in terms of distance away from the centre) was significantly different from the expected (uniform) distribution (ie, whether the urban centre was exerting an effect, positively or negatively.) As there was some doubt as to the distance over which centres could exert an effect, the test was repeated over 20km and 30km radii for each centre.

This was done by working out the cumulative percentage curve for each urban centre. At 0km from the centre, there will be 0% of villas. As the radius around the centre increases gradually the percentage of villas within the radius will increase, reaching 100% at 20km/30km (We are measuring the number of villas as a percentage of those within 20km/30km, so it will always reach exactly 100%.) The way in which this percentage changes with distance will vary from centre to centre, creating a unique profile for each. These profiles can then be measured using the K-S test against a standard cumulative percentage line, which represents the expectation that villas will be randomly distributed. The *expected* percentage

of villas within radius n km as a proportion of those in area t (where t=20km or 30km) will always be equal to $100 \times (n^2 / t^2)\%$. Assumptions here are as listed on page 16.

The only approximation used within these tests was that villa distances from centres, originally calculated precisely, were placed in 1km bands. It is not likely that any further precision would at all improve the accuracy of results, and it would have been considerably more complex to achieve.

The overall results were as follows;

	20km			30km		
	max diff	no. villas	significance	max diff	no. villas	significance
Catterick	24%	8	no	33%	11	no*
Aldborough	42%	6	no	19%	19	no
Brough	45.3%	8	10%*	41.7%	12	5%*
York	25%	9	no	12%	24	no
Malton	33.3%	12	no*	22%	21	no

*marginally misses the next level of significance.

Max diff: the maximum difference between the expected and actual percentage of villas that occurs in any radius of circle up to 20km/30km.

No. villas: the total number of villas within 20km/30km.

Significance: If no, the test records no significant difference between the expected and actual curves (ie the null hypothesis of uniform villa distribution cannot be disproved.)

If a percentage, the villas are not uniformly distributed around the centre, with a probability of 100 minus the value shown. Eg Within a 20km ring at Brough, there is a 90% probability that villas are not randomly distributed with respect to distance from Brough.

These results contain several points of interest, which will be discussed area by area following the outline of the Chi Squared test below.

Number Of Villas: The Chi Squared Test

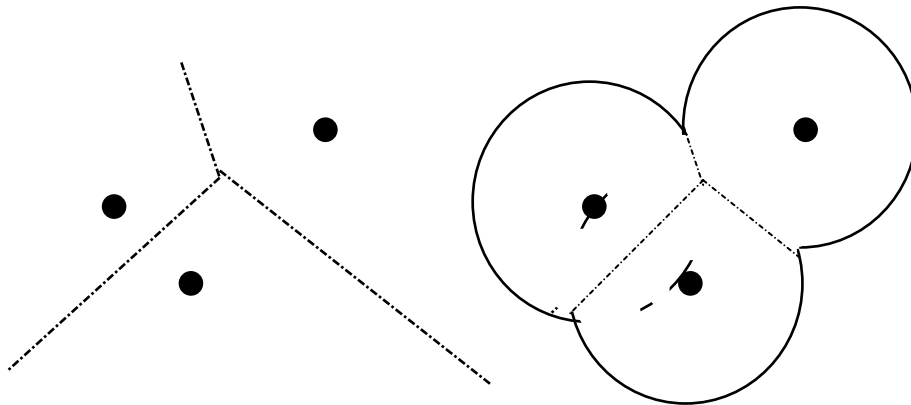
While looking at graphs and the Kolmogorov-Smirnov test may provide evidence for distribution patterns, it tells us nothing about the actual number of villas close to each centre. To try and measure this, a computer program was written in Visual Basic (see disc: some programming knowledge will be required) to assess the relative “market areas” of each of 5 centres.

It was assumed that;

- there was a limit to the size of a hinterland: 20km and 30km were used as alternative models (as before).
- where an area would fall within the hinterland of 2 centres by this analysis, it would be taken as falling within the hinterland of the closet centre.
- the line of the Humber at Brough would form a natural Southern boundary for the analysis.

This produces an area around each centre similar in shape to Thiessen polygons, with the exception that such polygons assume all areas will attach to one group or another (diagram, left), whereas as I have limited the hinterlands in size (diagram, right). This is a technique similar to that of limits of market areas in central place theory (see for example Bradford & Kent (1977) chapter 1). Note that these areas are not recorded on paper, they exist only in the computer program, for the purpose of this exercise, so are not drawn here.

Examples of Thiessen Polygons (left), and central places with hinterland limit (right)



The program then assessed the area accruing to each centre, and I then expressed this as a percentage of the total area attached to all 5 centres combined: these percentages were then multiplied up by the total number of villas in the areas concerned (39 or 49 at 20km or 30km) to produce *expected* numbers of villas within the hinterland of each centres, which could be compared with the *actual* numbers found.

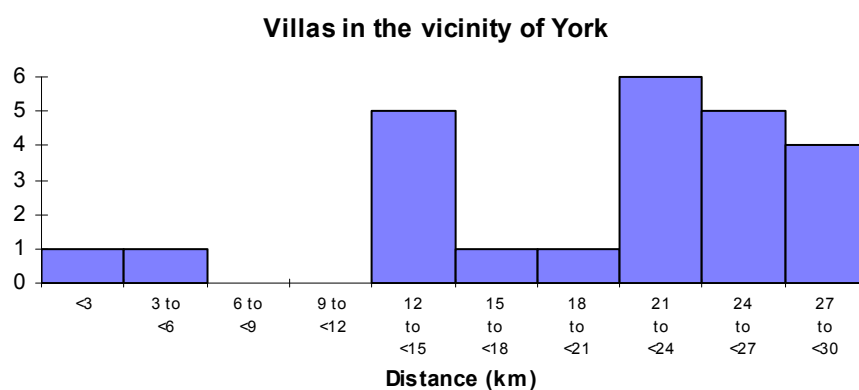
It was found that the expected values were high enough for a Chi-Squared statistical test to be carried out (the Chi Squared test is probably the best known such test (see Fletcher & Lock (1991) pp. 116-118 for a simple description)), and when this was done, it was found that the differences between actual and expected numbers of villas differed by a statistically significant amount. At 20km, this was significant at the 10% level (ie 90% certain), with a 30km range it was significant at the 2.5% level (ie 97.5% certain.)

The actual and expected numbers were as follows;

	number within a set radius of;			
	20km		30km	
	actual:	expected:	actual:	expected:
York	8	7.5	11	8.6
Brough	8	3.9	9	4.3
Aldborough	4	8.3	6	10.1
Malton	11	9.1	14	11.2
Catterick	8	10.2	9	14.8

It can be seen that while York, Brough and Malton have more villas than expected, Aldborough and Catterick have less. To restate the position, these differences are shown by the Chi Squared test to be more than just random variation. These trends will be discussed area by area below, together with results of the K-S test.

Analysis By Centre

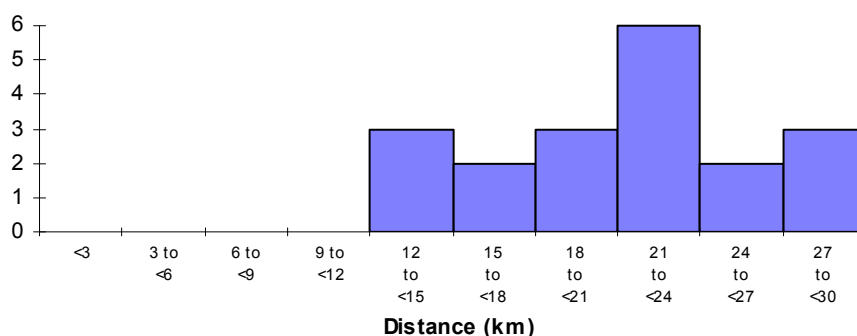


While York does not fit exactly to a linear relationship, numbers do increase with distance as expected of a random fit, and the lack of significance in the K-S test confirms this. But at the same time, there are more villas within both a 20km and 30km radius of York than chance would suggest, by the Chi Squared test.

So, while there is a lot of activity in the area, villas aren't being drawn to York itself. There may be a number of factors why this arises, most notably that York had a thriving civilian community of its own, on the South bank of the Ouse, and landowners close by York may have preferred life there rather than building a villa. This concept is certainly applied to other urban centres (xxx). Further out, areas would still be prosperous because of the presence of York, and villas would be numerous. This is the pattern that we seem to see.

Alternatively, it may be that different factors are at work here which make York somewhat unusual. We know that many villas around York are situated on the Ouse and Wharfe, seemingly well spaced along its length, rather than more frequent close to York. It seems certain that goods were being shipped up the Ouse, possibly via trans-shipment at Brough. This being the case, trade between Brough and York by river would potentially be constant along that distance, not biased to one end. Hence, while the trade would mean larger numbers of villas would be expected, they would not need to be centred on York itself. This theory also fits the results of the statistical tests.

Villas in the vicinity of Aldborough

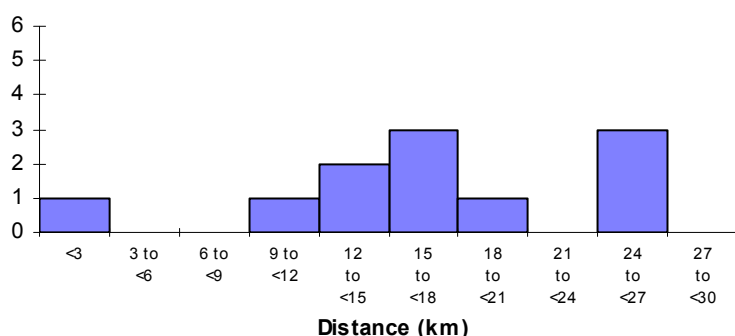


Aldborough shows a startling lack of villas in close proximity, followed by what appears a more uniform distribution further out. At all distances, though, actual numbers are far lower than would be expected, indeed dramatically so at roughly half the number expected. Given this lack of numbers, it is no surprise that the K-S test shows no significance: the test would require very strong evidence to draw a conclusion from such small numbers.

Branigan (1980 pg 21) suggests that in the cases of both Aldborough and York, a lack of villas close by may suggest that nearby lands were farmed by the towns themselves. This may be the case, and may explain the distribution pattern, but cannot explain the lack of villas in absolute terms, which is not seen at York.

Perhaps it would be more true to note that whereas York is a military centre, with constant demand for goods (and thus the facilities for the build up of villa life), Aldborough is a civitas centre with little military demand. Without such demand, and sitting as it does on the very edge of the Romanized world, it would perhaps have been difficult for local landowners to achieve the sort of profitability needed for a villa, and for similar reasons, the area would have been an unattractive one for Roman citizens to settle, especially merchants who could see better sites near Brough or on the Humber river system.

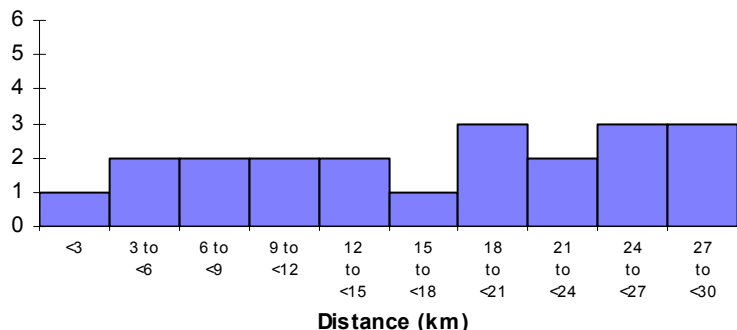
Villas in the vicinity of Catterick



Like Aldborough, Catterick shows little activity in terms of total villa numbers, less than chance would suggest. This is perhaps less unexpected, as it is a relatively small settlement, and relatively Northerly. The results under the Chi Squared test are interesting, however, in that numbers within a 20km radius are closer to expectations than those within a 30km radius. It can be seen visually on the graph above that the number of villas in the 21-30km range drops off just when by chance it should be increasing.

Interpreting these results is difficult: the presence of Baines Farm villa alone would indicate that Catterick had an effect, but that effect seems to stop abruptly around 20km distance. Beyond that statement, I do not think that at present anything meaningful can be said.

Villas in the vicinity of Malton

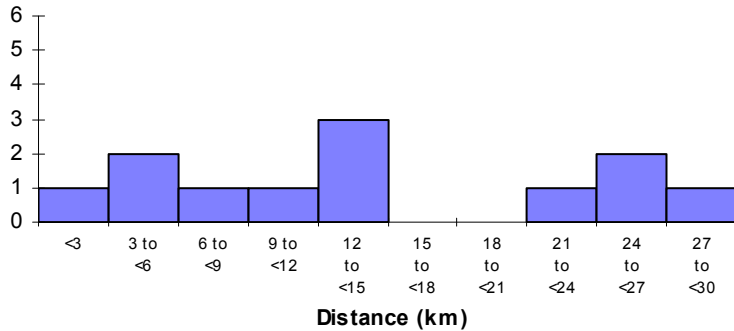


Malton shows a far more promising distribution: there are relatively large numbers of villas in the area in total (21), with far more than chance would suggest, with a strong bias (compared to expectations) to villas close to the centre. Frustratingly, in the K-S test we are a fraction of a percentage short of being able to show statistical significance.

However, there are enough villas present that it proved possible to do an additional test for statistical significance (note that the failure of one test to show significance does not indicate a lack of significance, so conducting a second, different test is quite acceptable). To obtain large enough sample sizes to test, sites were grouped into 0 to 15km, 15 to 24km and 24 to 30km bands. With these groupings a Chi-Squared test was conducted against the expected graph shown earlier, scaled to match the same overall villa numbers. This showed a significance at the 5% level, (ie there is a greater than 95% chance that the distribution of villas with respect to distance from Malton is not uniform) and this would support the hypothesis that Malton had an economic effect.

This then is the first site where it can be conclusively shown both that the number of sites is higher than expectations, and that the spread of sites is not by chance, but biased towards the centre.

Villas in the vicinity of Brough



There are few known villas close to Brough. However, the few villas there are yield dramatic results. First, the number of villas in the area is far more than expected, giving Brough and the surrounding area the highest density around any centre.

Additionally, this is the only centre for which the K-S test gives significant results, both at 20km and 30km. This shows that villas want to be as close to Brough as possible (the graph above is visibly different from other centres, in having most villas under 15km. This contrasts with the situation at York where the high villa density does not increase closer in.

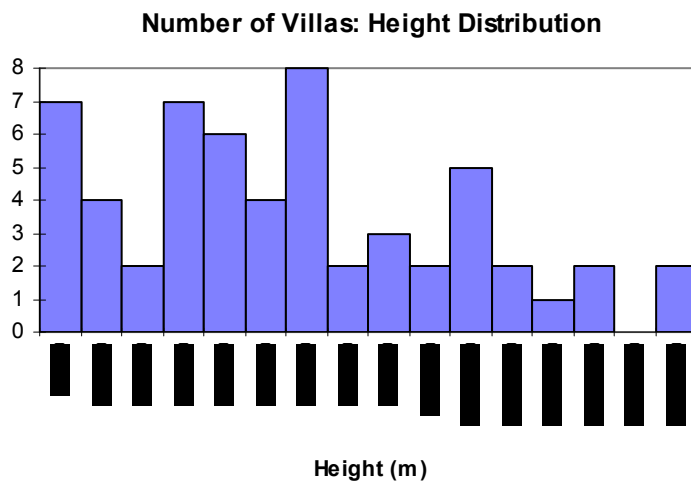
It is hard to see that the economic impetus for this could be Brough itself: accounts vary, but it is not as large as York or probably Malton. Equally, it cannot be that villas were servicing York and surrounding areas via trans-shipment at Brough: this would surely make little sense, when they were mostly situated on the road to York anyway. And had road transport to York been desired, more villas could be expected at the York end of the road.

Perhaps the answer is that whatever agricultural produce was coming out of these villas was being exported from Brough, either far North for military reasons, or abroad. Certainly, ships bringing goods in to Brough would have wanted some profitable cargo to carry back out again.

HEIGHT

The concept that villa location might be partially determined by height was raised by P.R.Scott (1973, pp 186-7), whose theory that villa sites are clustered strongly between 150ft to 250 ft (45 to 76 metres approximately) gained some credence by his discovery of a new possible site at Kannythorpe around the 200ft contour.

The graph below shows the distribution across Yorkshire. It can be seen that there is no clear height which dominates in the way Scott suggested. Only 15 of the 57 sites with height data fall within the band he proposed, and thus his hypothesis must be rejected. It is hard to perceive any universal trends, other than to say that the 70m line seems to form the level above which the number of villas declines. It must be suspected, however, that this is simply a matter of geography rather than any siting decisions.



Given that no real universal pattern is apparent, I looked for more localised trends. The individual area groups had frequencies as follows;

Group	Height (M)															
	0 - <10	10 - <20	20 - <30	30 - <40	40 - <50	50 - <60	60 - <70	70 - <80	80 - <90	90 - <100	100 - <110	110 - <120	120 - <130	130 - <140	140 - <150	150 - <160
1	0	0	0	0	0	1	1	0	0	0	1	0	1	0	0	0
2	0	0	0	0	2	1	0	1	0	0	1	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
4	4	3	0	0	0	0	0	0	2	0	1	0	0	0	0	0
5	1	0	0	1	0	0	1	1	0	1	0	1	0	0	0	0
6	0	0	0	2	0	1	1	0	0	1	1	0	0	1	0	0
7	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	2
8	1	0	0	1	2	0	2	0	1	0	0	0	0	0	0	0
9	1	1	2	1	2	1	1	0	0	0	0	1	0	0	0	0

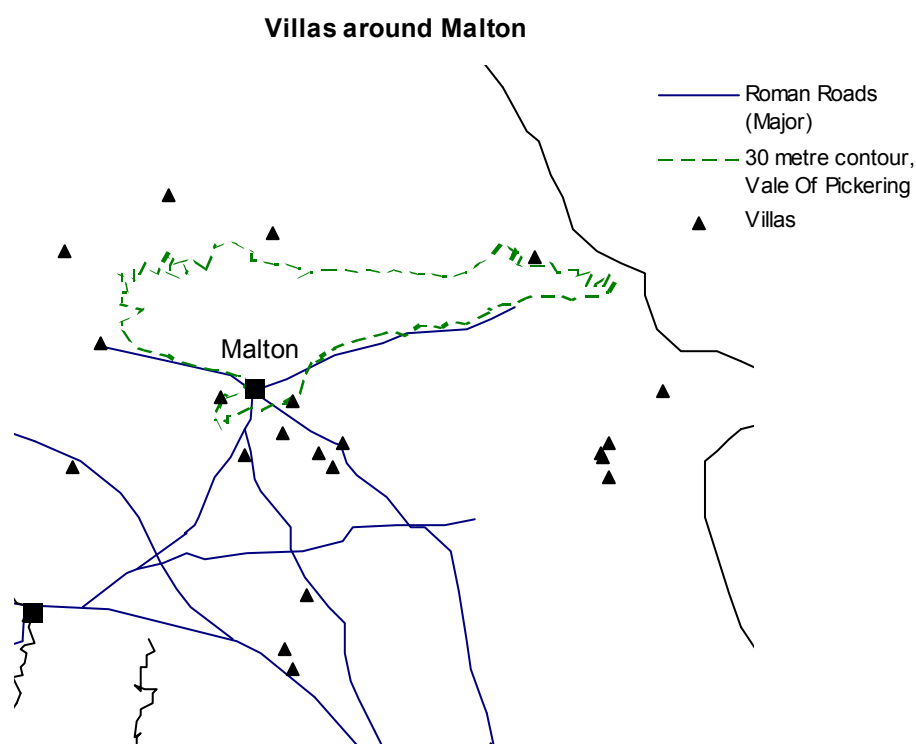
Only group 8 (Bridlington Hinterland) and possibly group 2 (Catterick-Aldborough) does Scott's pattern have the possibility of holding, and in the latter case there is little in the way of height gradation in the landscape, so it is to some extent inevitable. Strikingly, around York, the vast majority of sites are almost

at sea level, again because of topology, although the preference for riverine sites in the area obviously carries with it a corollary low heights.

Group 5 (Brough Linear) is also biased towards lower heights, and here the pattern is not solely due to topology; adjacent high ground was available on the Wolds, but for some reason was not used. It must be wondered why this occurs when further North, still in the Wolds, high ground is used (at Langton for example.) It would perhaps seem that finding flat land was a most important factor than elevation.

Other groupings do not appear to have clear height patterns, at least with the level of data available. One trend that crosses groupings, and is illustrated in the map below, is that despite activity in all surrounding areas, the Vale of Pickering has no villas. The plotted 30m line appears to be the limit of activity, even to the extent that Roman roads keep predominantly to this contour line or above.

Given that there was activity in the Vale in earlier periods, and given that villas in the Vale of York are in far lower and (one would have thought) waterlogged positions, it is hard to see why this should be the case. It is of course possible that soil conditions have led to a lack of survival of lower lying roman sites, but again this seems dubious. There is not a complete absence of finds in the area (as the Clark (1935) map shows, for example), just an absence of villas and roads.

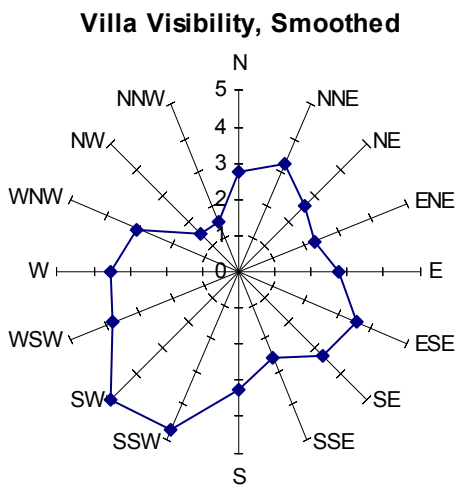
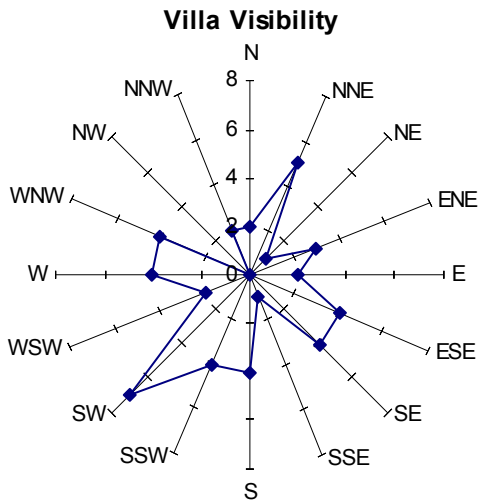


VILLA ORIENTATION

Direction Of Maximum Visibility

There seem to be two ways of assessing orientation. First, it is possible to look at the direction which provides the best (ie furthest) view. View direction could either reflect aesthetic, religious or possibly military objectives.

For this exercise, no precise method of assessing directions of maximum visibility were available, so there is inevitably a certain amount of human error involved. Where an arc of very high visibility applies, the centre point of the arc has been taken. In some cases, visibility extends over virtually 360 degrees: these sites have not been included. Directions were divided down into 16 compass points, which were then plotted with and without rounding, with results as follows;



Smoothing is achieved by calculating a weighted average of each point and its two neighbours, with the central point giving a weighting twice either of the surrounding points.

The smoothed graph is probably to be preferred, as less vulnerable to human error. Neither graph shows any particularly clear trend: unsurprisingly, there is a marked shortage of sites with a Northern aspect.

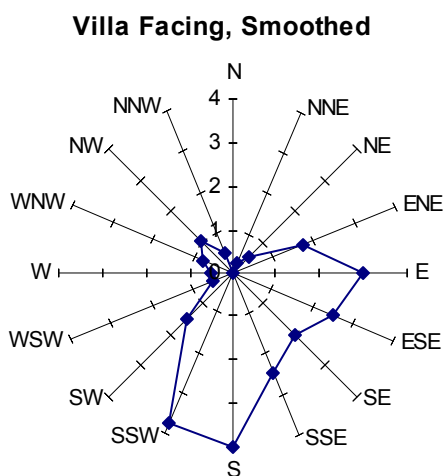
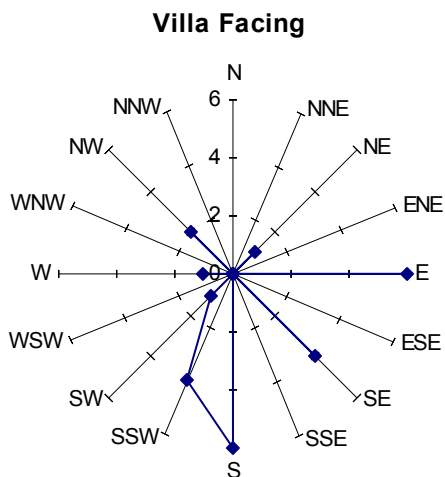
The most surprising feature is perhaps the peak of 5 villas facing NNE. On examination of raw data in Villas of the Brigantes and Parisii: Criteria for Site Location

the gazetteer spreadsheet, it becomes clear that these sites are predominantly Northern: Whorlton, Dalton on Tees, Ingleby Barwick, Rudston, and (more Southerly) Dalton Parlours. I commented earlier on the similarity of Dalton on Tees and Ingleby Barwick in locational terms, and this may be a consequence of similar siting decisions. It does seem counter-intuitive that Northerly sites should be more likely to face in a NNE direction: with only 5 sites, more evidence is needed.

Direction By Building Orientation

Villa Facing was measured in the main by assessing the orientation of the main entrance to the main villa building. Some interpretation of sites is needed to ascertain facings, and assess which is the main building range, and in some cases evidence is slender, but the task is far easier and more verifiable than the visibility analysis above. Not every site is amenable to this sort of analysis, so the sample population is only 25 sites.

Results were graphed as per the visibility analysis above, as follows;



Smoothing is achieved by calculating a weighted average of each point and its two neighbours, with the central point giving a weighting twice either of the surrounding points.

The results here seem clear-cut, and while the finding of a strong Southern bias is not in itself a surprise, it does seem odd that this should be biased slightly towards SSW, when a more Eastern bias would catch more sun. It would be tempting to write this off as a statistical freak, not unexpected with a small sample size, were it not for the fact that 3 of the 4 SSE sites are closely clustered: Langton, Wharram Grange and Villas of the Brigantes and Parisii: Criteria for Site Location

Settrington (b). It would be interesting to know whether this positioning is mirrored by lower status farmsteads of the period in the same area, but I am not aware of any such analysis.

The strong showing for directly East-facing villas is presumably a sunrise orientation, and thus to be expected. As with SSE facers, though, there is a regional bias in that 4 of the 5 East facers are Brigantian, and Northern: Old Durham, Ingleby Barwick, Middleham and Well. Why this should be is again not clear.

ROAD/RIVER LINKS

One of the original concepts of this research was to consider the relationship of each site to the nearest river and Roman road, in an attempt to establish regional trend in siting. It was hoped to do this statistically, but there were considerable problems assembling consistent data (as detailed in Appendix 2). As such, I considered that it would have been irresponsible to carry out a statistical analysis. Perhaps at some future time with more reliable data such an analysis might be possible and fruitful.

However, this does not prevent examination of such local trends as are clear. First, there are areas in which villas closely follow Roman roads. This is clearly the case with most of the villas stretching North from Brough which in the main closely follow road 2e, from Brough towards York. Equally, villas around Brough tend to be close to roads (Langton is the furthest from major roads, and this had minor connecting roads (Ramm (1976) pp. 86-87.) The clustering of villas around roads is logical enough, allowing as it does in prosperous areas for the easy transportation of produce to major settlements (and possibly in the case of Brough, imported goods to villas).

What can also be seen is the importance of river siting. There appears to be a strong sequence of villas along the banks of the Rivers Ouse and Wharfe between the Humber and the York area : as with the Brough villas, these sites would have been well placed on routes between Brough and York, emphasising the importance of these two settlements. Also, as has been mentioned earlier, there are also 3 villa sites on the River Tees; given the paucity of villas in the area generally, this would suggest water transport was viable. Given the strong disagreements on the subject of navigability this far North (notably Selkirk (1983) and Anderson (1992)), I do not feel well placed to make any further judgment.

In the more prosperous and thus perhaps trade-driven areas at least then, it seems that some form of transport links were important. Further North, it becomes more questionable, with villas North West of Malton and those between Aldboro' and Catterick bearing few links to rivers or known roads, although certainly it should be born in mind that many roads may simply have been lost (Heslington (1867) pp. 13-14 alludes to some such.) In areas where transportation of goods over longer distances would have been necessary, then, ensuring close access to road or river may have seemed less imperative than other siting concerns, or perhaps these remoter sites were more likely to be owned by native occupants continuing with traditional sites despite disadvantages that may have been seen by more Romanised landowners elsewhere.

CONCLUSIONS

In conclusion, perhaps the most important outcome of this research has been the establishment of an up to date and reasonably consistent corpus of villa sites in the North, something which has been sadly lacking for some time. The data on disk in the Gazetteer provides a good introduction to each site, and if used would give future villa researchers a useful launch point: there is far more data present than I have analysed. In order to make this data available, it is hoped to deposit a copy of the gazetteer, with references, at each Yorkshire SMR, along with the Yorkshire Archaeological Society.

Aside from this, perhaps the main points to emerge in analysis have been;

- York has higher numbers in its hinterland than expected, but no gravitation towards the settlement: this may suggest building along transport links was more profitable than close to the centre.
- Aldborough dramatically lacks villas; those that are present are at a distance. Possibly this is due to the civitas centre generating less demand than centres with a military presence.
- Malton has both more sites than expected and a statistically significant bias in positioning towards the centre.
- Brough has the highest villa density, far above expectations, and a statistically significant bias towards the centre. Thus both Parisian centres attract villas, where Brigantian ones do not.
- P.R. Scott's theory on dominant villa elevation is demonstrably wrong. There is no overall height pattern, though sub-regional trends are apparent.
- Villa orientation is southerly (as expected). There are some local variations on this, however.
- There appear to be concentrations of villas on the Ouse/Wharfe and possibly on the Tees.
- There appear to be groupings of villas along roads near Brough and Malton. It appears therefore that rivers are more important as a transport mechanism for the Briganti than for the Parisi.

There are many areas where more work is desirable. I have only scratched the surface of possible locational analyses, and have not examined geology and soil types in particular as possible factors. Equally, the data in the Gazetteer probably provides enough data for regional and sub-regional analysis of villa dates: many statements are often made on the subject, but little is said that is not subjective.

Finally, I would like to propose a new approach to villa categorisation. Present systems essentially measure only the probability that a site is a villa: having used this system, I find it conceals more than it makes clear.

A better system would be to use a 2-dimensional classification. The first dimension would be the degree of evidence for rural agricultural use, the second the degree of Romanisation (ie whether the site is of high or low status. Such a 2-dimensional system would still be simple to use, but carries a far greater quality of information, allowing a distinction to be made between a rural but low status site (eg Cross Gates) and a high status site that may not be primarily agricultural (eg Millington or Clementhorpe.), which are very different, but both just classified as 'possible' villas under most current systems.

This sort of approach would also allow sites to be graphed to allow visual comparisons.

APPENDIX 1: LIST OF VILLA SITES

Sites are listed by Number, Name (Alternate Name), References. Square brackets on references indicate the source has not been checked, but is included for completeness.

1. Sites North Of Catterick

- 1.1 Old Durham
(Shincliffe Bridge) Richmond et al (1944), Wright & Gillam (1951), Wright & Gillam (1953), E.Scott (1988) pg80
- 1.2 Holme House
(Piercebridge) (Manfield)
(Cliffe) Harding (1984), BRIT I, pl. XXXI, Clack (1982) pg 383.
- 1.3 Whorlton E.Scott (1988) pg 279, Clark (1935) pg 139-140, YAJ vol 21, pg 220, Elgee (1923) pp 8-9.
- 1.4 Apperley Dene Clack (1982) pgs 382, 284, Hildyard (1952), Greene (1978).
- 1.5 Dalton On Tees (Chapel House Farm) Brown (1999)
- 1.6 Ingleby Barwick Carne (2001)

2. Sites Between Catterick And Aldborough

Ripon Deanery has been excluded. There are accounts of tesserae/tiles found in the area of the deanery (Hallitt (1901) pg 77), which may be either Roman or Medieval, but no other artefacts have been found. The site itself is rather precipitous, unlike most villa sites. I have found no record of the fate of the tiles.

- 2.1 Middleham Topham (1882), JRS xxxi (1941) plate 13, JRS 47 (1957) pp 208-209.
- 2.2 Well Smith (1969) pg 78, Gilyard-Beer (1951), E.Scott (1988) pg 278, CPD(1982), North Yorkshire SMR (Well).
- 2.3 Langwith House Gilyard-Beer (1951) pg 42, E.Scott (1988) pg 278 (under Well.)
- 2.4 Gatenby (Gate) (Theakston Grange) Scott (1988) pg 272, JRS 33 (1943) pg 52, Whitaker (1823), vol 2 pp 165-6. North Yorkshire SMR records.
- 2.5 Snape (Thorpe) Branigan (1980) pp 22-23, E.Scott (1988) pg 278, YAJ 51 (1979) pg 5.
- 2.6 Bainsse (Farm)
(Catterick) Wilson (1999), Hildyard (1955)
- 2.7 Castle Dikes/Dykes/-
Dykes(North Stainley) Lukis (1875), Heslington (1867), PR Scott (1973) pg44, JRS 19 (1929) pg 190, Clark (1929).

3. Mid Pennines

- 3.1 Kirk Sink (Gargrave) Bowen (1969) pg 44, Whitaker (1878) pg 229, Villy (1912), JRS 59 (1969) pg 207, PR Scott (1973) vol 2 map 38.

4. York Vicinity.

Other sites discarded include briefly Scarcroft & Wike (just roman altar finds, non-indicative), Wetherby (graves connected to a settlement but no indication of villa status at all), East of Wilstrop parish (Christiansen (1998) pg 13: no evidence beyond extremely vague Aps (North Yorks SMR), and Clifton (Pearson (1936) pp 146, 154 (adjacent to Roman walls of York, too close to be considered a villa)

- 4.2 [3km W. of Dalton Parlours] Ramm (1980) map pg 34 ('villa enclosure')
(Bardsey/Rigton?)

- 4.3 Newton Kyme (Moat House) Ramm(1976) pg 3.
- 4.4 Kirkby Wharfe (Ladyflats) (North Milford) Thoresby (1816) antiquities section pg. 109, Thackrah (1972), Ramm (1976) pg 3, Hearne (1888) pg 138.
- 4.5 Cawood Corder (1936).
- 4.6 Drax (Scurff Hall Farm) Wilson (1966), Branigan (1980) pg 22, Hartley & Fitts (1988) pg 75.
- 4.7 Dalton Parlours (=Collingham)(=Compton) Wrathmell & Nicholson (1990), Faull & Moorhouse (1981), plates IIIa & b.
- 4.8 Acomb Elgee (1933), map, Yorkshire Museum Handbook (1891) pg 95, Eburacum pg 64
- 4.9 Clementhorpe (York) Branigan (1980) pg 21, Brinklow & Donaghey (1986), Interim: Bulletin of the York Archaeological Trust vol 4 no. 2 (1976) pg 2, vol 5 no. 1 (1977) pp. 32-36.
- 4.11 Biggin/Harewood Hartley & Fitts (1988) pg 73,124, West Yorkshire SMR records, Letter: Hartley to Ramm (in North Yorks. SMR (Newton Kyme file)).
- 4.12 Wilstop Hall Hartley & Fitts (1988) pg 73 map, Christianson (1998), YAJ 48 (1976) pg 5, North Yorks. SMR Records.
- 4.14 Riccall Scott (1988) pg 276, YAJ 44 (1972) pg 220, Turnbull & Walsh (1988?).

5. Far South/South-West

Ferry Fryston (Scott (1988) pg 363) has been excluded as showing none of the sophistication expected of a villa. Broomhead (Stannington) (Surtees Society (1885) pg 365) is excluded, and would seem to be simply an extrapolation from one find, albeit there must be a slender chance that antiquarian writers knew more than has been handed down.

- 5.1 Bingley (Gawthorpe) Faull & Moorhouse (1981) pp146-8, Scott (1988) pg. 364
- 5.2 Birstall (Batley) (Gomersal) Faull & Moorhouse (1981) pp146-8, Scott (1988) pg. 364
- 5.3 Wakefield (Snapethorpe Hall) (Alverthorpe with Thornes) (near Ossett) (Lupset) Faull & Moorhouse (1981) pp146-8.
- 5.6 Stancil(l) (near Tickhill) Whiting (1943), Buckland (1986) pp 37-38.
- 5.7 Conisborough (near) Buckland (1986) pg 38.
- 5.8 Ackworth (Low Ackworth) Scott (1988) pg 363.
- 5.9 Darrington Scott (1988) pg 363-4, YAJ 45 (1973) pg 202, 42 (1968) pg 117, West Yorks SMR records. [Pontefract Archaeological Journal 1970, 1974, 1975]

6. Rural Sites North Of Malton

- 6.1 Beadlam Neal (1996), Stead (1971) pp 178-186.
- 6.2 Oulston(Burton House Farm) (=Pond Head Farm)) (=Yearsley) Scott (1988) pp. 275-6, 279, Clark (1935) 119, Ramm (1978) pg 90.
- 6.3 Hovingham Surtees Society (1885), pp 354-6, Jessup (1959) pg 2, Scott (1988) 272, PR Scott (1973) pp. 45-46, Clark (1935) pp. 88-92, Engraving by Vertue, 1745.

- 6.4 Crayke Hayes (1962), Hildyard (1962), Sheppard (1939)
- 6.5 Hood (Hood Grange) Wenham (1962)
(Sutton-Under-Whitestone
Cliff)
- 6.6 Crossgates, Scarborough Forum 1999: The Annual Newsletter of CBA Yorkshire, pp.
(Seamer) 32-34, Eagles (1979) pp. 198, 418-9, Ramm (1978) pp 77,
101, 135, [Rutter JG & Duke G, 1958, 'Excavations at
Crossgates near Scarborough, 1947-56' Scarborough and
District Archaeological Society Research Report No 1.]
- 6.7 Spaunton/Hutton Le Hole YAJ 41 (1966) pp 7, 11, 174, 330-331, 563, YAJ 42 (1970)
pg 113, JRS 57 (1967) pg 179, Scott (1988) pg 273.
- 6.8 Blansby Park (Pickering) Watts, Jones & Rahtz (2000), Eagles (1979) pg 418.
- 6.9 West Lilling Hopkinson (2001)

7. Suburban Malton

The reason for Settrington (b) being so named is that there are 2 Settrington sites. Settrington (a) showed no sign of being a villa, and was discarded.

- 7.1 Musley Clark (1935) pg 88, 111, 123.
(Bank)/Rowborough
(=Mosley Bank)
(=Roughborough)
(=Huttons Ambo)
- 7.3 Settrington (b)(=Brough Hill) Scott (1988) pg. 277, Ramm (1978) pp 76-77, 91. (For other
Settrington site, possibly connected, see Corder & Kirk
(1928) pg 77.)
- 7.4 Langton(East Farm, Middle Farm & Whin Hill/Dale Bottom) Corder & Kirk (1932), Ramm (1978)
- 7.5 Burythorpe(=Kennythorpe ?) (Fox Covert) Ramm (1978) pg 90, Scott (1988) pg 270, PR Scott (1973) pg 187. Kershaw et al (1994).
- 7.7 Wharram Le Street Rahtz et al (1986). Hayfield (1987) especially pp. 83-85
- 7.8 Wharram Grange Rahtz et al (1986), Hayfield (1987) (especially pp 31-39, 63-79), Scott (1988) pg 278-9.
- 7.9 Wharram Percy(North Manor) Rahtz et al (1986) (Preface & section 7.)

8. Bridlington Hinterland

- 8.1 Grindale (=Grindall) [Bulmers directory 1892 pg 268.] YAJ 38 (1952) pg. 259, 43
(1971) pg 194, TIR pg 39, Clark (1935) pg. 85, Ramm (1978)
pg. 192.
- 8.2 Rudston Stead (1980), Loughlin & Miller (1979) pg 124.
- 8.4 Harpham [Trans. of the East Riding Antiq. Soc., xiii, pt ii (1907)
pp141-52.] PR Scott (1973) vol 2 map 24, Mellor (1955),
Sheppard (1905), Ramm (1978) pg 102.
- 8.9 Kilham (N. of Tuft Hill) Humberside SMR (Aps DNR 1633/21A (Kilham)), Ramm
(1978) fig 18, Eagles (1979) pg 438.
- 8.10 Tuft(s) Hill Ramm (1978) fig 18, TIR pg. 76, Loughlin & Miller (1979)
pg 109, Humberside SMR APs.

9. Brough Linear

[JRS, vol 32 pg 110 has reference to a destroyed villa N. of Brough. It is not clear which site this refers to.]

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|------|---|---|
| 9.1 | <u>Sangton</u> | YAJ 39 (1958), pg 335. |
| 9.2 | <u>Bishop(s) Burton</u>
<u>(=South Burton)</u> | Clark (1935) pg. 67, Elgee (1933) pg 238. |
| 9.3 | <u>North Newbald</u> | Corder(1943), Eagles (1979) pp 205-206. |
| 9.4 | <u>Cave Road</u> | YAJ 37, pg 429. |
| 9.5 | <u>North Cave (=Dryham)</u> | YAJ 47 (1975) pg 4, 49 1977 pg 3 & 7, Mackey (1999) pg 21, Eagles (1979) pg 153, 443. |
| 9.6 | <u>South Cave</u> | YAJ 44 (1972) pg 220, Clark (1935) 74-5, Eagles (1979) pg 153. |
| 9.7 | <u>Brantingham (Cockle Pits)</u> | Slack (1951), Liversedge et al (1973), Ling (1991), Dent (1989), pp. 26-28. |
| 9.8 | <u>Welton (Wold)</u> | Mackey (1999) |
| 9.9 | <u>Millington</u> | Eagles (1979) pg 206, Clark (1935) pp109-111, TIR pg 56, Ramm (1978) pp 101-2, Burton & Drake (1747) |
| 9.11 | <u>Fishpond Wood, Risby</u>
<u>(Rowley)</u> | Didsbury (1988), pg 26, Didsbury (1989), pg 25. |
| 9.12 | <u>Hayton</u> | Halkon (1999) pp 16-18, Halkon et al (2000 and 2001), ERAS Newsletter 6, June 1996, Humberside SMR refs 17474 & 4509. |
| 9.13 | <u>Pocklington</u> | BRIT XXX (1999) pg 342, Hawe (1998), Humberside SMR 19534. |

APPENDIX 2: NOTES ON THE DATA SHEET

The data sheet used initially for recording data was divided into several categories. Most of these are straightforward, but the notes below provide clarification. Most fields recorded on the data sheets are included in the Gazetteer spreadsheet file on disk. Some fields were felt to be none-useful, or simply too patchy to be worth including as data, but all are listed here.

NAME

The primary name of the site. Where a site has multiple names, these are given in appendix 1. Many sites have over the years been given different names, which can cause confusion. Equally, some sites have been given the same names as other sites, which is even worse.

SMR

The sites and monuments record number. In practice, this field was not felt to be useful: each SMR has its own numbering system, and sometimes many systems, which would have made recording difficult. Additionally, the number of sites where SMRs contained new information was limited: where they do so, this information is generally recorded in Appendix 1.

MAP REF

8 figure or 6 figure as available/appropriate. Map references cannot always be found, due to vague positioning for older sites in particular.

HEIGHT (M)

Only recorded where the map ref was reliable enough to enable accurate placing with respect to contours.

CATEGORY

Sites have been categorised on a scale of 1-4 according to the evidence for them being villas, in a scheme broadly parallel to that used by Greene *et al* (1997), although direct comparisons between the two schemes may not be appropriate.

Categories:

1. **Certain Villa** There is no doubt but that this is a villa site. (eg Beadlam)
2. **Probable Villa** Incomplete or shoddy excavation, or question mark over purpose of site cast some doubts, but highly likely to be a villa (eg Well)
3. **Possible Villa** Some reliable reports, or reports of a mosaic in situ in a rural location. (eg Bingley)
4. **Unlikely Villa** Scant reports of a villa are unsubstantiated or hypothetical. (eg Langwith House)

There are certain problems with this scheme as originally put forward, as the quality of evidence in the north of England is patchy, and the number of excavations relatively few. Nevertheless, it provides a means of indicating the broad reliability of hypothesised villas.

The distribution of sites between categories was as follows;

Category	Number Of Sites
1	14
2	16
3	17
4	18
Total	65

DIRECTION OF HIGH VISIBILITY

This has been estimated from 1:10000 OS maps. Details of the method are given under Villa Orientation in the main text.

SITE NO.

The site number is in 2 parts: the first digit refers to the villa group (1 to 9), the remainder is a villa number within the group.

NEAREST RIVER (DIRECTION)

This proved impossibly hard information to reliably collect. The main problem is in establishing what is meant by a river: there is simply no satisfactory point at which a stream becomes large

enough to count. Navigability would be the obvious dividing line, but there is no clear consensus as to where this stops (see Selkirk (1983) and Anderson (1992) for alternative views). Nor is there any consistent information as to the Roman coastline, despite work in some areas.

VILLA FACING

Where more than one villa range is to be found, facing is taken off the front of the highest status range, except on such sites as Beadlam where the configuration of buildings makes facing quite obvious. Less well researched sites can be impossible to identify, so the sample size here is smaller than for most other data.

NEAREST ROAD (DIRECTION)

As with “Nearest River”, a problematic category, due to the rather hypothetical routes of many Roman roads, the lack of any agreement about which roads are Roman, and the lack of any consistent treatment known to me since Margary (1955, 1957).

BEST REFERENCES

Straightforward. Listed in appendix 1. Every reference known to me which includes useful information (not just a duplicate of what is elsewhere) has been given, and where I have not been able to locate a reference to check, it has often been included in square brackets in appendix 1, in order to make this a useful data source for others. Inevitably, there will be sources I did not locate.

DATING

Refers to a broad range of dates for the villa, using the available evidence. This information has little diagnostic value for this form of study, but now the corpus of data has been collected, patterns may begin to emerge which could be studied elsewhere. The evidence for the vast majority of sites is incomplete, and for many non-existent: this would be true of almost any site of any early period of history, so should not render the data invalid. For ease of keying in the spreadsheet records, abbreviations E/M/L have been used for early/mid/late, and centuries written as a single number. (eg E4=early 4th Century).

PERIODS OF HIGH/LOW ACTIVITY

There is little evidence available for many sites, which may make any use of this data difficult. See also dating above.

PRE-VILLA EVIDENCE

Continuity is, of course, a flexible concept, and so there are potential problems here. In any case, only the more recently excavated sites appear to have been checked for IA structures (Langton being an obvious exception).

POST-VILLA EVIDENCE

I have generally restricted this to the early medieval period. Very little evidence appears to exist.

VILLA EVIDENCE

The 5 categories here (see appendix 2) form a brief but useful guide to general features. As much of this data is numeric or has two states, some form of statistical analysis may well prove possible (though as it is not locational data, it has not been analysed here.) With hindsight, a further useful indicator would have been painted plaster.

OTHER FEATURES

A catch-all text category. Useful contextual data.

FUNCTIONS PRESENT

Functions here refers to uses for the site, which may be agricultural, manufacturing, religious or all manner of other things. I have excluded basic domestic or agricultural functions. Milling has not generally been included, for example, but possibly evidence for large scale milling at Beadlam and Dalton Parlours has been.

OTHER COMMENTS

Anything interesting not covered elsewhere. I have included notes on the location of artefacts/archives where known: in many cases these are ‘last known’ locations, and would need some detective work to hunt down.

BIBLIOGRAPHY

- Anderson, James D., 1992 Roman Military Supply in North-East England: An analysis of and an alternative to the Piercebridge Formula, Oxford, Tempvs Reparatvm. (BAR British Series 224)
- Beresford, M.W. & Jones, G.R.J., 1967 Leeds And Its Region, Leeds, British Association.
- Bonser, Wilfred, 1964 A Romano-British Bibliography (55 B.C.- A.D. 449), Oxford, Blackwell.
- Bowen, H.C., 1969 'The Celtic Background' in Rivet (1969), pp. 1-48.
- Bradford, M.G., & Kent, W.A., 1977 Human Geography: Theories and their applications, Oxford, Oxford University Press.
- Branigan, Keith, 1980 Rome And The Brigantes: The Impact Of Rome On Northern Britain, Sheffield, University Of Sheffield.
- Brewster, TCM, 1956 'Four Finds From East Yorkshire', in YAJ, vol 39, pg 55.
- Brinklow, David & Donaghey, Sarah, 1986 'A Roman building at Clementhorpe', in Brinklow et al (1986), pp. 54-73.
- Brinklow, David, Hall, R.A., Magilton, J.R. & Donaghey, Sarah, 1986 Roman Extra-Mural Settlement And Roads: Coney Street, Aldwark and Clementhorpe, Minor Sites and Roman Roads, York, York Archaeological Trust 1986 (The Archaeology of York, volume 6 fascicule 1).
- Brown, J., 1999 'Romano-British Villa Complex: Chapel House Farm, Dalton On Tees, North Yorkshire' in YAS Roman Antiquities Section Bulletin No. 16, pp. 19-27.
- Buckland, P.C., 1986 Roman South Yorkshire: A Sourcebook, Sheffield, Department of Archaeology and Prehistory University of Sheffield.
- Buckland, P.C., 1988 'The Stones Of York: Building Materials In Roman Yorkshire' in Price & Wilson (1988), pp. 237-287.
- Burton, John & Drake, Francis, 1747 'A Dissertation on the Situation of the ancient Roman Station of Delgontia in Yorkshire' in Philosophical Transactions of the Royal Society of London, no. 483, 1747, pp 541-556 & tables x, ix.
- Carne, P., 2001 'A Roman Villa And Settlement At Ingleby Barwick, Teeside' in YAS Roman Antiquities Section Bulletin No. 18, pp. 12-16.
- Christianson, Nikole, 1998 The Archaeology of Wilstrop Civil Parish, unpublished MA thesis, Department of Archaeology, York University.
- Clack, P.A.G., 1982 'The Northern Frontier: Farmers In The Military Zone' in Miles (1982), pp. 377-402.
- Clark, Mary Kitson, 1929 'Castle Dykes' in Yorkshire Archaeological Society Roman Antiquities Committee Bulletin #8, 1929.
- Clark, Mary Kitson, 1935 A Gazetteer Of Roman Remains In East Yorkshire, Leeds, Yorkshire Archaeological Society (Roman Malton And District Report No. 5.)
- Corder, Philip, 1936 'A Roman Site Near Cawood' in YAJ, vol 32, pp. 333-338.

- Corder, Philip, 1943 'Roman Site at North Newbald, East Yorkshire' in Proceedings of the Leeds Philosophical And Literary Society (Literary And Historical Section), vol v, pp. 231-238.
- Corder, Philip, & Kirk, John L., 1932
A Roman Villa At Langton, Near Malton E. Yorkshire, Leeds, YAS (Roman Malton and District Report No. 4.)
- County Planning Department, Northallerton, 1982
'A Romano-British Sculpture from Well, North Yorkshire' in BRIT vol 13, pp. 324-5 & plate xxxiii.
- Dent, John, 1989 'Settlement at North Cave and Brantingham' in Halkon (1989), pp. 26-32.
- Didsbury, Peter, 1988 'Evidence For Romano-British Settlement In Hull And The Lower Hull Valley' in Price & Wilson (1988), pp. 21-35.
- Didsbury, Peter, 1989 'Recent discoveries in Hull and district' in Halkon (1989), pp. 23-26.
- Dobinson, Colin, 1995 Aldborough Roman Town, London, English Heritage.
- Eagles, Bruce, 1979 The Anglo-Saxon Settlement of Humberside, Oxford, B.A.R. (British Series 68)
- 'Eburacum', 1962 An Inventory Of The Historic Monuments In The City Of York: Volume 1: Eburacum Roman York, York, RCHME
- Elgee, Frank, 1923 The Romans In Cleveland, Middlesborough, Hood & Co.
- Elgee, Frank, & Elgee, Harriet Wragg, 1933 The Archaeology Of Yorkshire, London, Methuen.
- Faull, M.L., & Moorhouse, S.A., 1981
West Yorkshire: An Archaeological Survey To AD1500, Wakefield, West Yorkshire Metropolitan County Council.
- Fletcher, M., 1986 'A Fortified Site At Castle Steads, Walmersley, Bury' in Greater Manchester Archaeological Journal, vol 1, pp. 31-40.
- Fletcher, Mike & Lock, Gary R., 1991
Digging Numbers: Elementary Statistics For Archaeologists, Oxford, Oxford University Committee for Archaeology/Oxbow Books.
- Friendship-Taylor, R.M & D.E., 1997
From Round House To Villa, Northampton, Upper Nene Archaeological Society (Fascicule 3).
- Gilyard-Bear, R., 1951 The Romano-British Baths at Well, Leeds, Yorkshire Archaeological Society (Yorkshire Roman Antiquities Committee Research Report No. 1.)
- Goodall, Ian H., 1972 'Industrial Evidence From The Villa At Langton, East Yorkshire' in YAJ, vol 44, pp. 32-37.
- Green, Don, Sheldon, Harvey, Hacker, Michael, Woan, Chris, & Rowlinson, Hilary, 1997 'The distribution of villas in some south-eastern counties: some preliminary findings from a survey' in London Archaeologist, vol 8 no. 7 (Winter 1987), pp. 187-195.
- Greene, Kevin, 1978 'Apperley Dene "Roman Fortlet": A Re-examination, 1974-5' in Arch Ael, series 5 vol vi, pp. 29-59.
- Greene, Kevin, 1995 Archaeology: an introduction, Batsford, London.
- Halkon, Peter, 1989 New Light On The Parisii: Recent Discoveries in Iron Age and Roman East Yorkshire, Hull, ERAS/ University of Hull School of Adult and Continuing Education.

- Halkon, Peter, 1999 Further Light On The Parisii, Hull, East Riding Archaeological Research Trust/East Riding Archaeological Society/Department of History, University Of Hull.
- Halkon, Peter, Millett, Martin, Easthaugh, Ed, Taylor, Jeremy & Freeman, Peter, 2000 The Landscape Archaeology Of Hayton, Hull, East Riding Archaeological Society/University Of Hull.
- Halkon, Peter, Millett, Martin & Taylor, Jeremy, 2001 'Fieldwork and Excavation at Hayton, 2000: Interim Report' in YAS Roman Antiquities Section Bulletin No. 18.
- Hallitt, C, 1901 The Cathedral Church Of Ripon, London, George Bell.
- Harding, D.W., 1984 Holme House, Piercebridge: Excavations 1969-70: A Summary Report, Edinburgh, University Of Edinburgh Department Of Archaeology (Project Paper No. 1.)
- Hartley, B.R. & Fitts, R.Leon, 1988 The Brigantes, Gloucester, Alan Sutton.
- Hawe, Brian W., 1998 'A Romano-British Villa Near Pocklington' in ERAS Short Newsletter #11, July 1998.
- Hayes, R.H., 1962 'Romano-British Discoveries At Crayke, N.R. Yorks.: (i) Sites at Woodhouse Farm, Crayke' in YAJ, vol 40, pp. 90-98.
- Hayfield, Colin, 1987 An Archaeological Survey of the Parish of Wharram Percy, East Yorkshire: 1. The Evolution of the Roman Landscape, Oxford, B.A.R. (British Series 172) (Wharram: A Study of Settlement on the Yorkshire Wolds: Volume V)
- Hearne, Thomas, (Edited by Doble, C.E.), 1888 Remarks and Collections Of Thomas Hearne vol III (May 25, 1710 -December 14, 1712), Oxford, Oxford Historical Society (vol xiii in unnamed series.)
- Heslington, T.C., 1867 On Roman Camps In The Neighbourhood Of Ripon, Ripon, Johnson & Co./W.Harrison.
- Hildyard, E.J.W., 1952 'A Roman Site On Dere St.' in Arch Ael, series 4 vol xxx, pp. 223-238.
- Hildyard, E.J.W., 1955 'A Roman and Saxon Site at Catterick' in YAJ, vol 38, pp. 241-245.
- Hildyard, E.J.W., 1962 'Romano-British Discoveries At Crayke, N.R. Yorks.: (ii) The Trial Excavation' in YAJ, vol 40, pp. 99-111.
- Hodder, Ian & Millett, Martin, 1980 'Romano-British Villas and Towns: a systematic analysis', in World Archaeology, 12(1), pp. 69-76.
- Hopkinson, Guy, 2001 'Recent Archaeological Investigations At West Lilling, North Yorkshire', in YAS Roman Antiquities Section Bulletin No 18, pp. 19-21.
- Jessup, R.F., 1959 'Barrows And Walled Cemeteries In Roman Britain' in The Journal Of The British Archaeological Association, 3rd series vol xxii, pp. 1-32.
- Kershaw, Antonia, Carter, Ann, Horne, Peter, Witton, Helen, 1994, Roman Enclosure Complex, Burythorpe North Yorkshire: Air Photographic Transcription and Analysis (Presumed York, English Heritage.)
- Ling, Roger, 1991 'A New Look At Some Fourth-Century Mosaics' in BRIT vol 22, pp. 154-156.

- Linton, D.L., 1956 Sheffield And Its Region: A Scientific And Historical Survey, The British Association.
- Liversedge, Joan, Smith, D.J. & Stead, I.M., 1973, 'Brantingham Roman Villa: Discoveries In 1962' in Britannia, vol 4, pp. 84-106.
- Loughlin, Neil & Miller, Keith, 1979
A Survey Of Archaeological Sites In Humberside, Hull, Humberside Libraries and Amenities (for Humberside Joint Archaeological Committee).
- Lukis, Rev. W.C., 1875 'Castle-Dykes', in Archaeological Journal, vol 32, pp. 134-154.
- Mackey, Rodney, 1999 'The Welton villa- a view of social and economic change during the Roman period in East Yorkshire' in Halkon (1999), pp 21-32.
- Margary, Ivan D., 1955 Roman Roads in Britain vol 1, London, Phoenix House.
- Margary, Ivan D., 1957 Roman Roads in Britain vol 2, London, Phoenix House.
- Mellor, Eric, 1955 'The Harpham Villa' in YAJ, vol 38, pp. 117-118.
- Miles, David, 1982 The Romano-British Countryside: Studies In Rural Settlement And Economy, Oxford, BAR British Series 103.
- Millett, Martin, 1990 The Romanization Of Britain: An Essay in Archaeological Interpretation, Cambridge, Cambridge University Press.
- Neal, David S., 1996 Excavations On The Roman Villa At Beadlam, Yorkshire, Leeds, Yorkshire Archaeological Society (Yorkshire Archaeological Report #2).
- Nevell, M., 1989 'Great Woolden Hall Farm: Excavations On A Late Prehistoric/Romano-British Native site', in Greater Manchester Archaeological Journal, vol 3, pp. 35-44.
- Nevell, M., 1989a 'An Aerial Survey Of Southern Trafford And Northern Cheshire', in Greater Manchester Archaeological Journal, vol 3, pp. 27-34.
- Nevell, M., 1992 Tameside Before 1066, Tameside Metropolitan Borough Council with Greater Manchester Archaeological Unit.(no place of publication given)
- Parker Pearson, Mike, 1999 'Food, Sex and Death: Cosmologies in the British Iron Age with Particular Reference to East Yorkshire' in Cambridge Archaeological Journal, 9:1, pp. 43-69.
- Pearson, F.R., 1936 Roman Yorkshire, London, A.Brown.
- Price, J. & Wilson, P.R., 1988
Recent Research In Roman Yorkshire: studies in honour of Mary Kitson Clark (Mrs Derwas Chitty), Oxford, B.A.R. British Series 193.
- Rahtz, Philip, Hayfield, Colin & Bateman, John, 1986
Two Roman Villas At Wharram Le Street, York, York University Archaeological Publications #2.
- Rainey, Anne, 1973 Mosaics In Roman Britain: a gazetteer, Newton Abbott, David & Charles.
- Ramm, Herman G., 1976 'The Roman Roads West Of Tadcaster' in York Historian, vol 1, pp. 3-12.
- Ramm, Herman G., 1978 The Parisi, London, Duckworth.
- Ramm, Herman G., 1980 'Native Settlements East Of The Pennines' in Branigan (1980), pp. 28-40.
- Richmond, I.A., Romans, Rev T., Wright, R.P., 1944
'A Civilian Bath-House Of The Roman Period At Old Durham' in Arch Ael, vol xxii, pp. 1-23.

- Rivet, A.L.F., 1969 The Roman Villa In Britain, London, Routledge & Kegan Paul.
- Robinson, J.F., 1978 The Archaeology of Malton and Norton, Leeds, YAS.
- Scott, Eleanor, 1988 Aspects of the Roman Villa as a form of British settlement, Unpublished PhD thesis, Newcastle University (Ref DX202940).
- Scott, Eleanor, 1993 A Gazetteer of Roman Villas In Britain, Leicester, Leicester University Archaeological Research Centre (Leicester Archaeological Monographs No. 1).
- Scott, P.R., 1973 Roman Villas In The North Of England, Unpublished MA thesis, Durham University.
- Selkirk, Raymond, 1983 The Piercebridge Formula, Cambridge, Patrick Stephens.
- Sheppard, T., 1939 'Viking and Other Relics at Crayke, Yorkshire' in YAJ, vol 34, pp. 273-81.
- Slack, P.E., 1951 'Report on A Roman Villa At Brantingham, E.Yorks.' in YAJ, vol 37, pp. 514-20.
- Smith, D.J., 1969 'The Mosaic Pavements' in Rivet (1969) pp. 71-125.
- Stead, I.M., 1971 'Beadlam Roman villa: an interim report' in YAJ, vol 43, pp. 178-186.
- Stead, I.M., 1980 Rudston Roman Villa, Leeds, YAS.
- [Surtees Society], 1885 The Family Memoirs Of The Rev. William Stukely, M.D. and the Antiquarian And Other Correspondence Of William Stukely, Roger & Samuel Gale etc. Vol III, Ripon, The Surtees Society (Publications Of The Surtees Society, vol 80.)
- Tabula Imperii Romani: Britannia Septentrionalis, 1987 Oxford, OUP (for The British Academy.)
- Thackrah, Maurice, 1972 Ladyflats Roman Building. Preliminary Report, Leeds, Private Publication (Copy in YAS).
- Thoresby, Ralph, 1816 Ducatis Leodiensis, Leeds, Robinson, Son & Holdsworth. (This edition edited by Thomas Dunham Whitaker)
- Topham, John, 1882 'Supposed Roman Remains Found Near Middleham' in YAJ, vol 7, pp. 459-464.
- Turnbull, Percival & Walsh, Deborah, 1998? An Iron Age And Roman Settlement At Riccall, unpublished? (in North Yorks. SMR (Riccall)).
- Villy, Francis, 1912 'On The Roman Site at Kirk Sink, Gargrave, Near Skipton' in The Bradford Antiquary, New series III, 1912, pp. 353-68.
- Watts, Lorna, Jones, Andrew & Rahtz, Philip, 2000 Blansby Park: Excavations 2000: Interim Report, no publisher, Helmsley.
- Webster, Graham, 1976 Romano-British Coarse Pottery: A Student's Guide, London, Council For British Archaeology.(CBA Research Report No. 6)
- Wenham, Peter, 1962 'Seven Archaeological Discoveries In Yorkshire: 1. Roman Sarcophagus, Sutton-Under-Whitestone Cliff' in YAJ, vol 40, pp. 298-300.
- Whitaker, T.D, 1823 An History Of Richmondshire . . ., London.
- Whitaker, T.D, 1878 The History And Antiquities Of Craven In The West Riding Of The County Of York, Leeds, Joseph Dodgson.
- Whiting, C.E., 1943 'Excavations At Stancil 1938-1939' in YAJ, vol 35, pp. 261-269.
- Wilson, Kenneth, 1966 'A Survey And Excavations Within The Area Of Scurff Hall Farm, Drax, Near Selby, York' in YAJ, vol 41, pp. 670-686.
- Wilson, P.R., 1997 'Tradition And Change: Rural Buildings in Roman Yorkshire' in Friendship-Taylor (1997), pp. 9-18

- Wilson, Pete, 1999 'Catterick', in *Current Archaeology* 166, pp. 379-386.
- Wrathmell, Stuart & Nicholson, Andrew, 1990
Dalton Parlours: Iron Age Settlement And Roman Villa,
Wakefield, West Yorkshire Archaeology Service.
- Wright, R.P. & Gillam, J.P., 1951
'Second Report On Roman Buildings At Old Durham' in Arch
Ael, vol xxix, pp. 203-212.
- Wright, R.P. & Gillam, J.P., 1953
'Third Report On The Roman Site At Old Durham' in Arch Ael
vol xxxi, pp. 116-126.