
TRAC Theoretical Roman Archaeology Conference

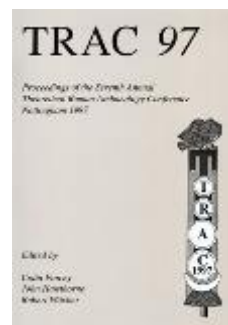
www.trac.org.uk

Paper Information:

Title: Theoretical Influences on Two Reports of Romano-British Land Division
Author: John W. M. Peterson
Pages: 53–59

DOI: http://doi.org/10.16995/TRAC1997_53_59

Publication Date: 16 April 1998



Volume Information:

Forcey, C., Hawthorne, J., and Witcher, R. (eds) 1998. *TRAC 97: Proceedings of the Seventh Annual Theoretical Roman Archaeology Conference, Nottingham 1997*. Oxford: Oxbow Books.

Copyright and Hardcopy Editions:

The following paper was originally published in print format by Oxbow Books for TRAC. Hard copy editions of this volume may still be available, and can be purchased direct from Oxbow at <http://www.oxbowbooks.com>.

TRAC has now made this paper available as Open Access through an agreement with the publisher. Copyright remains with TRAC and the individual author(s), and all use or quotation of this paper and/or its contents must be acknowledged. This paper was released in digital Open Access format in April 2013.

Theoretical Influences on Two Reports of Romano-British Land Division

by John W. M. Peterson

Introduction

We know that theory influences observation; it limits our choice of relevant observable phenomena (Chalmers 1982:32-3). 'The facts' are made up (Courbin 1988:xii) of those bits of reality which our theories prepare us to see (Gallay 1986:16). This paper will try to go beyond these generally accepted ideas to show how theory can, in a slightly different way, also influence archaeological reports. Reports sometimes contain errors which relate to phenomena which are not greatly significant when seen in the light of the report's theoretical preconceptions and conclusions. If the author's general view of the evidence had been different, the particular phenomena might have been seen as significant. In this alternative theoretical context, the errors might have been noticed and corrected.

The detached tone of this statement should not be allowed to hide my interest in the two cases which I am about to describe, for in each case the alternative theory which reveals the errors is my own. In two areas in eastern Britain (figure 1) I have suggested that there are signs of centuriation, contrary to the widely held belief that such systems did not exist in Britain (Jones 1989:129). Using my own experience, I hope to show how an unconventional theory allows new aspects of the data to be seen.

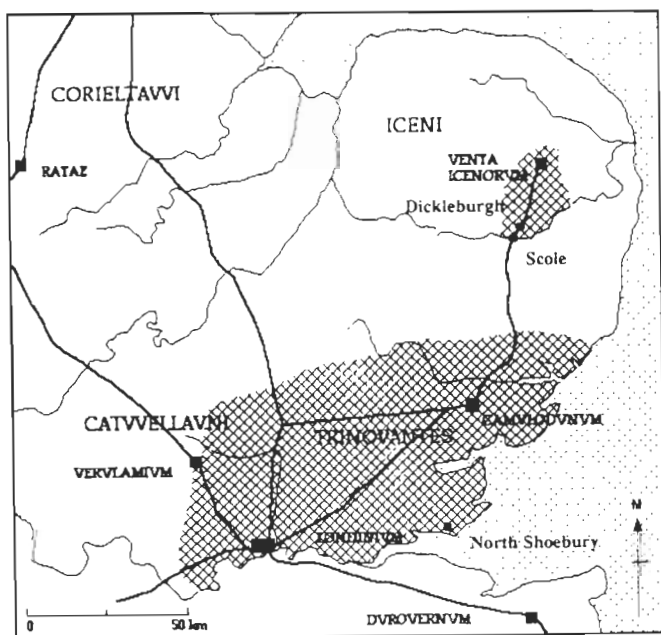


Figure 1. Eastern Britain and location of areas discussed.

Case 1. North Shoebury, Essex

A report (Wymer and Brown 1995) on excavations at North Shoebury, Essex, concludes that the Roman landscape was, in general, a continuation of a later Iron Age landscape with boundaries oriented north-south and east-west. This conclusion fits well with widely accepted theories of continuity of land use in Britain at this time (Fulford 1990:26). My own suggestion (Peterson 1990, 1993:211–5) is that a large centuriation, Eastern 'A', with orientation slightly greater than 17 degrees west of OS north, includes Essex and could extend to this area. On the face of it, because of the difference of orientation, these ideas are incompatible.

Wymer and Brown summarise the development of the landscape as follows:

During the later Iron Age a field system was laid out on a north-south axis This system seems to have developed throughout the Roman period, and probably survived into the early Saxon period... The lack of correlation between these early field systems and the more recent landscape is clearly indicated ... Following the early Saxon period there is little evidence for occupation at North Shoebury It can therefore be demonstrated that the recent rectilinear landscape in the North Shoebury area bears no relation to the prehistoric and little to the Roman boundaries..... A late Saxon origin might well be appropriate for the rectilinear pattern of landscape around North Shoebury (1995:171–2).

This thoroughly apotropaic set of facts almost put me off, but I continued to look for evidence to support my own ideas, as scientists do (Chadwick 1992:4). The 'recent rectilinear landscape' fits extremely well into the theoretical framework of the proposed Eastern 'A' centuriation; and Wymer and Brown's figure 103 'Plan of Period III [Roman] features with boundaries shown on the 1703 estate map' (shown in figure 2 with theoretical *limites* of Eastern 'A' superimposed) shows that some features of the excavated Roman landscape, which are not related to the north-south system, could also support the centuriation hypothesis.

In square MG there is a trackway. According to Wymer and Brown:

The ditches of this feature cut Bronze Age features and produced a few abraded Roman sherds. While this trackway may be of Roman date, it seems to run at variance to the general alignment of the Roman field system, and may be later possibly, even post medieval in date. It certainly fits well with the alignment of the field boundaries shown on the estate map of 1703 (Wymer and Brown 1995:40).

The only comment that can be made with confidence about this feature is that it is post-Bronze Age in date. Nevertheless, its visible part is very nearly coincident with a theoretical *limes* of Eastern 'A'. If we accept Wymer and Brown's possible later date, and association with the existing boundaries, it could be evidence that an earlier version of the modern landscape was even more like the proposed centuriation. In squares LV and LW we see two ditch fragments which coincide (to the limits of accuracy of the centuriation model) with a hypothetical subdivision of a century. Such a subdivision, at one quarter of the interval between *limites*, is commonly seen in well-attested centuriations.

One of these features is dated to the earlier Roman period. The other is not dated in the report. In response to an enquiry, I was told (Brown, pers. comm.) that it should have been included in period III unphased. This omission is a trivial, but interesting because it relates to a feature which is significant for my hypothesis but not for Wymer and Brown's. Even more interesting is the case of feature 1424, a corn dryer. The north arrow in Wymer and Brown's figure 35 (reproduced here as figure 3) indicates that it is aligned east-west, whereas their figures 30 and 103 show it parallel and close to the ditch just discussed.

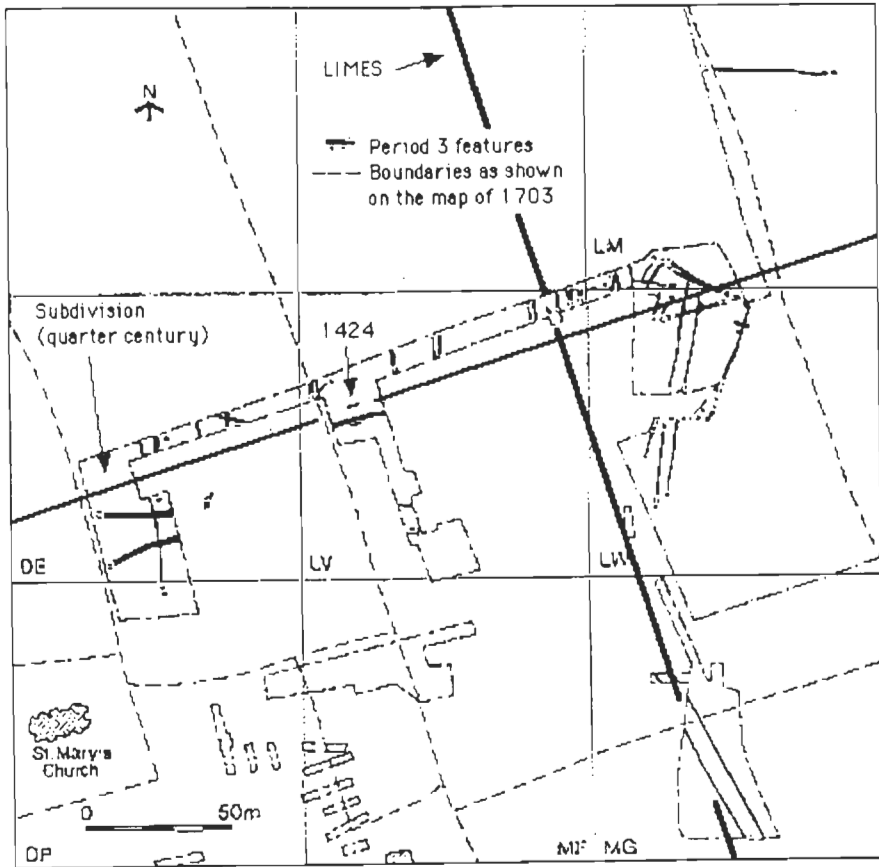


Figure 2. North Shoebury, Roman features (after Wymer and Brown 1995, figure 103).

Again Brown (pers. comm.) sheds some light on this. The orientation is, in his words, “probably better represented” on figure 30 (and 103), although difficult to judge precisely. Again, figure 35, although it accurately represents the length, “does not give an accurate view of the alignment of 1424”. According to Brown the text and illustrations for this report were prepared over a period of ten years and “Figure 35 was inserted at the specific request of a reader who thought more detail of the drying kiln 1424 should be presented, hence the lack of due regard for orientation”, since the figure “was intended simply to provide a more detailed view of the form of the flue”.

This may show why the north arrow on figure 35 is inaccurate. The figure was probably drawn when text had been drafted which described how the Roman period “saw the maintenance and development of the system of the north-south ditches” (Wymer and Brown 1995:40). Once a belief in the north-south Iron Age and Roman system had been established, this error could be overlooked because such an orientation, at right angles, would be expected.

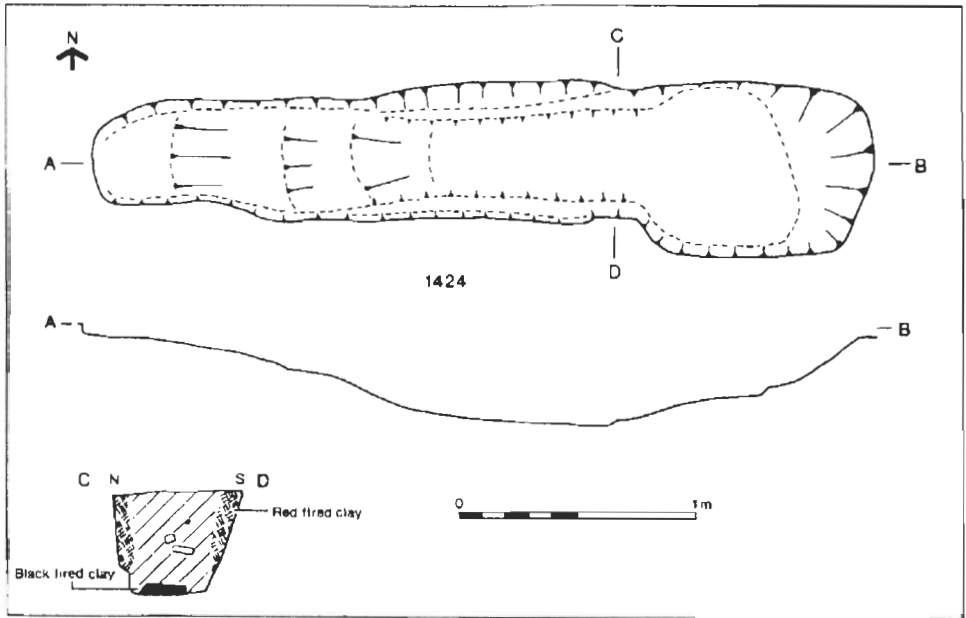


Figure 3. North Shoebury, probable drying kiln flue (after Wymer and Brown 1995, figure 35).

Brown's further comment on this analysis is that:

The reason little importance was attached to accurate positioning of the north arrow was that alignment of such an ephemeral and short feature as a drying kiln flue, would be of no real value in understanding the alignment of such large long-lived features as field systems (Brown pers. comm.)

So, for him, the reported orientation of the feature cannot influence views of the orientation of the field system. I did not find this so, since I initially saw its published orientation as evidence against my hypothesis; but views clearly can differ.

Case 2. Scole-Dickleburgh

One of the most widely known maps of the Scole-Dickleburgh field system is included in the introduction by Peter Wade-Martins to *Norfolk from the Air* (Edwards and Wade-Martins 1987:12). The map, apparently prepared by Tom Williamson, illustrates his hypothesis that in this area we can still see an essentially Iron Age system, organised by a set of roughly parallel, sinuous trackways, which predates the building of an early Roman road (Williamson 1986, 1987, 1993). Now, I do not accept the 'pre-Roman' hypothesis. The major axes of the field system conform well to a model of a normal centuriation which includes other known Roman roads. With this model in mind certain deformations of the data can be seen.

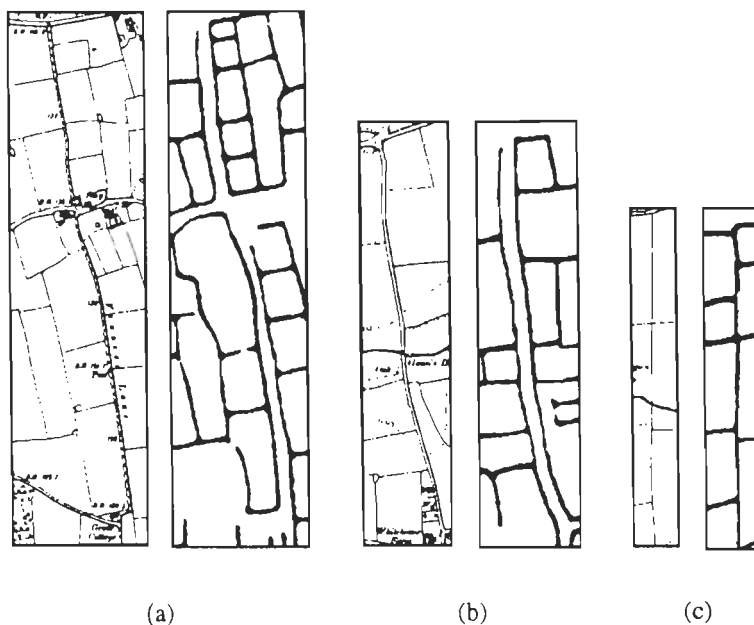


Figure 4. Scole-Dickleburgh, alternative cartographic representation.

Three examples demonstrated this (figure 4). Each compares a particular feature as depicted in two ways:

1. On the left, a fragment of the second series six-inch scale Norfolk county maps of the first decade of the twentieth century. These show the boundaries clearly and do not differ significantly from the first series maps of about fifteen years earlier, nor from the maps of the tithe apportionments of the first half of the nineteenth century.
2. On the right, the equivalent feature from Williamson's map.

To allow direct comparison, these map fragments have been scanned in the same way using a computer package, and resized to obtain pairs as near the same scale as possible.

Figure 4(a) shows the two representations of Vaunces (or Vances) Lane and its northern extension. This formed part of the Dickleburgh-Shimpling parish boundary, until the parishes were amalgamated. In my view it would be an axis of the centuriation. The Williamson version was originally drawn to a scale which was smaller than six inches to the mile. This has created some distortion. The lane has necessarily been drawn wider than its scale width and this has not been done in a consistent fashion. The result is that the feature appears to deviate much more from a straight line than in the county map.

Similarly, figure 4(b) shows the two representations of the lane that is now called Burston Road, Dickleburgh, another theoretical *limes*. Again, the overscale drawing of this road has led to a distortion of the profile. The end result is that the road, which in the county map could have

been interpreted as a straight line with small random deviations, now looks banana-shaped. Figure 4(c) depicts a field boundary rather than a road. This hedge appears now, seen on the ground, to be very straight, and this is true for all cartographic representations of it in the last 170 years, including the tithe map. The exception is Williamson's representation which makes it appear markedly sinuous.

Apart from these minor, but significant, distortions of the cartography, the illustration from *Norfolk from the Air* contains an important error. If we use the scale of the illustration, we can establish that two identifiable points in it are 2.88km apart. The indicated equivalent distance on Ordnance Survey six-inch sheet 106 SW, using its scale, is 2.63km. The former scale is thus in error by nearly 10% over this particular interval, an approximation which can be extrapolated to the whole figure.

Clearly, these errors are hard to see if you already accept Williamson's ideas. If the system is essentially prehistoric it is expected to appear so. Slight errors in draftmanship which support this vision by emphasising sinuousness go unnoticed and uncorrected. An error of 10% in the scale can also be unnoticed if we think we are mapping a prehistoric field system. In this context the accurate measurement of intervals between boundaries has not hitherto been very important.

In contrast, the axes of a centuriation are expected to be straight; so it is obvious if a drawing makes them look less so. They are also expected to be a certain fixed distance apart, in the range 702–712m. The accurate measurement of this interval is important evidence for the reality, and even the likely date, of the system. For this we need an accurately scaled map and we soon notice if it is not so.

Some Conclusions

In both these cases the errors could be unnoticed by the author because the theoretical context of the report (i.e. the ideas that were in the author's head before and during writing and drawing) do not identify that particular aspect of reality as having particular importance.

It also seems that the unnoticed errors tend to reinforce the theoretical framework within which the report is written. We see that certain features – a ditch at North Shoebury, straight axes at Dickleburgh – become de-emphasised. Others – consistency of orientation from the Iron Age, a non-Roman module for the interval between major boundaries – may become emphasised. Thus the evidence becomes distorted, both in support of the report's conclusions and to the detriment of rival theories.

This is akin to the phenomenon so effectively described by Stephen Jay Gould in his history of a revolution in Palaeontology. He says:

I have laboured through the details ... because I know no finer illustration of the most important message taught by the history of science: the subtle and inevitable hold that theory exerts upon data and observation. Reality does not speak to us objectively, and no scientist can be free from the constraints of psyche and society. The greatest impediment to scientific innovation is usually a conceptual lock, not a factual lack. (Gould 1990:276)

While agreeing wholeheartedly with him, I wonder if we need to add 'reports' to his 'data and observation'. A final conclusion is that we should continue to allow space for unconventional views. There is some virtue in theories of Roman-British landscape which are not based on the idea that Iron Age forms tended to be perpetuated. Such theories, even if they may never be widely tenable, sometimes allow us to see, and correct, errors which are currently invisible.

Acknowledgements

I must express my sincere thanks to N. Brown for valuable comments used in preparing this paper, and for permission to reproduce his illustrations. I would also like to thank Tom Williamson for tolerating my criticism for many years.

Bibliography

- Chadwick, P.K. 1992. *Borderline: A psychological study of paranoia and delusional thinking*. London: Routledge.
- Chalmers, A.F. 1982. *What is this thing called science?* (Second edition.) Buckingham: Open University Press.
- Courbin, P. 1988. *What is Archaeology?* Chicago: University of Chicago Press.
- Edwards, D.A. and Wade-Martins, P. 1987. *Norfolk from the air*. Norwich: Norfolk Museums Service.
- Fulford, M. 1990. The Landscape of Roman Britain: A Review, *Landscape History*, 12:25–31.
- Gallay, A. 1986. *L'archéologie demain*. Paris: Belfond.
- Gould, S.J. 1990. *Wonderful Life: the Burgess Shale and the Nature of History*. London: Hutchinson Radius.
- Jones, M. 1989. Agriculture in Roman Britain: The Dynamics of Change. In M.Todd (ed.) *Research on Roman Britain: 1960–89*. Britannia Monograph 11. London: Society for the Promotion of Roman Studies, pp.127–134.
- Peterson, J.W.M. 1990. Roman cadastres in Britain: II – Eastern A: signs of a large system in the northern English home counties, *Dialogues d'histoire ancienne*, 16.2:233–272.
- Peterson, J.W.M. 1993. *Computer-aided investigation of ancient cadastres*. Ph.D. Thesis. University of East Anglia.
- Williamson, T.M. 1986. Parish Boundaries and early fields: continuity and discontinuity, *Journal of Historical Geography*, 12.3:241–248.
- Williamson, T.M. 1987. Early Co-axial Field Systems on the East Anglian Boulder Clays, *Proceedings of the Prehistoric Society*, 53:419–431.
- Williamson, T.M. 1993. *The origins of Norfolk*. Manchester: Manchester University Press.
- Wymer, J.J. and Brown, N.R. 1995. *Excavations at North Shoebury: Settlement and economy in south-east Essex 1500BC – AD1500*. East Anglian Archaeology 75. Chelmsford: Essex County Council.