

APPROACHES TO THE INVESTIGATION, ANALYSIS AND DISSEMINATION OF WORK ON ROMANO-BRITISH RURAL SETTLEMENTS AND LANDSCAPES

A REVIEW

PAPER 9: DISCUSSION NOTE ON OPTIONS FOR ADDRESSING THE METHODOLOGICAL ISSUES RAISED BY THE ROMAN RURAL SETTLEMENT PROJECT

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Part I: The Methodological Project and The Issues It Has Raised

1. Background to the RRSP - ALGAO and ClfA Involvement

1.1 One of the undoubted successes of the Roman Rural Settlement Project has been its engagement with the wider archaeological sector, most notably with Local Government Historic Environment Records (HERs). This engagement included an invitation for a Local Government archaeological (ALGAO) representative to sit on the Project's Steering Committee and for that representative (the author) to also provide active liaison with local government archaeological services and HERs and to contribute to the Project's methodological strand.

1.2 As the RRSP and its methodological strand developed, it became clear that the ClfA Standards and Guidance would have a significant role to play in any plans to address the issues which were beginning to be identified. A meeting was therefore arranged between ALGAO, ClfA and the RRSP team in February 2016 to discuss and it was agreed that following the production of the RRSP methodological papers in June 2016 and the methodological conference in September 2016, the author would produce a discussion document on the implications of the Project and the potential options to address the issues raised.

1.3 It should however be emphasised that the document below is a personal view, which although has been shown to ALGAO and ClfA colleagues in advance, does not necessarily reflect their views or the organisations concerned.

2. The importance of RRSP for Future Archaeological Fieldwork and Post Excavation Practice

2.1 The methodological strand of the Project is for the following reasons potentially important in terms of its implications for the quality of the outputs of development-led archaeological investigation:

2.2 It is by far the most systematic and thorough analysis that has so far been undertaken of development-led archaeology and it has included all of the significant published and unpublished literature from archaeological excavation of Roman rural settlements (including small towns and roadside settlements) since the 19th century.

2.3 A key project output has been the detailed database of the c.3600 investigations of Roman rural settlement that have produced significant evidence. These are investigations that by virtue of their scale and/or the quantity and quality of artefacts and environmental evidence are able to achieve a basic level of understanding of the settlement and therefore can contribute to research questions at a regional or national level.

2.4 The database therefore provides a resource to interrogate the results of the Project, a research context for proposed investigations and a resource to compare and contrast with future investigations. This can include for instance factors such as the size of the investigation in relation to the ability to understand the results, and the usefulness of evaluation and survey techniques including trial trenching, test-pitting, geophysics and metal detecting surveys where there are for example comparable soils and/or topography.

2.5 The Project database and its analysis within the published reports and at the regional seminars therefore provides probably the best resource currently available for what can be termed 'operational research' into current and past fieldwork, post excavation and reporting practice within English (and Welsh) archaeology. The term operational research, here used in its most basic form, is useful in this context as it can refer to '*the use of empirical evidence of past activity and from trials to inform and improve future policy and strategies*'. It also serves to distinguish the ways in which the evidence from the RRSP has been used in the methodological strand of the Project from its important and ground-breaking academic research.

2.6 It is important to recognise that the usefulness of the RRSP for operational research also extends beyond the Roman period. Many of the issues mentioned elsewhere in terms of investigation scale, fieldwork techniques and methods of analysis for example are applicable to varying degrees for the later prehistoric periods (from c.1500 BC) and also the post Roman, Anglo Saxon and medieval periods. In this respect, a value of the Project is in the obvious characteristics of Roman rural settlements: their archaeological visibility; the fact that they are very common within the landscape of most of southern and central England; and the durability and quantity of their surviving archaeological evidence. This theoretically enables statistically meaningful (or otherwise convincing) conclusions to be made regarding Roman rural settlement that will have implications for other periods for which the evidence is less visible, but is otherwise comparable.

2.7 The potential of the RRSP to provide evidence to influence archaeological methodologies was clearly recognised by Historic England at the outset of the project and the Methodological sub-project was included as part of the Historic England funding for the wider project. This far-sighted decision has enabled wider sector involvement the Project and the production of the discussion papers which generically provide rapid assessment of the methodological implications of the project.

3. The Nature of the Evidence for Methodological Issues

3.1 The RRSP is based entirely upon the analysis of the reports (published and grey literature) that are the outputs of archaeological investigations. As such, there was not any first-hand observation or analysis of the investigations or the post-excavation stage of Roman rural settlements themselves other than those investigations or research that the authors have undertaken outside of the Project.

3.2 The methodological evidence has therefore been almost entirely obtained from reports, a large proportion of which are 'grey literature'. Any analysis and conclusions regarding methodologies is therefore reliant upon the presence of the relevant data within the published or grey literature report and for this to be recorded reasonably consistently. Whilst some important data such as excavation and evaluation plans are invariably present, most data including reporting of non-invasive surveys and the reporting and illustration of artefacts and environmental data is inconsistent to varying degrees. For instance, it is clear from the methodological discussion papers and personnel communications with the Project team, that direct evidence of the presence/absence of surveys or post excavation analysis is not always reported, especially within grey literature, even though it can sometimes be inferred (Paper 6, 2.2). For some important techniques such as absolute dating, reporting can

assumed to be 100%, but for most this not so and it is probably fair to say that inconsistency of reporting and variability of analysis and presentation has affected the ability of the Project to draw direct conclusions regarding the applicability and usefulness of methodologies. Nonetheless, the evidence of fieldwork and post-excavation methodologies from the RRSP, although indirect and incomplete, is still arguably by far the best available within the sector.

3.3 In contrast, the evidence from the RRSP of methodology in terms of the quality of the reports themselves (both published sources and grey literature) is direct, comprehensive and statistically valid. All reports have been thoroughly examined and issues in terms of consistency and have been documented, especially for key data such as incorrect locational information and the reporting of surveys and some finds such as coins. The conclusions and recommendation of the RRSP regarding the quality of reports are therefore probably the most compelling as they critically affect the ability of the outputs of development-led archaeological investigations to contribute towards regional and national research and are the product of extensive research. Methodological issues concerning reports are also – as will be argued below in Part II – likely to be the most straightforward to address via amendments to existing regulatory mechanisms.

4. The Methodological Issues Raised by the RRSP

4.1 The issues below have been identified and summarised from the discussion papers. They are not comprehensive and have been selected to some extent subjectively, based on a combination of the relative importance of the issue, how common and widespread it is and the extent to which it might be addressed. Many of the important and convincing recommendations in Paper 8 on burial have also not been included as these can hopefully be addressed through specialist guidance. They also range from specific and relative straightforward issues to those which are more generic and are probably dependent upon cultural changes within the sector for progress to be made. The list below has been divided on this basis. Some issues have also been included that were raised by contributors and also during discussion at the methodological conference in September 2016.

4.2 Relatively straightforward issues that are backed up with clear evidence and could be addressed through regulation, voluntary guidance or advice

References to the issues in the RRSP review papers have been noted.

4.2.1 Absence of important information about surveys undertaken and sampling techniques used. Paper 5, 2.2 & 3.2; Paper 6, 2.5; Paper 7, 2.4.

- Insufficient information to determine whether a survey or sampling technique took place, for example metal detecting surveys.
- Important relevant details of surveys or sampling processes are missing that might affect interpretation e.g. mentioning sieve mesh size for environmental sampling.

Possible options to address the issue: Produce advice or guidance on the appropriate level of reporting for all surveys undertaken as part of development-led investigations and evaluations. Also consider additions to ClfA Standards and Guidance to make some level of reporting mandatory. Ditto for technical information on the sampling methodologies used (see below Pt II)

4.2.2 Inaccurate reporting of the geographical location of sites resulting in their miss-location

- Inordinate amount of time is spent by users of grey literature reports in locating sites due to geographical (NGR) errors and poor published maps.

Possible options to address the issue: Advice or guidance on accurate reporting of the location of investigated areas, for example by the use of automated systems. Consider including in ClfA S&G (see below Pt II).

4.2.3 Greater use of C14 dating, especially for burials, pottery and animal bone. Paper 4; Paper 8.

Possible options to address the issue: Advice and training on from Historic England on the potential of current technology and the priorities for selection of dating samples.

4.2.4 Improve the quality of Roman pottery analysis and reporting. Paper 4.

- Significant – and multiple - problems with the ability to use Roman pottery for synthetic research.

Possible options to address the issue: Implement recommendations of Paper 4.

4.2.5 Greater use of metal detector surveys as part of evaluation and mitigation strategies. Paper 5, 2.

- The RRSP has clearly demonstrated the value of systematic metal detector surveys where Roman settlements are known to exist. Their usefulness is especially marked in areas where coins are rare, where such surveys are – understandably perhaps – uncommon.

Possible options to address the issue: consider producing short advice or guidance (from HE/CIfA/ALGAO/FAME) to local authorities and contractors to encourage the specification of metal detector surveys.

4.2.6 Improve the use of digital historic mapping to identify the presence of medieval and post-medieval linear boundaries

- The Fields of Britannia Project and the RRSP have suggested that the dating of linear boundaries investigated on development sites can often be improved by overlying digital historic mapping (e.g. 1st edition OS and Tithe maps)

Possible options to address the issue: use digital, GIS-based historic mapping available from HERs. A small licence fee will usually be payable, but this will in almost all cases be cost effective.

4.2.7. Ensure basic quantification for artefacts, faunal remains and plant macrofossil assemblages. Paper 6, 3.6; Paper 5, 3; Paper 7.

- 10% of reports examined that were published between 2010 and 2015 either lacked any information on classes of finds or had inadequate quantification (Paper 5, 3.1).

Possible options for addressing the issue. Amend CIfA S&G. (see Pt II below for evaluation reports)

4.2.8 Lack of consistency with regard to finds illustration, especially in grey literature

- There is wide variability within grey literature with respect to the presence/absence of illustration for small finds and pottery and also, where there is illustration, of its type and quality. The frequent absence, for instance, of even digital photos of significant coins and small finds limits understanding of the site and imposes constraints upon comparative research.

Possible options to address the issue: introduce standards and guidance (via CIfA S&G) for minimum illustration requirements for small finds specifically in grey literature or accessible from GL via a link (e.g. library of digital photos with appropriate metadata). Also consider guidelines for pottery illustration in GL.

4.3 More difficult and complex issues, some requiring significant cultural changes

4.3.1 The potential of late/post Roman evidence (and also early prehistoric) in topsoil is not being properly addressed. Paper 1, 3.

- A longstanding issue. The relative rarity of negative features and the vulnerability of deposits to erosion means that a relatively high proportion of the evidence can be present in superficial deposits.

- Fieldwalking has largely disappeared as an evaluation technique which means that the potential for evidence in the topsoil pre-determination of planning permission has become more difficult to identify.

Possible options to address the issue: Greater emphasis could be given in DBAs to consider the potential of late/post Roman evidence in topsoil, including from associated walkover surveys; consider specifying topsoil sampling of evaluation trial trenches (e.g. 1m boxes at either end); consider fieldwalking and topsoil sampling for artefacts as a subsidiary mitigation option.

4.3.2 *The difficulty of accessing specialised data that has been analysed and published.* Paper 7, 4.2.

- Most specialist data is publically available only in pdf format. This imposes constraints upon their use by specialists (such as the RRSP team) for comparative studies and regional/national research.

Possible options to address the issue: consider the feasibility of introducing a national protocol for providing access to all published specialist data in standardised accessible formats that can be easily used for active research such as a database or spreadsheet.

4.3.3 *Introduce the recording of excavated soil volume as a standard procedure.* Paper 1, 3.5.

- The ability to undertake inter-site comparisons, especially for artefacts and environmental assemblages, is limited by the lack of data on excavated soil volume for contexts and phases. This can potentially indicate, for instance, the relative abundance of artefacts/animal bone as well as allowing more general inter-site comparisons regarding excavated sample size for classes of features and the sites themselves.

Possible options to address the issue: Undertake a more detailed assessment of the benefits of a widespread adoption of recording excavated soil volume, the options in terms of techniques and the resource implications. Carry out pilot studies.

4.3.4 *Greater use of 'reflexive' strategies for investigation.* Paper 1.

- Instances where local authority staff, contractors, consultant and other stakeholders have worked together constructively to critical solve problems in order to develop strategies for investigation have often proved to be successful and have led to innovative approaches. A key to success in such projects is the willingness to adapt the strategy in a 'reflexive' approach as circumstances change during the investigation. The most notable 'reflexive' project was Heathrow T5, but other smaller projects.

Possible options to address the issue: compile case studies for advocacy.

4.3.5 *Size matters: addressing the bias of development and investigation size as a factor in understanding sites.*

Analysis of the area excavated of Roman Rural Settlement in England and Wales by the Project has revealed a clear (but not unexpected) relationship between the size of the area and the level of understanding of the settlement in terms of morphology with areas greater than 0.5 having a higher rate of understanding in terms of being able to classify even within the very broad project system of classifying farmsteads. It has also revealed clear national-scale patterns in the average area of excavations: the average size of the north and west (c.40% of England and Wales) is 0.5-6ha compared with 2-3 times higher (between 1-1.5ha) for the rest of England and Wales in south and east (including north east).

The reasons for the differences are probably related to the average size of development, but there may also be other factors in play as well. However, it is clear that the ability of the average sized excavation to provide an understanding of Roman rural settlement is lower in the north and west than the south and east. If this factor is added the generally lower level of surviving material culture from Roman rural settlements in the north and west, then the

disparity in understanding between average excavations in the two sub-national zones is potentially very high. There is therefore a case for considering opportunities provided by large scale excavation in the north and west for higher levels of sampling and/or a wider range of survey techniques such as metal detecting survey and fieldwalking.

Possible options to address the issue: consider the case for targeting large-scale excavations within reviews of regional research frameworks.

5. The regulatory processes and options for improvement, a summary

5.1 The formal regulation in GB (England, Wales and Scotland) of practice with respect to undesignated archaeology that is undertaken via the planning system comprises two separate but complimentary processes:

- the implementation of planning legislation, policy (national and local), national guidance and national good practice advice that relates to undesignated archaeology;
- professional codes of conduct and standards and guidance of the Chartered Institute for Archaeologists that govern the activities of its individual members and registered organisations that are involved in the protection and conservation of undesignated archaeology.

5.2 Nationally designated archaeology (Scheduled Ancient Monuments) are controlled by the 1979 Ancient Monuments Act, for which DCMS is the decision making body – advised by Historic England. Historic England also have an important role in identifying nationally important undesignated archaeology, including where such sites are discovered on development sites.

5.3 Methodological issues can also be successfully addressed voluntarily by means, for instance of education, advice notes, examples of good practice and agreements between organisations, and it is likely that over the long-term many improvements (including those in category 4.3 above) will occur via these routes – and others. However, addressing issues and improving the quality of practice and outcomes for undesignated archaeology via formal regulation can only realistically be achieved via reference to national planning policy, guidance or advice, or through ClfA professional Code of Conduct and Standards and Guidance.

5.4 However, if change is required to effect improvements, the ClfA Standards and Guidance is probably the only realistic option via the formal regulatory route. This is because the combination of the narrow, archaeologically specific nature of the methodological issues raised by the RRSP and the general difficulty currently of achieving any change to national government planning documentation in England would rule out this option.

5.5 Another potential option could be via Historic England advice that is linked to their own Good Practice Advice notes and is also referenced to ClfA S&G as appropriate. This could be the best option for the more technically complex (e.g. encouraging absolute dating) and ‘culturally dependent’ issues mentioned above in 4.3.

Part II: The Case for Amending CfA Standards and Guidance for Evaluation (and Watching Brief) Reports

1. Introduction

1.1 As is mentioned above in Pt I. 3.3, the most direct and compelling evidence from the RRSP regarding methodological issues relates to the quality of reports. In addition to the suggestions for improvement that have been made above, a potential means of addressing many of the methodological issues, especially those in category of relatively straightforward issues (above Pt I. 4.2) would be to improve the consistency and quality of grey literature reports.

1.2 Moreover, a means of potentially making relatively rapid progress on this issue could be to amend and improve existing regulation for two important categories of grey literature reports:

- archaeological evaluations in advance of full excavation
- watching brief as a mitigation for development.

2. Grey Literature and the Role of Evaluation Reports

2.1 Before making the case for regulation and how it might be implemented, it is helpful to list the main categories within the broad scope of the term 'grey literature' and to consider the important role of evaluation reports within the current planning process.

2.2 Types of grey literature:

- Data from specialist reports published on the web
- Post-Excavation Assessment reports (PXAs) and Updated Project Designs (UPDs)
- Final or near publication reports that are given to the HER and are not proceeded to full publication
- Publication drafts: recent and historic
- Desk-Based Assessment (DBAs)
- Environmental Impact Assessment reports (EIAs)
- Geophysical survey reports (standalone or within other reports)
- Geotechnical reports
- Reports of archaeological investigations (evaluation, watching-brief), to address planning conditions, pre-determination requests by LPA or independently commissioned pre-application by the developer/landowner

2.3 The purpose of and the distinctive characteristics of evaluation reports

2.3.1 Evaluation reports constitute a relatively distinct type of grey literature. They are a largely post PPG 16 phenomena, developed mainly in response to the then new policy support for the protection of archaeology as a material planning consideration and for evaluation to be undertaken before planning permission is decided. They are also arguably the most important output of the planning and archaeology process: an essential requirement for planners, developers and archaeologists to assess the likely impact of development where the conservation or protection of archaeology is a planning issue; they also provide an important source of archaeological information about sites; and with post excavation assessments, are crucial in determining the archaeological outcomes of development projects.

2.3.2 A defining characteristic of almost all pre-determination evaluation reports is that in addition to archaeological objectives and questions, they also address important planning questions and objectives some of which can influence the planning decision. These can for instance include: 'how significant is the archaeology, and is there any nationally important

remains present that could be a reason for refusal?' Or another type of question from the developer: 'will its cost make the development less viable?'

2.3.3 Post-determination archaeological evaluations are also influential for developments in terms of questions related to the significance of the archaeological interest and its consequences for the cost of the development and its timetable.

3. Options for Changes to ClfA Standards and Guidance

3.1 Archaeological evaluation and watching briefs are currently regulated by separate ClfA Standards and Guidance. Both S&G are widely regarded as successful in defining the archaeological processes concerned and in providing the necessary S&G for the fieldwork elements and post-excavation/reporting. However, it is argued here that the evidence from the RRSP provides a case for amending and expanding the aspects of the S&G for evaluation that relate to reporting. The relevant section is 3.4.11 which refers to the specific requirements of the report. It could be feasible, for instance, to add and amend text as appropriate to include requirements to:

- list all of the survey and investigation methodologies that have taken place;
- include details of (or provide a link to) the technical aspects of any excavation or post-excavation sampling for artefacts or environment evidence that has taken place;
- provide basic quantification of all classes of artefact and environmental evidence.
- provide photographs (in the report or as a link) of significant small finds, coins and key diagnostic examples of pottery;
- ensure that locational information including address and NGR is accurate.
- unless there is a good reason no to do so (size or location of the site or lack of availability) overly available 19th century historic mapping on evaluation site plans.

4. The Potential Benefits of Further Regulation of Evaluation (and Watching Brief) Reports

4.1 The ease of monitoring, enforcement and assessing the impact of changes made

4.1.1 Monitoring, and if necessary enforcing, compliance with requirements specified in a WSI as part of an evaluation is much quicker and easier for an archaeological planning advisor (on behalf of the LPA) to do from a report alone, if this is possible, than it is by visiting the evaluation in the field at the post-excavation stage. Therefore, any new or additional regulations or guidance that can be monitored via a report should have a greater likelihood of being monitored and/or enforced. They are also less likely to add to the burden of local authority services, especially if the regulations are easily enforceable.

4.1.2 Several of the methodological quality measure identified by the RRSP (see 3 above) potentially capable of being specified within a WSI and if necessary be monitored as part of the content of the evaluation report. Other measures such as recording of soil volume, topsoil sampling and metal detector survey could also theoretically be monitored via the content of the evaluation report if monitoring of the evaluation in the field was not possible.

4.1.3 Additional regulation with respect to the content of evaluation reports should also mean that it will be possible to assess the impact of any changes on the quality of reports more readily than would be the case with archaeological fieldwork and post excavation analysis.

4.2 Improving the quality and accessibility could be beneficial more widely for archaeology within the planning and development system

4.2.1 It has been mentioned above that pre-determination evaluation reports are often important to developers and planners as well as to archaeologists. Indeed they are the archaeological reports most likely to be read by planners, developers and also by local

people and communities who are interested in the impact that archaeology will have on a proposed development. Evaluation reports are therefore the route through which most non-archaeological professionals and local communities can engage with archaeology as a written medium. The quality and accessibility of evaluation reports generally is therefore arguably an important reputational issue for archaeology, and the addressing of the quality issue identified by the RRSP such as locational accuracy, mentioning where surveys have taken place, the presence and/or quality of quantification and illustrations, and the benefits of overlying archaeological trench plans with historical mapping, are issues that need to be addressed.

4.3 Improving the quality of evaluation reports and watching-brief reports could improve archaeological knowledge.

4.3.1 *Evaluation Reports.* A significant minority of pre-determination archaeological evaluations (c. 5-20%) are not followed by further investigation for up to 5-10 years - if ever - a proportion that is relatively higher for large developments. Such reports are often archaeologically valuable as they often cover very large areas and contain significant evidence, including of newly discovered sites. The quality of the evidence within the report is therefore potentially a very important factor in their value for research and informing advice on other planning proposals. Improving the issues identified by the RRSP could therefore have a positive impact on the archaeological knowledge of such evaluations in the future.

4.3.2 *Watching-Brief Reports.* Grey literature reports of archaeological watching-briefs undertaken as archaeological mitigation are often regarded as a poor relation/the least important grey literature reports. However, such reports frequently provide the only evidence for archaeological sites/features on a development site, and only a small percentage of watching-briefs that reveal important archaeology (which can be the only evidence of the site), are published or go through the formal process of PXA. The quality of the grey literature report is therefore often important for understanding the site in perpetuity.

4.4 An enhancement of the status of evaluation reports

4.4.1 Currently, evaluation reports are included in the broad, relatively amorphous category of 'grey literature' (see above 2.2). Their relatively special status in terms of archaeological fieldwork is recognised by the production of the ClfA S&G, but the key output which is the evaluation report itself does not have a specific identity and it is probably fair to state that the overall quality of these reports is poor in comparison with peer-reviewed, published reports, especially with respect to post-excavation analysis and reporting.

4.4.2 The importance of evaluation reports for the current planning system has been mentioned above. In addition, evaluation reports could be a showcase for the successful application of new and innovative techniques that have direct implication for planning and development. A recognition of the special and unique status and importance of evaluation reports – and as part of this implementing measures to improve their quality - could therefore be helpful for the reputation of development-led archaeology both within and outside of the sector.