

Archaeological Project Manager: Critique of Key Reference and Data Resources

Project managers have a variety of responsibilities which include the tender, design, and delivery of projects in accordance with business aims and in compliance with the multitude of regional, national and professional standards. A range of key reference and data sources are essential to planning and executing well-informed programmes of investigation. To limit the number of key reference and data resources considered, given their abundance, the focus is restricted to those routinely used in the planning and designing of archaeological investigations. As such, reference and data resources including health and safety legislation, the National Planning Policy Framework (NPPF) and planning practice guidance, and local plans are not considered within this essay. Specifically, the accessibility, currency, reliability and relevance of the MoRPHE project managers guide, the infrastructure of standards and guidance, the multitude of research frameworks, and historic environment records will be critiqued.

MoRPHE Project Managers' Guide

The *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide* (Historic England 2015a), and the associated planning notes (e.g. Historic England 2008), are an integral reference source to the project manager. By offering a robust procedural model tailored to the unique challenges of the historic environment and specific guidance on the structure of project designs, to be employed in combination with professional standards, MoRPHE supports project managers to produce well-structured research designs that are well-aligned with research and business aims (Fig.1). Although many of the associated planning notes are now defunct, with the only project planning note listed on the Historic England website being that focused on aerial reconnaissance (Historic England 2015b), the MoRPHE guide is easily and freely accessible online.

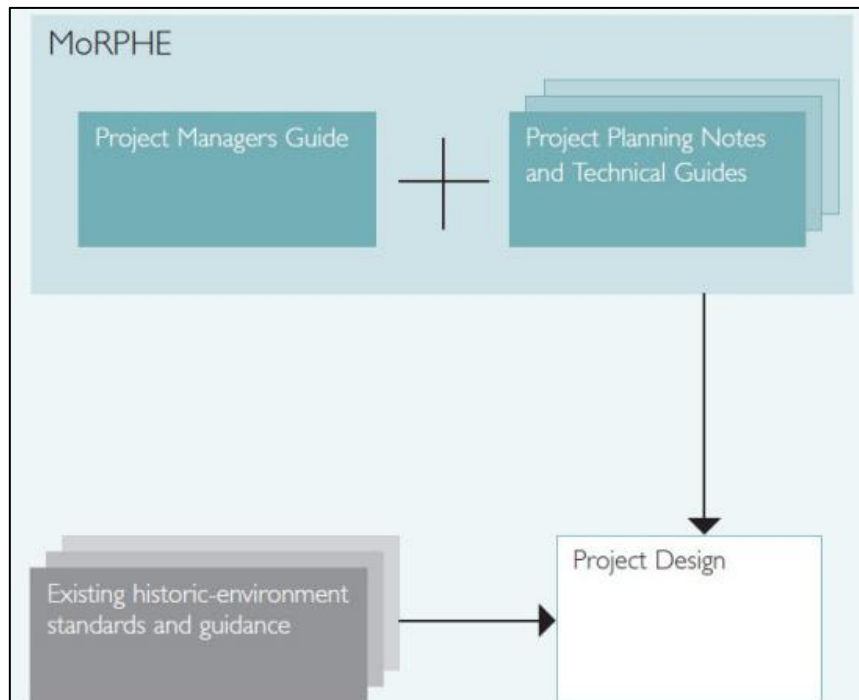


Fig.1: A schematic of the MoRPHE model for the management of historic environment research.

Despite the utility of MoRPHE guidance, the proffered MoRPHE structure is arguably not always the best basis to design a project. The comprehensive guide is perhaps too prescriptive and debatably promotes a one-size-fits-all approach, which may not be appropriate for all research projects in the

historic environment. Indeed, a small archaeological watching brief – the monitoring of a small residential extension in an area of low archaeological potential, for example – does not require the exhaustive detail required to be in compliance with MoRPHE. To produce a MoRPHE compliant project design in this example – with all details on the business case, interfaces, communication, project reviews, and risk log information – is disproportionate, time-consuming, and an overly expensive endeavour. This may be because, as noted by Heaton (2014: 257), MoRPHE is derived from ‘government procurement project management systems’ that are not entirely compatible with the explicitly commercial endeavours of ‘threat-led research’.

Nevertheless, perhaps the most significant criticism of MoRPHE is the extent to which its recommendations are employed in practice. Many written schemes of investigation cite MoRPHE documentation and claim that the document is in compliance with the guidance but, perhaps due to the disproportionality outlined above, do not include significant information specified for in the comprehensive guidelines for the compilation of project designs (e.g. Cotswold Archaeology 2016; Wardell Armstrong 2017; RPS 2021). Details about the ‘business case’, ‘interfaces’, ‘communications’, ‘project review’, ‘risk log’ and ‘budget’ are typically not included in project designs in developer-funded archaeology. Just as there were suspicions about the utilisation of MAP2 guidelines, despite the value of the MoRPHE guidelines as a reference source, there remains a concern that a large number of developer-led archaeological projects are managed through an *ad hoc* and reactive process (Everill 2009: 16). Cumperpatch and Roberts (2012: 26) express similar concerns and state that, “unfortunately, it is often more honored in the breach than in the observance and effective enforcement of its principles is rare”.

In summary, as with any procedural guideline, the effectiveness of MoRPHE ultimately depends on how well it is implemented and adapted to meet the specific needs and context of each project.

Standards and Guidance

MoRPHE is only intended to cover the project management aspects of archaeological investigations and it is not within its scope to provide exhaustive guidance on specific procedures and techniques – this is the role of the myriad of complementary standards and guidance documents. The standards and guidance form a relatively robust infrastructure of agreed professional standards for the range of types of work and their products, which support and inform professional judgements (Southport Group 2010; Nixon 2017). This infrastructure is formed by a range of standards and guidance documents published by CifA (e.g. 2020a; 2020b) and Historic England (e.g. 2015c; 2023), and numerous professional practice papers (e.g. Hodgson 2001; Brickley and Jacqueline 2004). Although MoRPHE is the most widely employed guidance, planning archaeologists often publish specific regional standards to which written schemes of investigation and projects have to adhere (e.g. Robertson et al 2018). These documents are intended to enable practitioners to design and conduct high-quality archaeological investigations using well-informed and established methodological processes.

Part of the vision for ensuring quality proffered by the seminal Southport review was, in addition to archaeology being conducted by accredited experts, that the standards and guidance that would inform their work would be readily available (Southport Group 2010). Today, access to the plethora of standards and guidance documents and professional practice papers is relatively simple, with the documents largely accessible as PDF downloads on institutional websites; however, it is noteworthy that some professional practice papers are not freely accessible to non-members of CifA (see CifA 2023). A perhaps more pertinent and persistent critique of the infrastructure of standards and guidance, however, is the potential for the guidance to be out-of-date and somewhat functionally

obsolete. As noted in the Southport report (Southport Group 2010), and subsequent projects and reviews that highlighted issues with standards generally and from the stand-point of specific research themes (Nixon 2017; Bryant 2016; Cattermole 2017; Wills 2018), many standards and guidance documents require radical revisions. Indeed, without continuous review and update, many standards and guidance have become unreliable and irrelevant (Parker-Wooding 2019). For example, despite the evident advances in the specialism during the intervening period (see Dobie 2019) – particularly in the field of computer-aided modelling – the most recent professional practice paper on reconstruction drawing dates to 2001 (Hodgson 2001). Likewise, despite considerable developments in the sector in recent years (see Marston 2021) – including advances related to the extraction of DNA for plant remains from a range of burial environments – the last palaeoenvironmental professional practice paper was last published in 2011 (Campbell *et al* 2011). Moreover, the lack of specific ClfA standard and guidance specific to environmental archaeology is a notable and bemoaned absence (Howard 2019). In addition to many standards and guidance documents being out-of-date, arguably, the production of guides for emerging methods appear to be somewhat slow; indeed, despite the widespread use of drones, professional practice papers have not been published and discussions on standards and procedures are apparently in their relative infancy (Campana 2017).

A major issue often proffered about this key resource, as outlined in the Southport report, are the limitations of self-regulation and the extent to which organisations and individuals adhere and commit to the published standards and guidance (Southport Group 2010). There is an apparent reluctance to commit to professional standards and guidance, and it has been noted that organisations and individuals have not put into practice particular improvements made to ClfA standards and guidance following the Southport review (Nixon 2017: 8-9). Indeed, a survey carried out in 2019 found that less than half of participating ClfA members referred to the standards and guidance frequently, while 13% responded that they had only referred to them once, not at all, or were not sure what the resource was (Parker-Wooding 2019). The lack of implementation has been suggested to be the result of a lack of training and familiarisation across organisations, and because there is a ‘reluctance to specify the use of accredited expertise’ due to concerns of being anti-competition (*ibid.* 13-14). One could also argue that ClfA is somewhat toothless in upholding its members to using the standards (Greary 2020: 20), despite the *Code of Conduct* (ClfA 2022: 3) stating that the written standards and guidance for specific areas of archaeological work indicate how a member would best comply with the code. Regardless of their wider currency, it should be the responsibility of the project manager to be aware of and use the relevant standards and guidance in their work – while evaluating whether the information they contain is outdated and obsolete – to ensure that the projects they design and implement are well-informed and produce high-quality results.

Historic Environment Records

As the principal means through which archaeological information is accessed and disseminated, the historic environment record (HER) represents a key data resource. The intention of the HER is to store and provide access, in addition to information on archaeological investigations, to systematically organised and georeferenced information about all aspects of our surroundings that have been anthropogenically influenced, formed, or built from prehistory to recent history (ALGAO 2002; Historic England 2019). The textual and georeferenced data made accessible via the HER is regularly used as a preliminary source of information to inform heritage management processes, archaeological fieldwork, and non-intrusive research into the historic environment (ADS 2023). Without the vital data stored within the HER data it would be extremely challenging to produce an appropriately contextualised project design that could deliver an informed programme of archaeological research, nor would it be possible to produce an erudite archaeological report or publication without using the

data as a preliminary source of information. The significance of this key data resource has given rise to significant concerns attesting to the fundamentals of all research disciplines: accessibility, consistency, accuracy, representativity, and completeness.

The majority of HER datasets are freely viewable through online portals such as Heritage Gateway or through regionally hosted websites such as the Norfolk Heritage Explorer (Illsley 2019: 126-129); however, these online portals are solely intended for non-commercial purposes, and are specifically for research and study purposes only. For the commercial searches typical of developer-funded archaeology, HER data is supplied with a service charge following a search request. The cost of the data for commercial projects is relatively minimal when considering the overall cost of archaeological works and modern developments; nonetheless, waiting times to receive the data can be lengthy and vary widely between authorities (*ibid*: 126). Data is typically stored and provided as georeferenced shapefiles, which are compatible with GIS software widely used in commercial archaeology, and are accompanied by associated textual information.

Illsley (2019), in their effort to problematise HER databases in England and Sweden, identify that there is a significant 'fragmentation of standards'; a lack of consistency and standardisation in the way that heritage data is recorded at the level of the individual, institution and region. When representing the historic environment it is key to reflect the multitude of nuances and specialisms relevant to each asset; however, this may not always be compatible with the differing specialisms and levels of understanding of those who compile the records (*ibid*: 123). Indeed, this can lead to data being omitted from a record that to a 'generalist' is unimportant but to a specialist is highly significant. On a regional scale – as a result of the interests of individual practitioners or the inclusion of the results of research projects, like those funded by Historic England – particular specialisms are better represented in certain areas. For example, unlike most regional databases, the Worcestershire HER and Kent HER store spatial data that identifies areas that hold the potential for Palaeolithic remains (Wenban-Smith and Cuming 2015; Russel *et al* 2018).

On a national scale, considerable attempts have been made to minimise variability in recording standards across the local authorities that hold the HER data; in particular, through the MIDAS data standard, which provides definitions to increase the commonality and compatibility of the wider dataset (Lee 2005). While MIDAS data standard is inflexible and does not allow for the recording of data that falls outside of the established categories, this is an inevitable result of the standardisation and classification of the myriad of archaeological subjects. A significant way in which the lack of standardisation limits the convenience and usability of the HER, is the classification of periods across region; a pertinent issue when investigating a site that straddles regional or national boundaries. Regional periodisation standards are often variable and reflect local conditions (Illsley 2019). Although archaeologies do not always develop coevally and the regional databases attempt to express their specific regional evolution, this can stifle the comparability of datasets.

Standardisation and consistency are persistent issues with HER databases, but it is perhaps their incompleteness that is of greater significance. While many local authorities have implemented ongoing programs to update their databases, backlogs are well-documented. Indeed, according to recent research conducted by Historic England (2022), 91% of the eighty-three HERs surveyed had a backlog. An audit of the Wiltshire HER in 2010 estimated that it would take a well-resourced team three years to clear their extensive backlog (MacLean 2010: 66; Henry 2018: 231), while a study of excavations related to quarrying in Derbyshire found that 37% of such investigations were not listed within the HER (Baker and May 2007; Evans 2013). Beyond a backlog of records, it has also been noted that research undertaken within the academic sector are overwhelmingly underrepresented in HER databases (Evans and Hardman 2010). In addition to the potential for missed opportunities for

heritage management if non-designated assets are not listed in the database, the incompleteness of the HER database casts doubt on its reliability and the gaps in knowledge that it represents makes it difficult to design and implement properly informed archaeological research projects.

As outlined above, in utilising HERs, one must not incorrectly perceive it to be an entirely reliable and authoritative database of archaeological information; indeed, 84.4% of sites identified during an extensive lidar survey had not been noted on the local HER (Challis *et al* 2008: 1058). HER databases should be understood as an incomplete source of georeferenced data that provides a basis for more comprehensive research.

Research Frameworks

Another key reference source utilised in the design and implementation of investigations, are the range of archaeological research frameworks. There are several broad types of research framework: the national framework (e.g. RFN 2023a; RFN 2023b), the regional framework (e.g. RFN 2023c; RFN 2023d), the period-based framework (e.g. James and Millett 2001; Haselgrove *et al* 2001; RFN 2023e), the thematic framework (e.g. RFN 2023f; Newman *et al* 2016) and the site-type or site specific framework (e.g. RFN 2023g; RFN 2023h). Today, following a strategic review into existing frameworks by Olivier (1996), research typically comprise three core components. A *resource assessment* that is an overview of the current state of archaeological knowledge in that region or period; a *research agenda* that highlights major gaps in that archaeological knowledge and potential subjects that can contribute to important research questions; and a *research strategy* that forms a prioritised list of research objectives that are informed by the agenda (Belford 2020). Together, these components are intended to act as an ‘authoritative reference tool’ that provides a high-level structure to assist in the planning and execution of high-quality, well-informed, and relevant research (Darvil 2007; Cooper and Clay 2023). Indeed, in addition to providing key contextual information, research frameworks are a key resource that helps users to define research questions and strategies for inclusion in project designs to be submitted to research funding bodies or as part of developer-led excavations. Research frameworks, given their significance outlined above, have been the subject of considerable review (Southport Group 2010; Pye Tait 2014). The aforementioned reviews have recently resulted in considerable developments in the way in which research frameworks are disseminated and utilised – changes that have arguably improved their accessibility, currency, reliability and relevance.

According to a review conducted by Pye Tait (2014:42-43), which surveyed the range of audiences using archaeological research frameworks, 20% of participants encountered challenges in locating frameworks and that 33% of respondents found it difficult to find the required information within frameworks. At the time of the Pye Tait review, research frameworks were accessible on purpose-built websites, as PDF files, and as potentially inaccessible printed publications. Since the review – which called for the pursuit of a dynamic and interactive web-based system for hosting archaeological frameworks – the Research Framework Network website has been established. The Research Framework Network (RFN) website, which hosts useful links to all the range of framework types and PDF documents of preceding frameworks, is extremely accessible and provides a simple guide on how to use and contribute to the developing frameworks (RFN 2023i). Although RFN is successful in the process of centralising access to the range of research frameworks, many of the more specialised frameworks are not included. Beyond the ability to source research frameworks, the language utilised on the pages can be somewhat technical and specialist with few ‘plain English’ summaries included; nevertheless, this should not be seen as a limitation of the resource to archaeological project manager, who should be relatively well-versed in the vocabulary used.

In addition to accessibility, the currency of some research frameworks has been called into question; indeed, the review of a printed volume stated that it “suffers from a significant lack of recent analysis and updated revisions of the archaeological evidence” (Grove and Croft 2012). It has been noted that the updating of regional frameworks is inconsistent, and that period-based frameworks and thematic frameworks are even more sporadically updated (Pye Tait 2014). The Pye Tait (2014: 50-52) survey highlighted how and why research frameworks lacked currency: the typical PDF documents were immutable; no structural mechanism existed to feed new findings into the resource assessment; and that the development of research frameworks was a time-consuming and lengthy process, which meant that some components would have been out-of-date by the time they were published. With the establishment of the RFN website, efforts have been made to address these criticisms: the frameworks are intended to be interactive and ‘living’ documents; there is a mechanism of input established via OASIS; and the contributor-driven format aims to stop the documents from becoming quickly irrelevant. Although the interactive ‘wiki’ approach has the potential to make frameworks more iterative, some of the regional frameworks do not have this facility and the extent to which the frameworks are actively being interacted with is unclear –anecdotally, many frameworks do not appear to have been widely commented on. Moreover, despite the establishment of RFN, parts of the West Yorkshire framework have not been updated since 2005 (Sanderson and Wrathmell 2005). While the RFN website has made significant strides in improving the currency of regional frameworks, many specialist and period-based frameworks remain absent from the site – with that for the south-east also being conspicuously absent – and have not been updated in over a decade. In light of the copious amount of archaeological research carried out in recent times, a considerable number of research frameworks have become obsolete and irrelevant. These frameworks have become historical records in their own right.

A notable criticism of regional research frameworks is that, because of convenience rather than archaeological coherence, regional frameworks are divided along the lines of modern administrative boundaries (Mullin 2012; Belford 2020). While the current system is intended to advance cross-border and inter-sectoral communication (Olivier 1996), the frameworks are inevitably hampered by their relatively rigid structure – particularly with regards to prehistoric archaeologies. Belford (2020) uses the example of the research agenda for the Neolithic and early Bronze Age in Wales (Pannet 2007) to demonstrate the limitations of this model. Within the agenda it was put forward that further research was required in mid-Wales in order to ascertain whether the eastern region of Wales had greater ties to England during the Neolithic era, despite the fact that neither England nor Wales existed as discrete geographical entities during this period. Borders and the regions that they define are socially and historically ‘constructed’, dynamically evolving throughout time and space; thus, it is impossible for the research frameworks to entirely encapsulate the nuances of historical development through spatially defined subjects. As such, users should question the relevance of reliability or relevance of information available through the regional research frameworks; they may not always offer a coherent archaeological understanding of the wider context of a site, when sometimes arbitrary geographical divisions define how the wider region is understood and research questions framed.

A wide variation in completeness and detail has also been noted in reviews of research frameworks (Southport Group 2010; Pye Tait 2014; Belford 2020) – some resource assessments are exhaustive and include valuable specialist information, while others are lacking in detail (*cf.* RFN 2023j; RFN 2023k). Palaeoenvironmental evidence, for example, is treated differently within differing regional frameworks and demonstrate this inconsistency. The framework for the south-west of England provides a comprehensive and convenient resource assessment and agenda for environmental analysis for each period (RFN 2023l). In contrast, comparably brief palaeoenvironmental sections are only included for selected periods in many regional frameworks; the north-west of England framework

includes a short resource assessment solely for the prehistoric to early medieval period, while the east of England framework only includes a small section in relation to the Neolithic period. This suggests that many research frameworks may lack the requisite detail, for example, to assist in designing a well-informed and regionally relevant investigation into a site on a peatland where palaeoenvironmental could provide insight into landscape change. This calls into question the relevance and usefulness of some regional frameworks to a project manager attempting to implement and design a project that may involve considerable specialist input.

Conclusions

The analysed key reference and data sources have considerable shortcomings in terms of accessibility, currency, reliability, and relevance. The MoRPHE guide, an indispensable procedural guide for the management of research projects in the historic environment, is the subject of understandable concerns about adherence to its procedure and is arguable inapplicable to smaller developer-funded research projects. Likewise, standards and guidance documents serve as key reference sources for practitioners for ensuring the implementation of well-informed and well-established methodological processes, but their oftentimes dated information should be evaluated for obsolescence. Historic Environment Records are also integral to accessing the archaeological information key to contextualising archaeological project designs; nevertheless, the fragmented database should be understood not as an entirely authoritative source, but as an incomplete and inconsistent repository of georeferenced information that serves as a foundation for well-informed archaeological research. While the critiques of the abovementioned sources are relatively long-lived and persistent, in recent years considerable changes have been made to research frameworks; integral documents that provide context, define research questions, and aid in the planning and execution of high-quality, novel research. Although research frameworks have witnessed notable improvements in accessibility, this crucial resource continues to face significant challenges in terms of currency and consistency, compounded by the inherent difficulties arising from classification of arguably arbitrary geographical units and archaeological periods. In conclusion, while the reference and data sources discussed in this paper have their limitations, they remain essential resources for archaeological project managers, who must be diligent in evaluating their accuracy and relevance to ensure that they are conducting high-quality archaeological research.

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