

Assignment 3: Contextualise and Synthesise Data and Results

Using a current archaeological research framework (regional or thematic), contextualise and synthesise data and results from an agreed archaeological project

The project used for this assignment will be the park street mitigation and will look primarily at two research frameworks: the east Anglian regional research framework which constitutes the regional framework used for the WSI for the project and the 2008 archaeometallurgy research framework (Bayley, 2008) which was not used for the project. The aim will be to draw upon the finds based section of the archaeometallurgy research framework rather than the framework as a whole which also incorporates research into other aspects of archaeometallurgy such as how landscape was formed and manipulated to benefit metalworking industry and how metallurgical practices were undertaken on sites through the remains of features such as blooms, furnaces, slag pits and more.

For the purposes of synthesising data, use of the archaeometallurgical framework is important as discussion of metalworking finds is often relegated to small sections in regional frameworks, with the East of England regional research framework this is tied in with sub sections on industrial activity, disappointingly the reference to locating finds via metal detecting only appears to cover those found by amateur detectorists which are likely to be unstratified hoards rather than metalwork recovered from secure contexts on archaeological excavations. As discussed in the first assignment this is likely to improve over time as more commercial sites employ metal detecting as a viable strategy for finds recovery.

Knowledge of metalwork is a central theme in the development of most societies and cultures which makes it a crucial part of understanding our past and so is considered a significant body of knowledge (Bayley, 2008, p. 1). This has wider reaching implications for the majority of sites as archaeometallurgy and its technical and functional processes must be understood within the wider socio-economic contexts. (Historic England, 2015, p. 5). From the perspective of the general public, material that falls under 'treasure' status inevitably attracts a large amount of attention from assorted media and as such our knowledge of metalwork is of key importance archaeologically.

Metalworking material recovered from sites can sometimes tell us information as to the types of activity being undertaken. For example the presence of hobnails for boots, pilum and fragments of lorica segmentata would be heavily indicative of a roman military presence whereas the discovery of an agricultural billhook, pitchfork fragments and iron butchery implements might hint towards more of an arable / pastoral farming environment in a rural setting. Unfortunately much of the material recovered from Park Street doesn't fall in the direction of any specific and clear site usage with material recovered from a variety of domestic uses from coins and nails to hinges and hooks though a lot of the dateable material does lean more heavily towards a Roman date of which there are still many unresolved questions that could contribute to our understanding of the period and its aftermath. (Bayley, 2008, p. 31)

Unfortunately the regional research framework cited for Park Street makes only a sparse reference to both metallurgical contexts and finds as a crucial point of research (and even then, mostly only in a Bronze Age / Early Iron Age chronology), most mentions of regionally significant finds are those found via metal detecting and as such are typically topsoil finds which little to no stratified context.

(Medlycott, 2011, p. P72) This makes the regional research framework, from the perspective of investigating metal finds and metalworking, difficult to contextualize the information.

Fortunately though the archaeometallurgical research framework does provide some advice that specifically covers the relevant chronological periods from which metal finds were recovered from Park Street:

Multi-period

- Metalworking techniques and practice in Britain should be looked at in relation to continental Europe as well as within the British Isles to avoid assumption of pan-British production methods which are unlikely to have existed persistently throughout time. Both differences and similarities are important and influence on production of artefacts should be examined critically.

Roman

- Investigate whether different objects or different methods of manufacture utilised specific alloys and if the alloys used were influenced by the date or place of manufacture.
- Identify where raw materials for making Roman copper alloys came from
- For non-romanised parts of the British isles investigate regional patterns of copper alloy use through time including any changes.

Early Medieval

- Investigate the nature of primary metal production in post-Roman societies
- Investigate the nature and production of steel in the early medieval period

High Medieval

- Find evidence of copper production and use
- Investigate medieval steel if it came from bloomeries or other technologies such as earlier furnaces (Bayley, 2008, p. 68)

With the exception of x-radiography which is already becoming the standard procedure for a large amount of metalworking assemblages, further analysis of the metal material from Park Street is likely to prove fruitless in answering any of the relevant thematic framework questions or even any of the regional framework questions. Elemental analysis could prove useful in identifying the source material of copper for the roman coins recovered from site which would possibly answer one of the thematic areas for roman metalworking though this runs the risk of potential 'contamination' of artefacts in the event that roman coins are produced using melted down or refined copper material rather than ore which has not gone through the same processes.

Microscopy is unlikely to be of any use due to its main function being to identify micro-structures within ferrous metals so as to aid in identification of material that may have been cast as opposed to being forged. Whilst this would be useful in answering the questions pertaining to steel production for the post-Roman periods the relevant material from Park Street is unstratified or consists of nails which functionally contribute little to the research questions. (Bayley, 2008, p. 33)

Although the metalwork finds themselves offer very little in terms of research value, there is some evidence from the features on site of a limited amount of low level Roman metalwork activity from

the 2nd century AD onwards with some burnt industrial waste found in pits (specifically (162087)) possibly indicative of remnants of smithing hearths. (Scholma-Mason, 2023, p. 115) its possible that further research should be undertaken on this slag / waste residue to investigate what metalworking was being undertaken on site and to see if its possible to identify how far away the material is being brought in for working or if it is locally sourced.

Ultimately there is very little that can be synthesised from these results. The material present does not fit into many of the research aims of either the regional research framework or that of an archaeometallurgical framework by virtue of the material either being unstratified, simple material that would tell us little even subject to metallurgical analysis such as nails, or what little remains not falling into either category would be far too small a simple size to draw any reasonable conclusions from.

To echo what was stated in the first of these assignments, this is an issue that needs resolved at a base methodological level by ensuring that material recovered is from sealed and stratified contexts so that information can actually be recovered and the material can be tied in to the relevant research frameworks and contribute to our understanding of sites.

Bibliography

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