

Book reviews

The late Roman gold and silver coins from the Hoxne treasure by P S W Guest. *British Museum Press, London, 2005, 282x220mm, 160pp, many figs and tables, index, ISBN 0-7141-1810-9, £60-00 h/b.*

Hoard of coins always represent an invaluable source of information about the coinage and economy of a period. This is particularly true here. The Hoxne Treasure is well known, primarily for the collection of gold jewellery and table ware that were found alongside the 15,234 coins buried in a large wooden chest. The treasure was found in Suffolk in November 1992 by a metal detectorist and his exemplary behaviour in reporting the find immediately meant that its full context was recorded.

The book is nicely produced, and this is reflected in the price. It is well illustrated; particularly welcome are the 23 black and white plates of the main coin types as well as lower resolution scanning electron micrographs, illustrations of comparative objects and some of the other items in the treasure. Also included is a location map and a series of line drawings illustrating aspects of the coin typology.

The introduction describes the discovery of the treasure, sets it within the context of late Roman Britain, and discusses several other hoards of late Roman silver plate found in East Anglia. It also presents the background to late Roman society, discussing the association of gold and silver with Imperial authority, and the importance of gift-giving within the social hierarchy. This background informs the discussion of who might have owned the treasure and what the objects may represent.

Then follows the numismatic details of the coins in the hoard. One of the important consequences of such a large group is that it arguably represents a selection of the coins in circulation at the time and can therefore be used to check such information as average coin weights and the level of control that the mints exercised. The hoard confirms the theoretical weights of the denominations represented and provides evidence for control: the weights of the gold *solidi* do not deviate from the official weight of 4.48g by more than 0.1g (72 coins struck from a Roman pound). The silver, however, was less tightly controlled; the *siliquae* in the hoard,

notionally 2.25g (144 being produced from a pound of metal), range from 1.9–2.0g with none coming up to the prescribed weight. Furthermore, the *siliquae* struck at Milan were on average 20% lighter than those from the other mints represented. The most likely reason for this is that gold coins were valued *al peso* whereas silver coins were valued *al marco*. As gold coins were worth their weight in metal the individual weight of each coin was important, but silver coins were tarified above the intrinsic value of the metal, the aim of the mint being only to produce a set number of coins from a given weight of metal; the weight of individual coins was therefore not so important. One criticism of this chapter is of the way these metrical data are presented; the standard deviations are not included making it difficult to estimate the variability within groups and no graphical methods are used.

The hoard is particularly rich in silver *siliquae* (14,136), allowing the detailed numismatic study of these coins. Tables and line drawings showing the changes to the imperial portraits and the reverse designs are used to present a refined chronology of the *siliqua* between AD 364–395. This represents an important advance in our understanding of the sequence of issues during this period.

The production of *siliquae* in the western mints and their consumption in Late Roman Britain is also covered. The number of *siliquae* in the hoard made it possible to identify a previously unknown category of irregular copy. Before this study it had been assumed that only fraudulent copies were made, inferior in weight and silver content, with the intent to deceive. Evidence is presented for four groups of irregular copies that appear to represent four distinct issues during the late 4th and early 5th centuries. They are said to be struck at the same weight but no overview of their metrical data is given. Furthermore, we are told they have the same fineness as the official coins but the scientific basis for the statement is relegated to an appendix and merely cited in a footnote here.

The Hoxne material provides new evidence of the well known phenomenon of clipping late Roman *siliquae* in Britain and a useful model is developed to explain this.

The case is made for a sealed circulation pool of *siliquae* in Britain which were clipped in order to provide metal to produce the copies that were necessary to supply a continuous demand.

The scientific examination of the *siliquae* and the catalogue are presented as appendices. It would have been more appropriate for the scientific information to have been included in the main text as it presents some important data. Nearly all the *siliquae* were analysed by X-ray fluorescence of prepared surface areas; the reliability of the data was confirmed by a small sub-set being destructively sampled and analysed by atomic absorption spectrometry. There is a slight increase in fineness following the reform of AD 368 as well as some differences between mints. A small number of coins were analysed for their trace elements and lead isotopes, providing tantalising glimpses of the potential of such approaches that were unfortunately not capitalised upon.

This volume provides important evidence for late Roman coinage in the western provinces and a glimpse into the economy of the post-Roman 5th century. Guest is an accomplished archaeologist and numismatist and this is apparent in the way he treats the material and the seamless way he integrates social, economic, historical and numismatic data. Where criticism can be levelled is in the treatment of the metrical and scientific data, which is only partially integrated. If this find is as important as Guest and this reviewer believe, then surely a more cohesive and sensibly-structured campaign of scientific research could have been justified—in the way that the opportunity was taken to refine the chronology and evaluate the coin weights.

Matthew Ponting

Viborg Søndersø 1018–1030. Arkæologi og naturvidenskab i et værkstedsområde fra vikingetid [Viborg Søndersø 1018–1030. Archaeological and scientific investigation of a viking-age workshop] edited by Mette Iversen, David Earle Robinson, Jesper Hjerminde and Charlie Christensen. *Jysk Arkæologisk Selskab (Skifter 52)*, Højbjerg, [2005], A4, 583pp, many mainly full-colour figs, ISBN 87-88415-34-1, 450 Danish kroner + 50 Dkr P&P (~£41+£5), h/b. Available from <http://www.viborgstiftsmuseum.dk/>

This nicely produced and well illustrated book reports the results of a research excavation of deeply-stratified organic deposits in the Søndersø area of Viborg, one of the earliest towns in central Jutland. The text is mainly in Danish, but there are extensive summaries in English

and all figure and table captions are bi-lingual. The project was designed to explore daily life in the Viking period by integrating archaeological and scientific investigations, and built on earlier excavations in the same area which had located the corner of a building. To the excavators' surprise, the building was not domestic but turned out to be a metalworking workshop. Around it were large deposits of domestic refuse, and debris from comb- and shoe-making as well as metalworking. The good organic preservation meant that it was possible to date the deposits by dendrochronology—which showed all the activity spanned only about 15 years, and so could be linked to known historical events.

Some 90 pages of the text, mainly based on the analyses and identifications by Arne Jouttijärvi, describe the workshop—the archaeological structures, its use—reconstructed from the distribution of charcoal, slag and other metalworking debris—and the wastes themselves. All deposits were bulk sieved and finds were recorded to a metre square within each context. Within the workshop 150ml samples were taken at 250mm intervals and micro-particles of charcoal, hammer scale and slag spheres extracted. When the distributions of these materials were plotted, the location of activities within the workshop could be reconstructed; the trample of charcoal showed where it had been stored and then brought to the hearth. The distribution pattern of the hammer scale was even more striking, with the relative lack of hammer scale showing where the anvil had been sited, and also where the smith had stood next to it—the shadow of the blacksmith! In addition to evidence of the refining of iron blooms brought to the workshop, probably from southern Germany, and making iron objects, the finds showed that silver had been refined (or assayed) and melted, copper alloys cast, and lead melted. A total of 84 crucible fragments came from in and around the workshop, though the 10 cupel fragments were only found outside the building and so probably reflect activity in another nearby workshop.

Many of these activities can be dated more precisely than even the short life of the building as its floor was spread with sand on several occasions; most of the metalworking seems to have been carried out in autumn or winter—for instance the silver working can be dated to 1021–22! It was previously known that from about 1018 Canute the Great had coins minted in Viborg; three of his mint masters, Svartgol, Bjørn and Fuldgod, are known from inscriptions on coins. We can now see how and where they may have worked—a personal identification that is most unusual in archaeology.

This report demonstrates the level of detailed interpretation that is possible given the right preservation conditions and, more importantly, the right type of on-site sampling and recording together with close collaboration of excavators and their archaeometallurgical specialist. It should be consulted by all those planning to excavate workshops of almost any period so they can

understand the full potential of their site and learn what they need to know in order to realise that potential. Be warned though that there are the occasional slips in the translation; the crucibles were almost certainly used for melting rather than smelting the metals identified on them.

Justine Bayley