

A. G. Kinsley, *The Anglo-Saxon Cemetery at Millgate, Newark-on-Trent, Nottinghamshire*. Nottingham Archaeological Monographs 2, 1989. ISBN 0 904857 02 6, 187 pp. (incl. 98 figures, 8 plates). Price £17.50.

The University of Nottingham have recently produced two new publications in their Monograph series, this volume appearing close to 'An East Midlands Master Tree-Ring Chronology and its use for dating vernacular buildings' (R. R. Laxton and C. D. Litton, 1988). The Newark report is to be welcomed as a complete publication of the cremation cemetery, its burials and their contents from their earliest recorded discovery in 1722 to the series of excavations conducted between 1958 and 1978. The volume is dedicated to the principal excavator, Malcolm Dean, who died in 1970.

The report is logically laid out, and falls into two main sections — background and synthesis, and catalogue. It begins with a description of the site location, adjacent to the Fosse Way as it enters Newark from the south-west, and a review of the archaeological background to the investigation of the site. Early discoveries described by Stukeley, and excavations, including those of the Newark Archaeology Society and Malcolm Dean, are summarised and evaluated. Most of the publication is devoted to the catalogue of finds from the cemetery, and the bulk of this catalogue is taken up by the pottery. Much of the latter had originally been drawn for Myres' *Corpus*, but was redrawn by Kinsley for this report. Consequently the true fragmentary condition of many vessels is now apparent and profiles presented (not so in the Myres corpus), while associated grave goods are illustrated for the first time.

The opening line of the pottery section suggests a regrettable course of action to be avoided if at all possible: '*a detailed fabric analysis .. has been prevented by shortage of time and money*'. The reasons are not elaborated on. Examination of some fifty-three samples at 10 x magnification identified a range of inclusions, but concluded that '*none of the pots were made more than a few miles from the cemetery*'. Without evidence to substantiate the claim, the only recourse for many researchers may be further examination.

Form and decoration are covered in more detail. Stamp groups are presented in a useful set of figures accompanied by pot drawings at a scale of 1:6. The pottery is illustrated at the scale of 1:3 adopted by many reports on Saxon pottery from cemeteries, while grave goods are drawn at 1:1. The MPRG guideline of diagonal hatching for hand-made pottery is not followed, though this convention seems rarely to be followed for Saxon pottery — as here, the pottery from Alton (Hants), Buckland (Kent), and Morning Thorpe (Norfolk) was blacked in, while Spong Hill was stippled.

The cremation urns include four Romano-British pots (probably 3rd/4th-century) of various fabrics. On the Anglo-Saxon urns a total of fourteen stamped-linked pottery groups could be established, often based on more than one stamp link, and with related features of form and decorative scheme. Only 220 of the 400 pots are still associated with human remains, while at least 103 urns are less than 50% complete. Catalogue entries follow the sequence established by the excavators. The amount of each pot is recorded by sherd count, and as an estimated proportion to the nearest 10% of the complete pot. Descriptions of the decorative schemes are only used when the drawings are not self-explanatory. Munsell soil colours are not used to describe the colours of the fabrics.

The discussions on the growth of the cemetery into primary zone and areas of sequential expansion, and of its relationship to other cemeteries or settlements are limited, while the relative dating of graves in the absence of closely datable grave goods, or absolute chronologies, remains inconclusive.

The report will be extremely useful for comparison with Loveden Hill, one of the most fully excavated cemeteries in the country, and situated only 8.5 miles south-east on Newark. Despite the limited nature of the study, the appearance of this volume is to be applauded, when so many cemetery excavations remain unpublished.

Mark Redknap

A. Middleton and I. Freestone, *Recent Developments in Ceramic Petrology*. British Museum Publications, 1991. 410 pp., 25 plates; 170 figures. ISBN 0-86159-081-3. Price £17.50.

This large volume arose from a seminar held in the British Museum in 1987 and the papers reflect the wide range of ceramics which are now being studied using petrological techniques. Unlike the practitioners of Neutron Activation Analysis or other physical and chemical analytical techniques most of the contributors to this volume are archaeologists first and ceramic petrologists second. Thus, the papers are readable and informative to those interested in medieval ceramics even when their subject matter is far removed both in time and space. Medieval material is present within the volume: Ian Betts describes the application of petrological techniques to the characterisation of York's brick and tiles; Christopher Gerrard and Alejandra Gutierrez describe their work on the characterisation of medieval and later pottery from northern Spain; Robert Mason's paper on the petrography of Islamic ceramics is a report on a project of major importance for medieval ceramics and should be read by all working on medieval pottery. It is clear that Mason's work has prepared the ground for distribution studies of Near Eastern pottery which should enable us to place Western European data in perspective. Mason makes the point that some of the wares can be found in Western Europe, for example 'Rakka' wares, within which group Mason identifies actual products of the Rakka industry on the basis of grain size analysis and petrography.

Several of the papers are methodological and, as such, are relevant to all medieval ceramicists. Ian Whitbread contributes a description of his data-logging system in which the petrography of a thin-section is recorded directly onto a computer and is immediately displayable in the form of histograms and 3-D bar charts. Fieller and Nicholson present another method of grain-size analysis using data collected by means of a video camera and digitizer linked to a petrological microscope. The petrography of the grains measured was not taken into account in this method which examines texture alone. Mathew, Woods and Oliver, under the heading 'Spots before the Eyes', publish a series of charts for use in the visual estimation of the percentage by unit area of inclusions of different size. These charts are presented both as black inclusions against a white background and vice versa. It is interesting to look at these charts and guess the actual percentage of inclusions shown; be prepared to be chastened!

Middleton, Leese and Cowell's paper is similarly concerned with the grouping of thin-sections by texture, using a series of samples of Romano-British tiles from south-east England to test potentially useful techniques. One method was Pairwise Comparison, where every pair of thin-sections was examined and given a number reflecting their perceived similarity. Five sections would need twenty-five comparisons, ten sections would need one hundred and so on exponentially. The next method tried, 'Attribute Analysis', will ring a bell with practicing archaeological ceramic specialists since the authors took five or so features of the petrography of each section and gave them a score for abundance, from 0 to 5. These scores were

then entered into a data matrix which was used as the starting point for statistical clustering techniques. Both techniques are clearly a formalised version of the methods used both by ceramic petrologists and those trying to sort pottery fabrics macroscopically and could well be useful as a means of making our intuitive approach to classification more open to examination. This naturally leads on to the final paper in the volume, 'Extending Ceramic Petrology' by Ian Freestone. Freestone draws together various strands running through the papers and tells some home truths, both about the limitations of ceramic petrology and about the limitations of ceramic petrologists (principally that they have never sat down and established a formal terminology). Freestone proposes the adoption of a minimum standard consisting of six primary characteristics:

- 1) A list of all the inclusions present above trace level, with some indication of their relative abundance.
- 2) An indication of the total quantity of non-plastic inclusion, even if only in subjective terms such as 'common' or 'abundant'.
- 3) An indication of the degree of sorting of inclusions.
- 4) An indication of 'typical' grain size.
- 5) An estimate of roundness.
- 6) The colour of the ceramic matrix and whether or not it is birefringent.

This standard could well form the basis for one based on macroscopic examination and, indeed, is very close to that used in the Museum of London and elsewhere. Following a discussion of textural analysis and mineralogical quantification Freestone's paper briefly mentions the relatively recent techniques of electron microprobe analysis in which the elemental composition of inclusions seen in polished section under the Scanning Electron Microscope can be measured. The method only works where the fabric includes minerals of complex composition and is not, therefore, an answer to the ubiquitous problem of what to do with quartz or grog-tempered wares.

To conclude, this volume shows that the techniques of ceramic petrology are being extended and applied to more and more diverse areas of archaeology (and ethnography). To anyone working on the classification of pottery by fabric, with or without the use of thin-sections, the volume will contain material of interest and earns a place on the library or laboratory shelf.

Alan Vince

E. Lewis (ed) *Customs and Ceramics — Essays presented to Kenneth Barton* A. P. E. Wickham. 184 pp., 80 figures. Price £9.50 plus 50 p postage.

I find it hard to believe that Ken Barton has retired and gone to live in France. From my northern fastness in Aberdeen, I have come to expect him to be there when I journey south, ready as ever to examine my latest offering and to opine, discuss and, not infrequently, argue. But retire he has and this collection of ten essays has been presented to him by some of his friends as a tribute to his many years of work in the field of ceramic research. Examining a wide range of topics and spanning the medieval and post-medieval periods, the essays reflect the wide range of Ken's own interests.

Following an introduction by Graham Webster, who launched Ken on his archaeological career, John Hurst examines the beginning of the study of medieval pottery in his essay on antiquarian finds of medieval and later pottery. Frans Verhaeghe, following Ken's example, examines museum

collections in a thought-provoking essay which considers a fragment of a Brussels aquamanile and from that discusses ceramic competition with quality metal goods in the middle ages. This is the longest paper in the book, and is presented with Verhaeghe's usual meticulous scholarship. Also pursuing Ken's life-long association with French pottery and the Channel Islands, Robert Thomson and Duncan Brown, and Bob Burns respectively examine some earthenware curiosities from the Saintonge, and Normandy stonewares from Guernsey.

On the home front, Mike Ponsford looks at the dating of Ham Green ware from Bristol, while Elizabeth Lewis looks at the documentary evidence relating to the Blackwater potters, another ware eagerly pursued by Ken. David Allen examines four bellarmine 'witch-bottles' from Hampshire, and Russell Fox describes 18th- and 19th-century chimney pot and inscribed tile production in the Portsmouth area. The collection is rounded off by Peter Brears, who departs from the ceramic theme and presents a delightful essay on the Christmas wassail custom in England, tracing it from its medieval origins to the 19th century.

This is an attractive and interesting collection of essays and one which I am sure Ken Barton will appreciate. However, just one note of caution to readers — the scale of the drawings is not consistent throughout the volume, while the book is produced in a paper-back size (landscape format). Some may find this irritating, as it makes it awkward to fit into bookshelves, but I have to say that it appeals to me. It slips easily into the pocket to take on journeys or to read while having a quiet drink in the pub. I did this recently and found it excellent company — I'm sure Ken would approve.

Charles Murray

I. W. Reed, *1000 Years of Pottery. An Analysis of Pottery Trade and Use. Fortiden i Trondheim Bygrunn: Folkebibliotekstomten (the Library Site)*. Meddelelser Nr.25. Riksantikvaren, Utgravningskontoret for Trondheim, Trondheim 1990. 94 pp., 26 figures/tables. Price NOK50.

Norway is unique in Europe in that from the 7th century until c.1700 there were no local pottery industries; all the pottery used was imported, and this provides an extraordinary opportunity to understand the changing patterns of trade. The author of this report on the pottery from the Library site in Trondheim (over 34,100 sherds) is to be commended for making the most of the evidence at his disposal within a limited timetable and budget. To appreciate the strengths and weaknesses of this the first detailed publication of pottery from Trondheim requires a certain knowledge of archaeological and pottery research in Norway.

The first large-scale urban excavation in Norway was the Bryggen excavation in Bergen, directed by Asbjørn Herteig. This ran from 1955–69, but it was not until the 1970s that excavations began to be carried out in advance of development work on other sites, and not until 1978 that state-funded excavation units were established in historic towns such as Trondheim, Bergen, Tonsberg and Oslo. The approach to publication has varied. The different sites in Oslo and the Bryggen excavation in Bergen are being published in a series of monographs (the latter in English). In Tonsberg, publications have been planned but have yet to be published, while the Riksantikvaren in Bergen have produced a series of archive reports but no final publications. In Trondheim a compromise has been reached whereby the sites are published by means of A4-size fascicules which constitute a research archive rather