Interpreting Stratigraphy 1996 (York)

Introduction

by Steve Roskams with Philip Rahtz

“We can burn her, bury her, or dump her” (Monty Python, n.d.)

“What could be more universal than death? Yet what an incredible variety of responses it evokes. Corpses are burned or buried, with or without animal or human sacrifice; they are preserved by smoking, embalming or pickling; they are eaten - raw, cooked or rotten; they are ritually exposed as carrion or simply abandoned; or they are dismembered and treated in a variety of ways. Funerals are the occasions for avoiding people or holding parties, for fighting or having sexual orgies, for weeping or laughter, in a thousand different combinations. The diversity of cultural reaction is a measure of the universal impact of death; always it is meaningful and expressive.” (Huntington and Metcalf 1991, 1)

Human behaviour surrounding death has been prominent in archaeological research since the earliest days, so aspects of the stratigraphy of burials seemed an obvious focus for the latest Interpreting Stratigraphy conference, held at York in February 1996. The manifestations in the burial record which we study represent the residues of a long sequence of social activity, beginning with death and extending through and beyond the disposal of the corpse, via processes of decay and other natural and cultural transformations, to the uncovering of a body, either as a skeleton or a cremation deposit, in our fieldwork.

Our aim as field workers should be to use stratigraphic study to reconstruct all aspects of the burial process, together with any subsequent activities in and around the grave. The papers presented at York, most of which are published herein, discuss important new developments. But they also urge some cautions: in showing that we have come some way, they reveal that we still have far to go. Recent changes in government policy have had important, indeed traumatic, effects on the general organisation of the fieldwork profession, and one might wonder whether this will help or hinder further progress: here, only time will tell.

This piece is meant to act as an introduction to the papers given on the day. In the process, it incorporates the views of Philip Rahtz on some aspects of the history of stratigraphic analysis of cemetery data (the latter were presented as a short, introductory talk at the conference and Philip made his notes available to me subsequently: hence the authorship). In addition, I have tried to mould the various contributions into a wider, though still brief, commentary on certain aspects of mortuary studies in general, and the role of burial stratigraphy in particular. On reflection, the resulting bibliography has a rather parochial feel and the works mentioned will probably be well known to many. However, I do not pretend a full coverage and a British bias is, perhaps, inevitable, given the areas of interest of most readers. Thus, even as a personal view of some topics which might deserve further attention, I hope it introduces an important, indeed vital, sub-discipline of archaeology.

Archaeologists have become interested in the process of human burial because it elucidates economic, social and religious forces within the community. Indeed, for certain periods of the past, burial practices are the sole evidence of such structures. As a result of this interest, we have some understanding of mortuary practices for many stages of human development in Britain. Hence evidence from prehistoric periods, though variable in extent and quality, has elucidated the political and symbolic significance of burial monuments in Neolithic and Bronze Ages (Darvill 1987
provides a convenient summary, Bradley 1984 a more demanding, interpretative synthesis). Equally, the relative paucity of Iron Age evidence (Whimster 1981 notwithstanding) is a reminder of the problems of negative evidence, here as elsewhere in archaeology. For the Ancient World, our understanding can be augmented by documentary evidence. Hence Toynbee 1971 shows what is known of death and burial in the Roman Empire as a whole, a topic given a more regional, archaeological face by the recent studies of Britannia by Philpott (1991) and others.

Early medieval cemetery studies (Halsall 1995) are the main, and in some centuries the only, source of evidence for many post-Roman societies in Western Europe. When placed beside research into later periods, these can also help us to understand a series of related topics: changing belief systems and the impact of Christianity; the control of high medieval burial practice represented by growth of graveyards around churches; the increasing importance of more esoteric, but equally vital, theological concepts such as the so-called “Birth of Purgatory” (LeGoff 1984) in later medieval society; and, later still, the growth of religious distinctions within Christianity such as non-conformism, reflecting the growth of new class divisions under capitalism (Bassett 1992 provides insights into some recent archaeological work up to 1600, Harvey 1993 a résumé of the 12th to 16th centuries, and Litten 1990 a highly “individual” account of the 15th century and later). The conference paper given by Graham Keevil discussing “Stratigraphy and Phasing in Medieval Cemeteries”, which it was not possible to reproduce here, showed how stratigraphic excavation of Christian and other medieval burials has made a vibrant contribution to these debates, a process which the investigation of post-medieval cemeteries such as Spitalfields (Reeve and Adams 1993, Molleson and Cox 1993) elaborates further.

In all of the periods mentioned above, the archaeology of mortuary practices has benefitted considerably from the application of paradigms developed within adjacent disciplines, notably sociology and anthropology (as demonstrated in the (nonPythonesque) reference quoted at the start).

The paper by Phil Kiberd, “As in Life, So in Death”, is a reminder of how important anthropology remains to various areas of archaeological interest (even if I am, personally, less enthusiastic about his postprocessualist notion that human society is merely the sum of its individual, human parts. Equally I am unconvinced by the increasingly frequent trend in archaeology to see ideological dynamics as a force in their own right. Some societies had a belief in an afterlife, and this no doubt often influenced their burial practices. However, such beliefs are by no means universal and, when interpreting archaeological evidence, it is important to take note of the material conditions which engendered a need for them: people invent god(s), not vice versa, and do so in particular circumstances! However, cf Kiberd’s post-script: I am, no doubt, one of the “western cynics” mentioned there).

As a result of such inter-disciplinary work, a whole series of theoretically-informed case studies have been generated, for instance those presented in the volume edited by Chapman, Kinnes and Randsborg (1981). The levels of analysis adopted range from the micro- (grave goods and their positions, for example: Pader 1982) to the macro-scale (the distribution of high-status graves in the landscape and their implications for chiefdom territories in early medieval Norway: Myrhe 1987).

However, such studies have in turn demanded not only a greater volume and range of data from the fieldworker, but also much more contextual and stratigraphic information. At the same time, the general professionalisation of archaeological fieldwork within Britain in the last 25 years has increased the need to blend the activities of different excavators into a coherent process of work, to record systematically, and to integrate different forms of evidence from different types of site. Thus demands for increased intellectual rigour, derived in part from detailed case studies in anthropology, and organisational changes within archaeological fieldwork have interacted to demand an end to haphazard recording methods (an excellent example of the symbiotic relationship between theory and practice).
It is clear that the field profession has been successful, at a general level, in meeting this demand for greater rigour, as evidenced by the manuals on field methods published by many archaeological units (Hammer 1991). In addition, because of the sheer volume of data involved and the tripartite need to manipulate it efficiently, to test the statistical significance of any resulting patterns, and to present interpretations visually as well as textually, there has been an impetus to adopt computer storage of information, including its spatial characteristics. The paper “Death by Computer”, by Michael Luke, Sean Steadman and Michael Dawson, demonstrates the continuing process of development here. Yet it would also be fair to say that, in mortuary studies, the main impact of this more systematic approach has been seen in the technical spheres of recording skeletons or church monuments, rather than in the stratigraphic analysis of burials.

Thus there are books on how to dig up and analyse skeletal remains (Brothwell 1981) and on the archaeology of disease (Manchester and Roberts 1995), plus papers on decay processes (Boddington et al. 1987) which lead to a concern with forensic archaeology (Hunter et al. 1996). However, the implications of the work on skeletal remains are mainly confined, for all the wrong reasons, to the activities of the environmental scientist, rather than related to wider social and economic developments. Further, the note reproduced here by Pete Clark on “Inhumations and the Matrix” shows how difficult it can be to take this next step towards wider interpretation. He questions whether palaeopathological analysis merits the resources it sometimes receives, though the really important lesson of that experience might be his final one: where fieldwork takes place without an explicit, and sufficiently focussed, research agenda, we are always likely to be disappointed.

Equally, others have attempted to systematise the recording of graveyards (Jones 1985), and advocated the pursuit of a “Church Archaeology” (Rodwell 1989). Yet the discussion of graveyard monuments and church buildings, though providing important architectural and structural interpretations, too often shows limited concern with associated burials per se. Thus very little has been published on the recording and study of stratification of individual graves, even in major textbooks such as those of Harris (1989) or Barker (1993). Rodwell (1989, Ch.9) is an honourable exception, though the experience of Mark Whyman, expressed in his “Charnel and What to Do with It”, would advocate more careful recording of disarticulated bone than Rodwell recommends there.

What we have seen is the exposition of grave recording, notably by drawing, photography, and proforma analysis. This has engendered the production of pre-printed burial forms for specialist use, to set beside the deposit, cut, masonry and timber forms used in many organisations today. Though welcome in themselves, such additions do not lead, in some inevitable way, to increased attention to stratigraphic relationships between burials or within individual graves. Thus simply having a specialised recording form may be necessary, but is certainly not sufficient, to provide solutions to all of the problems which study of human burials throw up when trying to designate appropriate descriptive criteria or to record grave stratification.

In the past, where work on burials has created an interest in stratigraphy, this has revolved around attempts to interpret the meaning of what is called, rather misleadingly, horizontal stratification (really the analysis of the spatial development of cemeteries), coupled with such general stratigraphic relationships as may be apparent. Thus at Cannington, the remains of a cemetery which may have had upwards of 1000 graves, there was only a very small number of intercutting graves in what is predominantly a row-grave cemetery of the 4th-8th centuries. There were, however, stratigraphic relationships between graves and buildings, between graves and craft residues and, most importantly, a nuclear slab-marked grave mound and a path leading to it. It is perhaps worth pointing out, as this cemetery is still in the final stages of analysis (Rahtz, Hirst and Wright, in prep.) that in the 1960s the Inspectorate of Ancient Monuments, the then equivalent of English Heritage, was very reluctant to finance the excavation of Cannington in advance of quarrying, since there were so few grave-goods. It was only through the personal intervention of Don Brothwell that it was dug, because he emphasized the importance of recovering a large sample of human skeletal material from
this area and of this period.

When it comes to the identification of stratigraphic relationships as conventionally defined, that is in terms of *vertical* relationships, the vast majority of graves excavated in the past have been either associated with structural remains, such as barrows or mausolea, or defined as cuts in other strata, especially undisturbed natural deposits. It has usually been assumed, until recent decades, that the fill of a grave, whether a homogeneous deposit or a mixed one, is that which came out when the grave was dug, replaced after a varying interval of time (in modern burial this is one or two days).

Hence stratification of the grave fill was not normally the subject of study. Excavation, at varying speed, had as its object simply the defining of the burial itself - a skeleton or a cremation, a container or artefacts. Even in Denmark, where digging intact stratification is regarded as the equivalent of destroying a document, graves in churches are partially emptied to provide a section allowing study of the layers through which the grave was cut. Yet little serious attention was given to any stratification within those very grave fills removed to provide this preview.

At one time even relationships between individual graves, crucial to the establishment of cemetery and artefactual seriation, were only recorded when one grave was seen clearly to be secondary to another at the level of the natural. In the late 1950s, however, Brian Hope-Taylor sought to develop excavation of burials further. One of the most skilful archaeologists this country has produced but one of the least known to the present generation, he was, for a brief spell, a lecturer at Cambridge and two of his pupils were the young Peter Addyman and Martin Biddle. Hope-Taylor pointed out that, in certain circumstances, the intercutting of upper grave fills could be recognised, and thus that relationships could be demonstrated, *above* the level of the natural.

Furthermore, though allowing that this intersection might be recorded in vertical section if a baulk or trench edge happened to be in the right place, he suggested that such relationships could be worked out more consistently by drawing successive plans of soil patterns in a horizontal plane and reconstructing the stratification in three dimensions. Even today, it might be accepted that the most rigorous definition of deposits in the single context method might not succeed in distinguishing primary from secondary grave fills, especially where graves are dug through similar deposits. Although Hope-Taylor made a big impression with his lectures, he did not publish them. Even his famous *Yeavering* monograph (1977) gives little detail on the hundreds of graves excavated there, nor any exposition of the principles involved.

The stratigraphic study of relationships between graves, and of the deposits above interments, are two facets of the history of mortuary method. A third concerns the stratigraphic residues of the burial itself, together with any container such as a coffin. Advances here also date from the 1950s. Dutch archaeologists had long studied the stratification well-displayed in clayey soils under heath-land barrows, and have defined anthropomorphic and other silhouettes where no bone had survived (Clark 1960, 118-19). A British example from 1953, at Bishop’s Waltham, is provided by Ashbee (1960, 90, fig 27), using horizontal excavation. This technique was also attempted in 1958 at Little Ouseburn, Yorkshire (Rahtz 1989) and described more fully here by Philip Rahtz in “Reconstructing Stratigraphy within Burials: the use of the planum method”.

More recently, the approach has been brought to a fine art at Sutton Hoo, in dealing with both ‘sandpersons’ and soil-marks of associated artefacts, as discussed by Annette Roe and Madeleine Hummler in “Sutton Hoo Burials: reconstructing the sequence of events”. This paper also includes an account of the highly individual approach to remote sensing used on the site, particularly that which allowed the initial identification of Mound 17. If more projects were prepared to report such experiences, we would be a fairway to putting scientific advances to the “Fore!”.

Over the last three decades, thousands of Christian graves have been dug, notably by Warwick Rodwell (probably top scorer with over 3,000) and the Biddies (see the seminal work by Kjølbye-Biddle 1975).
The earlier publications of large Roman cemeteries in York (Trenholme Drive: Wenham 1968), Winchester (Lankhills: Clarke 1979) and Cirencester (McWhirr et al. 1982) can now be set beside recent studies of Roman Poundbury (Farwell and Molleson 1993), early medieval cremations at Spong Hill (Hills 1977ff - though precious little was said about cremations at our meeting, despite the fact that there was considerable debate at the time of excavation about whether these cremations should be dissected stratigraphically) and the recent, fine study of Jewbury (Lilley et al. 1994), again in the City of York. The last example also raised a series of vexed ethical issues which often occur when dealing with human burials in the context of complex political processes. Hence these matters have also surfaced further afield, for example in Israel and even on the other side of the Atlantic (Kaufman 1984).

The publications just mentioned represent substantial achievements, and major, more general advances in mortuary studies have meant a move away from artefact-dominated approaches towards a holistic appraisal of such behaviour, paralleled by the rapid development of the associated physical anthropology. Yet there are still relatively few publications of cemetery data to the standards needed today, even for such basic things as the precise location of artifacts in relationship to body, container or structure (Hirst 1980). More often, detailed finds studies stand in isolation from each other. Here, to stretch the theme somewhat, the question tackled by Sue Stallibrass - "How did all these Bones Get in Here?" - is an excellent example of how useful it can be to relate such specialist studies to each other, in this case concerning animal bones in relation to pottery, glass and leather. Clearly, fuller contextual analysis is the only way to come to grips with complex formation processes.

By the same token, the paper by Peter Hinge “Dealing with Vague Date Ranges: a chronology for a Roman cemetery” demonstrates the importance of taking a more sophisticated approach to integrating dating derived from finds, here Roman ceramics, with complex sequences of grave digging. Indeed, the techniques developed there could be usefully extended to other spheres. An obvious case in point concerns data on skeletal ages where, for technical reasons, the age ranges come in one form, with particular cut-off points. Whereas we may know that the society which we are studying classified the ages of its population very differently. Applying Hinge’s methods here may allow manipulation of data in a more meaningful way.

Recently, as we are all aware, the government has moved from funding organisations and people to funding archaeological projects. Whatever their intention in doing so, one of the few good things to come out of this is that projects facilitate meetings of team members, and thus allow greater discussion between specialists. Perhaps we can look forward to more integrated, contextual analysis of sites than was thought feasible previously.

The study of grave stratification, allied to other data, has brought about a transformation in our understanding of death in all centuries, and the surprising diversity of mortuary behaviour has been revealed, especially in recent large excavations. Our aim is to reconstruct the whole sequence from the status of the ground before the death occurs, through the planning process of authorization of the grave-digging and the reasons that determined its orientation, character and form, the preparation of the grave for its inhabitant(s), then the act of interment of body and container, with any special rites or offerings, followed by the filling-up or sealing of the grave and the ensuing post-depositional processes. All this we may hope, usually in vain, to reconstruct from stratigraphic study. The papers presented below provide some ways forward, but show clearly that there is also much to do.

Ashbee, P (1960) The Bronze Age Round Barrow in Britain (Phoenix, London)


Clark, J (1960) *Archaeology and Society: reconstructing the prehistoric past* (3rd ed), (Methuen, London)

Clarke, G (1979) *The Roman Cemetery at Lankhills, Winchester* (Winchester Studs. 3, O.U.P.)


Halsall, G (1995) *Early Medieval Cemeteries: an introduction to burial archaeology in the post-Roman west* (Cruithne Press, Glasgow)


Hills, C (1977+) Various monographs on Spong Hill in *East Anglian Archaeol. Vol.6ff*


Hope-Taylor, B (1977) *Yeavering, an Anglo-British centre of Early Northumbria* (DoE Report No.7) (HMSO)


Kjølbye-Biddle, B (1975) “A cathedral cemetery: problems in excavation and interpretation of
evidence” in *World Archaeology* 7.1, 87-108


Rahtz, P, Hirst, S and Wright, S (in prep.) *Cannington Cemetery*


Toynbee, J (1971) *Death and Burial in the Roman World* (Thames and Hudson, London)

Wenham, L (1968) *The Romano-British Cemetery at Trencholme Drive, York* (HMSO, London)

Abstracts from this conference

Kiberd, P

*In Life, So in Death*

Kiberd highlights the role of the dead in burial practice, citing ethnographic evidence for active links between the living and the dead. He emphasises the distinct roles of individuals in life, and suggests that archaeology could gain more from mortuary studies through increased awareness of the individual in death.

Luke, M, Steadman, S and Dawson, M

*Death by Computer*

A variety of methodologies have been used to record human burials. The advent of computer-based analysis necessitates not only precision in recording, but also greater understanding of the integration of data collected. This paper examines the impact of this change as experienced in the Bedfordshire County Archaeology Service.

Clark, P

*Inhumations and the Matrix: the value of stratigraphic sequence in ancient burial sites*

This paper offers a critical view of the recording of inhumations. It concentrates on intensively used cemeteries with substantial post-depositional disturbance, questioning whether the analytical potential of such material justifies the resources expended on its recording.

Whyman, M

*Charnel, and what to do with it*

Whyman offers a positive view of the analytical potential of disarticulated bone. Using the example of a small excavation at Ailcy Hill, North Yorkshire, he describes how the minimal recording of charnel deposits allowed the disarticulated bone to be related to later in-situ burials during post-excavation, and recounts the impact of this approach on the interpretation of the site.

Rahtz, P

*Reconstructing Stratigraphy within Burials: the use of the planum method*

The planum method of excavation, widely used in Holland and Germany, is seldom applied to British archaeology. Rahtz discusses the use of this method in the excavation of graves, citing as an example the excavation of a poorly preserved burial within an undisturbed barrow at Little Ouseburn near Harrogate.

Hummler, M and Roe, A

*Sutton Hoo burials: reconstructing the sequence of events*

This paper describes the methodology employed in the excavation and recording of burials at Sutton Hoo, with particular reference to mounds 2 and 17. The authors discuss how the approach to recording facilitated reconstruction of the sequence of events during burial, mound building, and later natural and anthropogenic intervention.
Stallibrass, S

‘How did all these bones get in here?’

Stallibrass discusses the evidence from the Roman fort at Ribchester with two goals in mind: Firstly, she demonstrates how the detailed study of animal bone can inform the understanding of site formation and stratigraphy. Secondly, the benefits of integrating several types of data is highlighted, the focus here being placed on pottery, glass, leather and animal bone data.

Hinge, P

Dealing with Vague Date Ranges: a chronology for a Roman cemetery

Hinge discusses the integration of data from the ‘Roman London’s Eastern Cemetery’ project. The cemetery was in use from the C2nd - C4th, and the data used is derived from several different excavations and watching briefs. The vagueness of date which can be attributed to a burial from ceramic or stratigraphic evidence is problematic when attempting to integrate large amounts of data. The data was organised into a relational database which could be queried with regard to TAQs and TPQs. Hinge provides a detailed discussion of how this approach allowed more meaningful analysis of the dates of burials.