Archaeology and Burial Vaults
A guidance note for churches

Association of Diocesan and Cathedral Archaeologists
Guidance Note 2

Produced in consultation with the Advisory Panel on the Archaeology of Burials in England (APABE)

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Contents

Contents .......................................................................................................................... 3

Introduction .................................................................................................................... 4

Issues, legislation and good practice ........................................................................... 5

Archaeological excavation and recording of vaults ....................................................... 6

Research Priorities ......................................................................................................... 7

Use of Vaults .................................................................................................................... 7
  Peopling of Vaults ......................................................................................................... 7
  Historical Demography ................................................................................................ 8
  Medical history ............................................................................................................. 8
  Generalist history ......................................................................................................... 9

Human Osteology .......................................................................................................... 9
  Demography ................................................................................................................ 9
  Social standing ............................................................................................................ 10
  Living environment, industrialisation, disease and post-mortem practices .................. 10
  Socioeconomic status ................................................................................................. 10
  Scientific research ..................................................................................................... 10

Conclusion ...................................................................................................................... 10

Bibliography .................................................................................................................. 11

Pictures by and copyright of Adrian Miles, used with permission. Front cover the crypt of St Mary Magdalene Islington, page 8 anthropoid coffin in St Andrew Holborn.
Introduction

Throughout England and Wales, deposition in burial vaults beneath churches generally came to a halt in the 19th century, though burial continues in many churchyards, either in the historic portion or in new extensions. This paper is concerned with providing guidance on the archaeological implications associated with vaults, from c.1650 to 1900, concentrating on the special characteristics and challenges of vault excavation. Earlier, medieval, vaults are known, for example Farleigh Hungerford Castle, but this paper is concerned with the vast majority, which are post-medieval. Although substantial numbers of church vaults were cleared of coffins in the 19th and 20th centuries, many remain intact, potentially to be cleared in the future. Furthermore, many vault clearances were incomplete and records may be unreliable. Throughout this paper, comparison is made to what may be learnt from flat cemeteries.

Archaeologists and osteologists have well-developed research agenda for human remains of earlier date, and often these themes are embedded within regional research frameworks but this is not the case for the post-medieval period. Yet the post-medieval and Early Modern periods have remarkable potential for study. The ground-breaking work at Christ Church, Spitalfields, London (Reeve and Adam 1993) really laid the foundations for the acceptance of this style of research as mainstream archaeology. This is beginning to flow more routinely into fieldwork and publication (Miles et al 2008a, Miles et al 2008b). It is now generally agreed that archaeology of human remains begins one hundred years before present (cf. Human Tissue Act 2006) and this is advocated for all church and vault projects.

Nevertheless, the emotional difficulties of dealing with comparatively recent archaeological remains and the logistical difficulties of working in vaults combined with distinct research themes do make this a separate subdiscipline. As the burials tend to be relatively recent, often with name plates, there may be a heightened sensitivity among the clergy and their parishioners concerning whether research is proper and decent; hence the need for all personnel working on such projects to conduct themselves at all times with suitable decorum; a sentiment shared by the archaeologists concerned. It is also a reason to begin detailed planning of the project as early as possible.

By their very nature, vault excavations tend to take place in confined areas with limited space for movement, yet the weight of lead coffins requires larger numbers of personnel than usual in order to move them. Such conditions are hazardous and require the preparation of risk assessments and appropriate provision to mitigate such hazards. Since a parish church vault, if full, can contain thousands of coffins closely packed together, its clearance is a formidable challenge, both logistically and financially.

Investigation should not be limited to well-preserved and well-documented vaults; some, and many burial grounds, might be written off because of disturbance; but such disturbance is evidence of past occurrences. Disorder, neglect, rearrangement, closure and clearance, reflect attitudes as much as do care and faithful observation of wishes. Awareness needs to be raised of the value of vault research, especially among custodians, so there is a presumption of access and analysis when opportunities become available. In turn, archaeologists and historians need to be precise and candid about what can be achieved and what it will cost. (Cox 2001).

This document will be of interest and use to curators, contractors and all those who work in this field, and to assist developers in understanding the value of vault archaeology.
Issues, legislation and good practice

Several thousand human skeletons are disturbed each year in England through building and other development, and most archaeological units deal with human remains on a regular basis. Currently, the law relating to human remains is complex and none of it was drafted with archaeology in mind. The law, whether secular or ecclesiastical, normally requires eventual reinterment of remains, but a review of the secular regulations has been ongoing with the intention of providing greater clarity on these issues.

In an attempt to provide advice and guidance to all concerned, the Church of England, English Heritage and the Home Office, as the three organisations with statutory responsibilities regarding human remains in England, sponsored a working group which produced the document Guidance on best practice for treatment of human remains excavated from Christian burial grounds in England, issued in 2005. The guidance touched on vaults (Annexe S3, Para 231, and see Cox 2001), but there was a recognition that this was a subject worthy of further work in the future. The same sponsors (the Ministry of Justice taking over responsibility for burial matters from the Home Office) set up the Advisory Panel on the Archaeology of Christian Burials in England (APACBE) to support the guidance and to update and add to it as necessary. This panel has been reformed (January 2010) to encompass all burials; not solely Christian ones and thus is now APABE.

Most archaeologists are conscious of the need to afford the dead respectful treatment and to avoid offending religious or secular sensibilities when dealing with human remains. Human remains held in vaults are no different; indeed their deliberately protective enclosure within walls and generally within churches or chapels rather than “open” burial in a churchyard appears to heighten sensitivities, and to throw the issues involved in dealing with human remains into sharper focus.

Parishes or the owners of private land and chapels often see their curation of such material as a “sacred trust” as it has been expressed in a recent case. In particular, they may be unwilling to allow the opening of coffins which are still substantially intact, arguing that this is unnecessary and disrespectful, and as some have expressed it, distasteful. There may be health and safety concerns here as well, particularly with sealed lead coffins (Guidance 2005, Annexe S3, Para 231, 232).

Archaeologists dealing with vault clearances will therefore need to demonstrate understanding of these considerations, and meet a parish or other owner’s concerns by producing a clearly staged programme of work backed by a justifiable research strategy, whether this is for in situ recording or where it is necessary to remove the remains from the site. No destructive sampling, in particular, should be undertaken without appropriate justification and express permission (Guidance 2005, Annexe E6). In general, proposals for archaeological work should be proportionate to the importance of the site and the level of impact. Proposals should show careful planning, outlining the cycle of fieldwork, review, analysis and publication and should clearly demonstrate to the developer that such work is in the public interest.

Ecclesiastical authorities are likely to be firm in terms of specifying a timetable for reinterment, or at least imposing stringent conditions for long-term curation elsewhere. This is presently the arrangement at Christ Church Spitalfields, where the present 10-year faculty has been renewed. At St Bride’s (Fleet Street, London), the collection is housed within the church itself, and this is a solution proposed by APABE, using churches as archives of human remains considered to have considerable research potential, available for appropriately justified research under controlled conditions, but protected on consecrated ground. St Peter’s church in Barton-on-Humber is the first such new repository set up as a direct result of this proposal, and it is hoped that others will be established in the future.
Archaeological excavation and recording of vaults

The importance of archaeological recording in post-medieval burial vaults is more commonly accepted than at the time of Christ Church, Spitalfields (Reeve and Adam 1993), but since then, no project of a similar scale has been published. A number of vaults have been ‘dug’, however, very few have made skeletal material available to osteologists and other researchers, with the exception of a few projects, for example, St Marylebone, Westminster (Miles et al 2008a).

It is worth considering what a clearance currently involves, as it is almost inevitable that an exhumation contractor will be involved in any vault project. At best, a record of the nameplates and a rough location will be recorded, but often only the number of coffins removed will be recorded. It is usual in exhumation-led clearances that any rubble within the vault will be removed quickly; potentially damaging any decorated wooden outer coffins. It has been argued that sleev ing of coffins and reburial in a known location preserves them for study at some future date, but the process of removal inevitably causes damage and loses valuable information. And yet it is perfectly possible to carry out accurate and sympathetic fieldwork whilst working in vaults.

Fieldwork in vaults needs to be clearly planned from the outset, and pre-application discussions with archaeologists are essential to facilitate smooth running of the project. A key factor influencing the level of data recovery from vaults is who takes charge of the clearance. Ideally, the archaeologist will be in control of the methods and rate of work, including the clearance of rubble. The responsibilities and jurisdiction must be clear, appropriate and unchanging from the outset. This will ensure that suitable time is put aside for recording within the vault whilst everything is in situ and ensure that finds are properly treated for conservation. Early discussions should be held to ensure that material can be permitted offsite. Whilst this can be viewed with nervousness by Church authorities, it is preferable to recording on-site, owing to better security, lighting and other facilities. Furthermore, it can be done with sensitive treatment of the remains.

There also needs to be a commitment to analysis and publication of the results. Since Christ Church Spitalfields, no large vault has been fully published and even interim reports are sparse. This lack of comparative material inevitably leads to archaeologists starting from scratch when reporting upon their findings. For example, coffin plate designs which are not in the Christ Church catalogue could be considered to be new examples, but may be known from excavated but unpublished vaults.

Earlier archaeological deposits may survive beneath the vault and this should also be taken into account when preparing the excavation strategy, should the development require works below the base. Full archives of each archaeological intervention need to be kept to inform future schemes.

Vault excavation should involve several kinds of archaeological recording, including:

- Documentary analysis of all available records relating to the vault prior to fieldwork
- Standing building recording of the vault (see English Heritage 2006 for guidance).
- Wooden coffin recording. These can be overlooked and are often fragile and damaged.
- Lead coffin recording is the norm for most vaults, before reinterment, unopened.
- Burial shrouds, clothes and interior fittings of coffins are often recovered from split and damaged coffins in vaults and should also be recorded.
Research Priorities

Understanding the significance and value of our places of worship enables us to better conserve and protect them. A strong research base must underpin this, and archaeological projects, where needed as a result of necessary modifications and development, will enhance our knowledge. However, carefully considered research themes, linked to regional and national research agendas are needed to direct endeavour and ensure that archaeological projects are tightly focussed and proportionate. This guidance has, through discussion and consultation, identified a series of archaeological, historical and osteological research themes which are outlined below and may be used as signposts to understand what can be learnt, and what is significant, about church and churchyard vaults.

Use of Vaults

Named and traceable individuals are the best instances we have of marrying archaeology and historical data. Vaults contain higher numbers of named individuals than any other sites and provide unparalleled opportunities for understanding the history of the vault and social history of the parish. Burial vaults beneath the chancel were generally reserved for the incumbents and their families, whereas those beneath the nave aisles were ‘private’ vaults for the wealthier of the parishioners. A key question is when does the vault become the preferred place of burial in the parish? How does vault construction develop over time? By digitising all the coffins and linking this to a database of the coffin plate and osteological data, computer generated plots of the development of the use of the vault can be analysed in combination with historical records. The coffin furniture itself can provide important stylistic and art-historical information as well as the recorded facts such as names and dates. The neglect and disuse of vaults, both specific and general may be examined and thus the effects of historical occurrences such as changes in the law and population expansion may be seen. The general closure of vaults in 1853-4 does allow for occasional burials of family members – but were these burials actually placed with the rest of the family, did they have a specific location within the vault or were they just placed wherever there was space? Additionally, there is much to be learnt from decay processes in vault conditions. Why is it that in some vaults the wooden outer coffins survive very well, such as at St Mary Magdalene in Islington, while in others the level of preservation is poor, such as at Spitalfields, where the wooden coffins have collapsed? How, why and when were vaults cleared, ‘tidied’ and sealed?

Peopling of Vaults

Historians have traditionally approached the study of death from two perspectives. The first is the demographic and statistical, attempting to assess the nature, incidence and occurrence of mortality in the past, in the context both of the history of health and the history of medical treatment. The second is the investigation of the culture, including the material culture, of death. Vaults are normally more expensive and exclusive places of burial, and family vaults and graves are particularly so. However, vault populations may be unrepresentative on grounds other than status; for instance, it seems apparent that infants and children are underrepresented in a vault population.

It should also be remembered that not all vaults were for the rich. Wills can be used to a certain extent to ascertain the standing of those within a vault. A range of points relating to the individuals interred in vaults may be seen from the people and placing. Are some decorations age, gender or status-specific and are these distinctions reflected in placement within the vault space? For example, were there areas reserved for children or for the clergy? There was a perceived shortage of child burials at Christ Church, Spitalfields. Family groupings can also become apparent, the coffins sometimes being chained together. But can we follow the extended families from the documentary sources and find evidence of the reuse of the vaults by subsequent families? It is also possible to find families located in the same general area within a communal vault. A final point that should be
prioritized is that of local customs and eccentricities. The 17th century anthropoid coffin from St Andrews, Holborn is very unusual, such early examples frequently being selected for disposal during periodic clearance of vaults.

**Historical Demography**

Historical demographers focus on the information recovered from the body rather than its context, though the issues of representativeness and reliability remain central. There is a continuing need to test and refine the attributions of age and sex; given the ongoing improvement and sophistication of techniques, we need constant reassurance that identifications are robust. How skewed by age are vault populations? In early modern London, perhaps 4-6% of those dying were over 70; what is the proportion of vault burials in this age range, and indeed can we tell?; what we can say about the levels of mobility and fitness of the aged, for example; and, given that the category ‘aged’ accounted for 7% of the adult death total in the Bills of Mortality, what does ‘aged’ imply for the body?

We need to discriminate between intrinsic biological differences between the sexes and the differences induced by different treatment of males and females - e.g. nutrition, clothing and footwear, occupational injury or disease, even age at death. Another key area of interest is ethnic and national diversity. Are the ethnicities identified from documentary sources also marked in the archaeological record? Other significant questions of population comes with ethnic or national origins, such as the Huguenots and Jews of late 17th century London. Burials of surnameless ‘Moors’ are sometimes mentioned in London parish records (e.g. St Olave, Hart Street); can concentrations of these early burials of black people be identified in a vault or elsewhere in the church?

**Medical history**

The interests of historical demographers, medical historians and human osteologists overlap; certain points are, however, specific to the medical historian, for instance the way the body has been treated after death and what measures appear to have been taken to secure or make safe the corpse. Indeed,
the presence of plague and smallpox victims in the favoured and restricted space of a vault is interesting testimony to the ability of social imperatives to overcome resistance on medical grounds.

It may be possible to learn more about treatments from mineral or organic residues. It is well-known that mercury was used in the treatment of syphilis (Tucker 2007) but other metals - antimony, gold, etc. - were also used. Can we see correlation between chemical residues and the remedies promoted in the official *Pharmacopoeia* (1618), or the Helmontian approach popular in the later seventeenth century? The ‘holy grail’ of medical historians and historical demographers might be thought to be the identification of actual pathogens by DNA analysis. What was the real (biological) identity of the disease contemporaries called plague? Can the vague category ‘fevers’ be unpacked?

**Generalist history**

Historians are concerned with changing burial practices, especially the presence or otherwise of grave goods and textiles, an impression of the cost and elaboration of coffins and coffin-plates. Furthermore, is it possible to see how people dealt with the bodies of their more distant predecessors - not the ones they buried themselves, but those whose identities and personalities were largely unknown to them? How have they thought about the dead and what value, for example, have they accorded to the presumed wish of the dead to rest in peace, or to specific injunctions about the upkeep of tombs and vaults? This is obviously of significance with the wide scale clearances we permit today.

A further point is the changing proportions of, and treatment afforded to infants and children, generally under-represented in the burial population. With families, is it possible to examine location and style of burial? And for how long were family vaults used? If individuals of, say, non-European origin can be identified, where and how were they buried? Is there any correlation between cause of death (especially suicide, homicide, and childbed) and style of burial?

**Human Osteology**

When *Health and disease in Britain* was published in 2003, the authors were able to marshal data on more than 4000 individuals from 15 archaeological sites, dating from 1550 to 1850 (Roberts and Cox 2003). In the short time since then, the results from several large post-medieval cemeteries have become available also, although it is frustrating that most of the high-quality samples have been reburied (St Martin’s, Birmingham, Old St Pancras, London and St Marylebone, Westminster). Thus, it remains the case that the samples from St Bride’s, Fleet Street, and Christ Church, Spitalfields, are the only ones that have been retained following vault excavations.

These vault samples are heavily outnumbered by the skeletal remains excavated from external or flat cemeteries and the retained vault groups have been under severe pressure for research purposes. Each population has a unique character and thus further samples of skeletal remains from vaults are required, both to spread the research load over more sites to present greater population diversity and to fill gaps in knowledge. The themes below are intended to summarise research priorities which may be addressed through excavations of vaults, individually and in comparison with flat cemeteries.

**Demography**

There are a variety of important demographic questions that may be answered from vault populations – central to this is what the vault sample may tell us about the parish population itself and the interrelationship with the flat cemetery. Comparison with documentary records will be significant with reference to age-at-death, presence of children and issues of sex distribution within vault groups, all of which may change over time.
Social standing

A central issue to understanding vaults is whether their populations truly are from higher social classes than those in flat cemeteries. This may be examined via pathologies of the affluent, and also traits such as achieved height. Again, comparison with historical records will be important to examine fully the nature of specific disorders such as rickets, which may indeed have affected higher social classes where babies were swaddled and children were kept indoors.

Living environment, industrialisation, disease and post-mortem practices

The exploration of environment and industrialisation is difficult, but it is possible that examination of the human remains, in comparison with mortality profiles and other records, may demonstrate identifiable levels of infection and adverse environmental situations which left their mark on the population, cross-cutting social class. Post-medieval populations often show signs of post-mortem examination – whether routine or illegally experimental – and much may be learnt from these assemblages.

Socioeconomic status

Vaults are seen as the preserve of the urban rich, yet this may not always have been the case. Research needs to address this issue through analysis of the human remains in conjunction with historical records. Injuries (and their treatment), traces of manual labour and increased industrialisation, dietary deficiency (or dietary affluence) and the style of hair and clothing are key areas to target with reference to this theme.

Scientific research

Certain scientific techniques used in conjunction with vault assemblages can enhance our own methods as well as developing our understanding of past societies. Age at death estimates and sex attribution may be enhanced through the use of known-age named individuals, for instance. Techniques such as elemental, isotopic and biochemical analysis can give strong insights in the treatment of the body and disease, pollution, origin and mobility of populations.

Whilst there is broadly a preference within the church community for rapid reburial, this conflicts with the desire to collect as much information as possible. The assemblage from Christ Church Spitalfields is in constant use not merely by those interested in bioarchaeology, clinical medicine and surgery but also forensic scientific work, human origins, diversity and evolution. New samples could also contribute more widely, for instance the ‘History of Health in Europe’ project (Steckel and Floud 2001). Where reburial must take place, it is important to discuss the possibly of retaining small samples for the development of new techniques.

Conclusion

Vaults and their contents represent a key component of community heritage: they are the repository of the remains of former human beings, former parishioners; they are part of the sacred space of extant places of worship, and they are significant historical, demographic and archaeological resources capable of making very real additions to our knowledge of past cultural, religious and demographic experience.

If there is an overriding reason to empty them of their contents, it is important to plan a coherent, meaningful and proportionate response to this to help preserve the knowledge and heritage and other significance for current and future generations. This can be done sensitively and without overwhelming cost through good forward planning and fully justified objectives.
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