

**Burial Practices in Northern England c. A.D. 650-850: A Bio-  
Cultural Approach**

**Elizabeth Flora Craig**

**PhD Thesis**

**Volume 2**

**Department of Archaeology**

**University of Sheffield**

**September 2009**



## **IMAGING SERVICES NORTH**

Boston Spa, Wetherby  
West Yorkshire, LS23 7BQ  
[www.bl.uk](http://www.bl.uk)

# **THESIS CONTAINS**

**VIDEO**

**CD**

**DVD**

**TAPE CASSETTE**

## CHAPTER 6

### BIO-CULTURAL ANALYSIS

In this chapter, a bio-cultural analysis of burial practices at the six case-study sites is presented. This builds upon patterns identified in the burial rites in the previous chapter by considering whether aspects of an individual's identity were related to the manner in which they were treated after death. First, bio-cultural methods by which identity can be investigated through an analysis of osteological data and burial practices are considered. Second, three aspects of individual and group identity are outlined, highlighting the theoretical and methodological background to their investigation through funerary practices. Third, demography, health and disease prevalences of the individuals from the case-study sites are characterised. This is followed by a consideration of correlations between all aspects of an individual's identity – represented by osteological data for age at death, biological sex, stature, health, activity and disease – and the funerary rite – divided here into spatial location of the grave, form of the grave, disposition of the body, grave elaborations and grave goods – in order to investigate the provision of different forms of burial. Most of the results are discussed in their wider context in this chapter, however, some of the more significant patterns in the expression of individual or group identity in burial practices are discussed further in the next chapter.

## 6.1 Bio-cultural methods

Previous studies that have termed themselves “bio-cultural” have sought to provide an integrated approach to the characterisation and contextualisation of evidence drawn from human remains and the archaeological record. Helen Bush and Marek Zvelebil (1991: 8) defined the bio-cultural methodology as follows:

An investigation of the dynamic relationship between population, culture and the environment, with a greater emphasis placed on individuals, social groups and populations.

It was emphasised that this rejected the traditional mode of palaeopathological study, which focused on the individual and single case-studies of unusual cases, in favour of understanding of the populations to which the individuals belonged. In Bush and Zvelebil’s volume (*Health in past societies: bio-cultural interpretations of human skeletal remains in archaeological contexts*), the focus of bio-cultural studies was health of past populations, as tends to be the case in much research that can be termed bio-cultural (e.g. Cook 1984; Goodman *et al.* 1984; Privat *et al.* 2002; Robb *et al.* 2001). In this study the bio-cultural approach to funerary practices is defined broadly as a method that seeks to combine evidence from human remains with their archaeological context. A bio-cultural analysis is intrinsically an integrated and interdisciplinary analysis, drawing on diverse strands of evidence to build up a deeper picture of the beliefs and actions of past societies. It is both a multipurpose analysis and a method employed to answer multiple questions. It therefore has the potential to be much more than a means of investigating health in past populations. Bio-cultural methods provide an ideal basis for studies that seek to investigate concepts such as identity, social categories (such as rites of passage,



gender, liminality and exclusion), belief, memory and familial relationships. Heinrich Härke (2002) has characterised modern, interdisciplinary approaches to funerary contexts as involving sociological, anthropological and historical viewpoints to focus more on the experience of death rather than life. The experience of death is described as “natural and cultural roots of grief, about rites of passage and the nature of liminality, about attachment and continuing bonds, remembrance and forgetting, individual and social memory, afterlife beliefs, pollution and superstition” (Härke 2002: 341). He contrasts this with previous uses of archaeological and skeletal data to interpret burial practices in terms of social structures and status in the past. I argue that the exploration of the experience of life naturally compliments investigation of the experience of death in a modern bio-cultural study. The broadening of focus to incorporate the experience of death predisposes, or at the very least is complimented by, a certain understanding of the experience of life. For example, consideration of rites of passage as Härke suggests is predicated on our understanding of the age at death of individuals who received certain socially sanctioned forms of burial treatment. Bio-cultural methods therefore have the potential to provide a means by which the experience of life and death in the past can be investigated. Through the holistic integration of all aspects of burial ritual with diverse evidence for the individual for whom it was provided, context can become key, and the active and multi-dimensional nature of burial acknowledged.

In this study the bio-cultural methodology is utilised to provide an integrated study of individual and group identity, burial rites and cemetery topography. Evidence for identity is drawn from osteological and palaeopathological analysis of cemetery populations, including evidence for age at death, biological sex, stature,

health and lifestyle. Archaeological evidence regarding all aspects funerary rites including burial orientation, grave form, burial position, elaborations and grave goods is included in the analysis. Additionally, the topography of the cemetery is considered in order to investigate the use of space in burial grounds. All of these strands of evidence are drawn together to investigate the provision of burial rites in middle Anglo-Saxon northern England.

## 6.2 The investigation of identity using bio-cultural methods

Bio-cultural methods seek to integrate osteological and pathological data with all aspects of funerary practices to provide a deeper understanding of who was afforded which forms of provision and commemoration in death. However, not all characteristics identified by osteological and pathological analysis have the potential to be related to identity. For example, there are many examples of conditions commonly recorded in osteological assessment that are idiopathic (have no known cause) or asymptomatic, and therefore cannot be related to lifestyle. Examples include spina bifida occulta, supernumerary vertebrae or ribs, and most non-metric traits such as wormian bones, additional articular facets or sutures. Those skeletal characteristics that do have known aetiologies and/or do result in physical manifestations can provide evidence of biological identity including biological sex, age at death and aspects of health/lifestyle. Biological identity has a complex relationship to aspects of social identity and in the following discussion the connection between biological and social identity is explored through a consideration of biological sex and gender, age at death and rites of passage, health and social status, and kinship and familial relationships.

The correlation of burial treatment and biological sex is a common means by which social identities are investigated from funerary practices. However, it has only been in the last three decades that the theoretical underpinnings of such methods have been developed to incorporate theories of gender. The data produced by osteological assessment are a measure of biological sex, the pre-determined genetic expression of maleness or femaleness, whereas gender is a socially-constructed identity developed in response to wider characteristics of masculinity and femininity (Conkey and Spector 1984: 16; Rubin 1975: 179). Archaeological theories of gender have added that gender is an acquired product of the social relations of sexuality that is negotiated and maintained through material culture (Sørensen 1991: 122). As a result, gender need not necessarily be a binary opposition of male and female, but can incorporate multiple different or intermediate categories (Gilchrist 1994: 6; Nordbladh and Yates 1990). The assessment of biological sex using osteological methods does not ideally compliment this socially-constructed reading of gender. Osteological methods assign a biological sex based on a suite of masculine and feminine skeletal traits. Intermediate categories can be identified, but these relate to biological variation in expression of sex characteristics that may be completely independent of the experience of gender. Biologically inter-sex individuals do occur as a result of genetic or hormonal abnormalities, however they are rare (Rega 1997: 242). Furthermore, it is unclear how, if at all, such individuals could be identified in the osteological record (Mays and Cox 2000: 125), and thus, for all intents and purposes, the osteological record produces a binary opposition of male and female.

In the theoretical and methodological approaches to funerary archaeology prior to the 1980s, gender was equated with biological sex, and the interpretation of

gender was heavily determined by stereotypes of “natural” gender roles (Conkey and Spector 1984: 3-14; Sørensen 1992: 32). Antiquarian scholars assumed a direct link between grave goods and sex/gender to the extent that skeletal sexing was often considered unnecessary where grave goods were present (Lucy 1997a: 154-5). This practice was to persist in Anglo-Saxon archaeology for much of the 20<sup>th</sup> century (e.g. Evison 1987: 123; Hirst 1985: 33-4). Assemblages of grave goods typically found with males and females were seen as indicative of masculine and feminine gender, for example the common deposition of weapons in male graves was argued to represent a patriarchal warrior culture (Härke 1990: 23; 1992: 150). Deviation from this model was rare. In cases where biological sexing differed from the sex suggested by grave goods at Sewerby, Susan Hirst (1985: 33-4) preferred to rely upon the grave goods. Moreover Vera Evison (1987: 126) chose to consider a double weapons burial at Buckland, Dover as evidence of male homosexuality rather than suggest a female skeleton may have been buried with weapons (for critical discussion of this burial see Stoodley 1999a: 29-30).

The traditional associations of material culture and biological sex obscure evidence which is vital to a gender-based study of burial practices. Joanna Sofaer (1998; 2006a: 89) has argued that associating artefacts with “particular categories of bodies” tends to result in the implicit conflation of sex and gender. Conversely the divorcing of sex and gender via the creation of a false dichotomy between gender (expressed through material culture) and the biological body (assigned a sex through osteological analysis) creates theoretical limitations by implying that where no objects were interred with the body, as is increasingly the case from the 7<sup>th</sup> century in England, gender is either inaccessible or was unimportant (Sofaer 2006b: 156). The archaeological practicalities of adopting gender theory are complex.

Whilst funerary practices have been highlighted as most revealing of socially-constructed sex identities, and therefore most valuable in the study of gender (Sørensen 1992: 34; Parker Pearson 1999: 96), the fluid and constructed nature of gender limits our ability to interpret it with any objectivity. In recent years, much-needed attempts have been made to create a practical theory and methodology by which gender could be investigated in funerary contexts. Gender and biological sex can be argued to have some degree of commonality, which does not completely preclude the utilisation of one in the study of the other (Sofaer 2006a: 98; Sørensen 2000: 57). Gender can be seen as “not just a mental construction but ... a materially expressed social practice” (Sofaer 2006a: 113). Therefore, the analysis of gendered activities that result in skeletally observable changes has been highlighted as one method of bypassing the, as yet unresolved, issues of directly relating biological sex and gender (Sofaer 2000; 2006a: 106; 2006b: 160-1).

Osteological data provide an estimate for the age of death for individuals, however, in common with the relationship between sex and gender, the osteologically identifiable measure of age is not a direct reflection of social concepts of the lifecycle (Sofaer 2006a: 118). Three forms of age have been identified in the literature: chronological age, which is the actual time since birth; biological age, which is what can be estimated from biological remains of the body; and social age, which is the culturally-constructed category implying norms of behaviour and status (Ginn and Aber 1995; Gowland 2006: 143; Halcrow and Tyles 2008: 192; Lewis 2007: 2; Sofaer 2006a: 119). Low levels of literacy and numeracy during the Anglo-Saxon period make it unlikely that individuals knew their exact chronological ages (Cox 2000: 62), and therefore it appears unlikely that chronological age was the primary means by which the lifecycle was measured.

Biological age can be estimated from osteological assessment, but the accuracy of the methods used varies. The rapid growth and development that occurs in children permits their biological age to be determined very accurately, generally to the nearest year, however, amongst adults aging methods rely upon degenerative changes to the teeth and pelvis which can be dependant on lifestyle and health as well as age. In consequence, biological age at death in adults is commonly recorded in ten-year categories (e.g. Bass 1995; Brickley and McKinley 2004; Buikstra and Ubelaker 1994; White and Folkens 2005). The process of skeletal development creates certain thresholds in biological age, for example, the age of skeletal maturity at c. 18 years is generally taken to be the threshold between juveniles and adults. Social age presents a very different form of personal chronology, which may only be loosely tied to either physical development or the passage of time. The measurement of social age could have been based on common physical transformations, such as birth, weaning, walking, puberty, parenthood, menopause, senility and death (Crawford 1999: 47-56; 2000; Metcalf and Huntington 1991; Stoodley 2000: 468-9; Van Gennep 1960), however, social events such as marriage, inheritance and parenthood may have also been significant stages in the social lifecycle (Gowland 2006: 144). Alternatively the perception of physical maturity may have been dependent on personality or acquired skills and capacities that may develop independently of biological age (Halcrow and Tayles 2008: 203; Kamp 2001: 4).

Literary sources provide some evidence for Anglo-Saxon social age thresholds that demonstrate the potential conflict between thresholds characteristic of biological age and social age. Laws from the 7<sup>th</sup> century onwards indicate that the age of criminal responsibility and inheritance was around 10 years during the 7<sup>th</sup>

century and rose to 12 in the 10<sup>th</sup> (Crawford 1999: 53; Härke 1997a: 126). Texts tend to concentrate on the important stages of high-status male lives and indicate thresholds at 7-8 years (beginnings of work or education), 14-15 years (adulthood) and around 25 years (where a man might enter a monastery or take possession of inherited land) (Härke 1997a: 126). However, whilst literary evidence provides an insight into age thresholds, it omits similar detail of the lives of women and lower status individuals. Nevertheless, amongst the groups that records consider, it is apparent that Anglo-Saxon children achieved social responsibility many years before biological maturity. A second problem relates to how age is reflected in the burial record. Sam Lucy (1994: 24-5) has argued that, due to adult involvement in the creation of a child's burial, juvenile graves are not a reflection of the children themselves, but rather they represent the meanings that adults ascribed to childhood in a funerary context. A similar issue may affect adult burials, in that the social persona created in death may not reflect the age of death, but some other stage of their life. Heinrich Härke (1992) argued that the presence of weapons in the graves of the elderly and infirm meant that the weapons could not represent warrior status, however if the burial was designed to reflect a younger persona – perhaps that individual's role in their youth – Härke's argument could not be sustained. Indeed, Nick Stoodley (2000: 469) suggests that on some occasions, mourners may have chosen to bury an individual with the symbolism that related to a lifecycle stage that they believed appropriate for that person, not that reflecting the actual stage they were in at the time of death. He argued that this occurrence could explain anomalies encountered in early Anglo-Saxon cemeteries, whereby a few individuals were commemorated with grave goods more commonly afforded to those in different age groups (Stoodley 2000: 469).

As age remains a strong structuring principle in modern society, it is essential that archaeologists do not uncritically project their assumptions about the roles, abilities and activities of certain age groups onto the past. Modern attitudes to the elderly as having fulfilled their contribution to society may be in conflict with past attitudes that venerated elders (Stoodley 1999b: 105). Similarly, modern concepts of childhood are unlikely to resemble those of the past. Children have, until recently, been undervalued in mortuary analysis (Crawford and Lewis 2008). This was partially a result of the tendency for them to be under-represented in many funerary contexts (Lewis 2007: 20), but can also be seen as a result of androcentric archaeologies, which focused on power and economy at the expense of family and the domestic. The early 20<sup>th</sup>-century attitude is summarised thus: “the skeletons of young subjects are of comparatively little anthropological value” (Hooton 1930: 15) and children were seen as having contributed little to archaeologically-important features of the past (Crawford 1999: xi; Halcrow and Tayles 2008: 199; Sofaer 1997). More recent studies of burial evidence have reconsidered the role of children in two ways. First, there is acknowledgement that juveniles did participate in those areas of social action from which they were traditionally seen as being excluded. For example Mary Lewis (2000a: 220) has explained child mortality and morbidity in medieval England as resulting from individuals having worked from around seven years, while Megan Perry (2005) has argued that mortality amongst children of seven to fifteen years in a Byzantine trading centre may coincide with the beginnings of self sufficiency for individuals within this community, many of whom, evidently, did not successfully support themselves. Second, a growing interest in domestic activities and the family has focussed archaeological attention on the lives of children and the different activities in which they engaged (Crawford



1999: xiii, 102-21; Crawford and Lewis 2008; Lewis forthcoming). Thus the archaeology of childhood is now beginning to receive the attention it warrants.

Social groups can exist on a variety of scales ranging from broad ethnic groups, which may draw their identity from a shared geographical origin (whether real or invented), to pairs of individuals bound together by, for example, marriage or biological relatedness. In line with the theoretical advances that have allowed the conceptualisation of gender and rites of passage in the archaeological record, social groups can be considered to be socially defined and constructed, fundamentally different from simple biological designations such as the nuclear family or genetic race, but still intrinsically linked to them. They can, therefore, be adopted, modified and manipulated by individuals (Moreland 2000: 24; contra. Sims Williams 1998; Tyrrell 2000a). Material culture can be manipulated in many ways to delineate social groups. It can be used to signify inclusion and similarities of identity, but it can also be used to exclude “outsiders”, who in turn can use their separation in the construction of an alternative identity (Jenkins 1997: 70). Association with, or position within, a social group has great potential to interrelate with identity and affect funerary provision. Two of the social groups most commonly discussed in the archaeological literature on Anglo-Saxon funerary practices are social status and kinship groups and, although not as extensively studied as, for example, gender and rites of passage, these social categories can also be investigated using bio-cultural methods.

Social status can be defined as deriving from divisions “originating in the distribution of prestige or social honour within a community” (Scott 2006, 29). People judge one another as either superior or inferior in relation to values they hold in common, and therefore social status is a form of identity that is perceived

and created by others. However, in addition, social status can be manipulated oneself, by behaving in accordance with, or in exception to, social norms and by utilising markers of social identity (Scott 2006: 29-30). Social status has been largely, and extensively, explored through studies of grave goods assemblages in Anglo-Saxon England (e.g. Alcock 1981; Arnold 1980; O'Shea 1981). In studies from the 1970s and early 1980s, grave inclusions were understood in largely economic terms, as markers of individual wealth. Differing approaches included investigating the "value" (Tainter 1975), rarity and occurrence (Rathje 1973; Shephard 1979: 56), and number (Hodson 1977: 406) of inclusions. The demography of the individuals who received elaborate burials was also investigated. The greater numbers and variety of grave goods in early Anglo-Saxon female graves was argued to indicate greater wealth, perhaps as a result of the combined wealth of husband and wife being reflected in the latter's burial (Arnold 1980: 132). The attitude characteristic of these studies from the 1970s and 80s can be summarised in the words of David Wilson (1976: 3):

[Anglo-Saxon archaeology provides] practically no clues to political structure, to national boundaries, to marital practises or to the rights of the individual. Occasionally a very rich grave may give an idea of social structure and the wealth of a particular person, but such indicators are rare.

This statement explicitly conflates social status with monetary wealth, however these concepts were not always considered interchangeable. In his discussion of differences in artefact assemblages between male and female burials, John Shephard considers that there was a greater reflection of wealth in female graves, in contrast to an emphasis on social status in male graves (Shephard 1979: 58). This

important distinction between wealth and social status is considered theoretically valid in modern studies.

A significant problem with the majority of processual research into wealth and social status was that it assumed that funerary ritual, more specifically grave goods, was the only medium through which identity could be expressed. Therefore if status was not apparent in the material culture of the funerary rite, it was not a significant ordering principle of society. In fact, however, there are many archaeologically invisible spheres of activity in which social status may have been explicit, such as conversation, ceremony and daily activities. In addition, equating wealth determined from grave goods with social status is overly simplistic, uncritical of the subjectivity of assigning “value” (Stoodley 1999a: 6) and neglects the fact that grave goods have the potential to reflect more than a straightforward index of wealth or the social standing of the deceased (Hadley 2000a: 155). It must be borne in mind that symbolic value may render seemingly innocuous items important, disproportionate to their physical quality, rarity and quantity and that funerary rituals provide an opportunity for the manipulation of actual roles and statuses: the use of the dead for the aggrandisement of the living (Parker Pearson 1982: 112). Furthermore, social statements in death may not have been consistent, for example it may have been more overt where status re-ordering or consolidations of new and unstable positions were occurring (Parker Pearson 1982: 122).

Whilst there are many criticisms of processual studies of wealth based on grave goods, some elements remain viable hypotheses for studies of social status. Economic status is a valid characteristic to investigate, despite being only one of a

range of elements that comprise social status.<sup>1</sup> The variations apparent in Anglo-Saxon burial practices indicate that it was deemed appropriate to provide additional investment in the graves of certain individuals. The possibility has been explored that some later Anglo-Saxon grave elaborations would only have been appropriate for higher-status individuals, due to the expense required in their manufacture, given the use of rare or exotic materials, or the need for complex and skilled construction. In her assessment of later Anglo-Saxon burial practice, Buckberry (2004) investigated social status at six northern cemeteries: the York cemeteries at the Minster, Swinegate and St Andrew's Fishergate; and the Lincolnshire cemeteries at St Peter's, Barton-upon-Humber, St Mark's Lincoln and Barrow-upon-Humber. Analysis revealed a marked disparity in the frequency and number of different grave elaborations used at these sites. The burial variation at York Minster was much more diverse than elsewhere, and included multiple forms of container for the body, graves lined with stone, tile, mortar and charcoal and forms of within-grave structures, including stones placed around or under the head, suggesting that a relatively high-status population was buried there (Buckberry 2007: 119; Phillips 1995: 75-92). The variety of burial forms at high-status sites may have reflected a desire for individuality and an element of social competitiveness amongst the elites (see Hadley 2000b: 165), and certainly at York Minster, it appears that groups of high social status were utilising burial as a means through which to express their elevated positions (Buckberry 2007: 119).

Bio-cultural studies have much to contribute to our understanding of the expression of social status in funerary practices. They can do this by providing two perspectives on individual or group status: first, a proxy for social status drawn

---

<sup>1</sup> Social status can be said to be composed of political, kinship and gender entitlements, lifestyle and economic status (Bourdieu 1986; Loe 2003: 2).

from funerary rites in the manner outlined above; and second, evidence for biological status drawn from pathological assessment of health. The human body requires certain conditions in order to thrive. Inferior nutrition, higher levels of disease, polluted living conditions including water sources, a lack of medical care and long hours of physically challenging labour can create biological stress, and result in physical manifestations of poor health, small adult stature and short life span (Goodman *et al.* 1984; Robb *et al.* 2001: 213; Selye 1973). Osteologically identifiable pathological conditions that result from biological stress have been termed “stress markers” (Goodman *et al.* 1984) (Table 6.1). As their aetiologies can be related to deprivation, these conditions can contribute to a bio-cultural analysis

Stress marker	Osteological manifestation	Aetiology
Early death	High proportions of juveniles within the cemetery population	Acute stress can result in death before skeletal manifestations have time to develop (Wood <i>et al.</i> 1992)
Reduced stature	Significantly shorter stature than the population mean for age	During stress, growth is retarded in proportion to the severity of that stress (Tanner, 1981)
Linear enamel hypoplasia (Goodman and Rose 1991; Sarnat and Schour 1941)	Grooves or pitting in the enamel of the dentition due to ameloblastic inhibition	Occur during general periods of childhood ill health, high temperature or diarrhoea
Harris lines (Harris 1926; 1931; 1933)	Radio dense lines across the diaphyses of long bones caused by periods of arrested growth	Linked to stress however study has suggested they remodel to quickly to be of use in adults (Garn <i>et al.</i> 1968)
Cribriform orbitalia and porotic hyperostosis (Stuart-Macadam 1985; 1989; 1992)	Hypervascularity of the orbit and cranium	Anaemia due to iron deficiency, pathogen load, sickle cell disease etc.
Non-specific periostitis (Goodman <i>et al.</i> 1984: 32-34)	Blastic bone activity, generally of the long bone diaphyses	The aetiology of this condition is varied and complex, however some form of general stress is thought to be responsible

Table 6.1. Stress markers, their skeletal manifestations and aetiologies.

by informing our investigations of social status. Many bio-cultural studies focus on aspects of health status in relation to manifestations of social status drawn from funerary provision (Craig and Buckberry in press; Goodman *et al.* 1984; Privat *et al.* 2002; Robb *et al.* 2001). A recent study by the present author considered health status and social status at the later Anglo-Saxon cemetery of Raunds Furnells (Craig 2006; Craig and Buckberry in press). Health status of each individual was determined by consideration of three “stress markers” – cribra orbitalia, linear enamel hypoplasia and tibial periostitis – and social status by funerary rites including carved grave covers, coffins, stone inclusions and grave markers. Analysis revealed several patterns in the provision of funerary rites to individuals who experienced different levels of health. Individuals clustered in a group of burials in the far south-eastern corner of the cemetery were found to have experienced the most frequent and severe forms of stress, as evidenced by higher prevalences of the three stress markers. These same individuals were buried with fewer, plainer grave elaborations than elsewhere in the cemetery, suggesting that their poor health during life may have been a consequence of low social status. In contrast a group of interments located in the centre of the site, just south of the church walls, experienced the fewest health-related pathologies, but were buried in the most elaborate graves in the cemetery, including stone coffins and those marked by carved grave markers and covers. These two groups provided a strong contrast in health and social status that supports the validity, and demonstrates the potential of, bio-cultural analyses of early medieval funerary practices.

A bio-cultural investigation of social status can also combine evidence of physical impairment and social exclusion to investigate disability in the past. Physical impairments can be identified through pathological analysis, but only in

some cases will these conditions have held a social stigma and therefore became disabilities (Crawford in press a; Metzler 2006: 65). Where pathological conditions were manifest as a deformity or physical impairment, they will have been noticed by others and therefore will have had the potential to direct the ways in which affected individuals were treated by society, thus creating disability. The term disability is used here to refer to the social response to a physical impairment; whereas the term physical impairment relates to a physical condition that has the potential to be identified from osteological evidence. Disability has been described as:

The disadvantage or restriction of activity caused by a contemporary social organization which takes no or little account of people who have physical impairments and thus excludes them from the mainstream social activities (Union of the Physically Impaired Against Segregation 1976 quoted in Metzler 2006: 21).

Several recent studies have investigated disability in Anglo-Saxon England by utilising bio-cultural methods (Crawford 2007; in press a; Hadley in press; Hemer and Craig in press; Lee 2006, Metzler 2006). Amidst general calls for a “more social model of disability” in archaeological research (Cross 2007: 191), these studies integrate evidence of physical impairment with social context derived from the ways in which individuals were treated in burial and documentary evidence for contemporary opinions to create a deeper understanding of disability in the past.

Irena Metzler (2006: 4) has highlighted the dichotomy between “visible” and “unseen” disability and emphasises that the appearance of impairment can make a profound difference to the perception of a person by society, with more recognizable conditions having a greater impact on how an individual was treated. Various physical impairments will have created physical limitations for those who

experienced them, therefore restricting their involvement in various aspects of society. Disability is highly contextual: a physical impairment that is disabling in one context may not be so in another. A commonly-cited example is that of dyslexia, a condition that today can result in considerable disability, yet in non-literate societies would have little impact (Cross 2007: 180). Alternatively, an individual with a physical impairment such as paralysis of the legs would suffer extreme disability in a society where physical labour was a necessity, but perhaps would not be disabled in another context where they principally required use of the arms. However, it must also be borne in mind that a purely social disadvantage such as poverty can also have the potential to be disabling, for example by preventing access to resources and social status (Waldron 2000: 31).

Bio-cultural studies that rely upon the identification and interpretation of markers of health, disease, activity and physical impairment on the skeleton, must acknowledge that this process has inherent limitations that should be considered before any conclusions can be drawn about their relationship to burial treatment. These limitations have been discussed in depth in the osteological literature and termed the “osteological paradox” (Wood *et al.* 1992). The “osteological paradox” draws attention to the fact that bone is a plastic material, which requires time to react to stimulus. Some diseases do not create the required stimulus for the bone to react at all, such as certain soft tissue infections, brain disorders and septicaemia (Roberts and Manchester 2005: 2). Additionally, diseases that act quickly may kill their host before the bone has had sufficient time to produce identifiable lesions. This is the case for some of the well-documented conditions in the past, including the plague. Thus the range and severity of diseases identifiable in skeletal material



does not provide realistic evidence of the variety of illnesses experienced by a population during life.

The implications of the “osteological paradox” in bio-cultural studies are numerous. First it must be borne in mind that all individuals in a cemetery population died of something, and when death occurred at a young age it is likely that their physical health was poor. As a result of the slow response of bone to disease, an individual with gross skeletal manifestations of disease or stress will have had to suffer chronic illness for a period of time, suggesting, in fact, that they were fit and strong enough to survive beyond the initial stress. Conversely, and most confusingly, an individual with no skeletal manifestations of stress or pathological lesions may have experienced one of two very different forms of death. Either they experienced good health throughout life and succumbed to old age or indiscriminate illness which will leave no trace on the skeleton, or they were a biologically stressed, perhaps nutritionally deprived, individual for whom sudden illness could not be countered by a strong enough immune response. As a consequence, it is not possible to determine confidently whether particular individuals were healthy, rather it is only possible to identify a proportion of those who suffered chronic illnesses.

Kinship is traditionally seen as essential to the structure of Anglo-Saxon society and instrumental in the articulation of personal status, development of genealogical links and dictating access to land and resources (Härke 1997a: 137; Loyn 1974). There is literary evidence for the importance of both the nuclear family and to a lesser extent, the wider household in Anglo-Saxon England. The structure of the Anglo-Saxon family can be reconstructed from Old English terminology that emphasises the importance of close kin – parents, grandparents, children, aunts,

uncles, nephews and nieces – through the use of distinctive names (Crawford 1999: 109). Aspects of the identity of family members appear to have been interlinked in a complex manner. For example, there appears to be a general consensus that marriage was monogamous (Härke 1997a: 130) and in literary sources women are often described in close relation to their husbands, but laws from the 6<sup>th</sup>-9<sup>th</sup> centuries seem to define a woman's status in relation to her father, even when married (Loyn 1974: 206). Furthermore, economic independence of husband and wife is indicated by the dispersal of a woman's morning gift (a gift made from husband to wife on consummation of the marriage) to her paternal kinsmen if she died childless (Æthelbert 81, Whitelock 1955: 359). This also implies an economic link between mother and child. The seemingly widespread practice of fostering and godparenthood throughout Anglo-Saxon England suggests the family unit was not always a biological unit (Crawford 1999: 122-138; Wareham 2001: 376). Thus the household was united both residentially and legally (Härke 1997a: 137), but not necessarily biologically.

Kinship and familial relationships have long been considered viable aspects of identity to explore in the burial record, particular attention having been paid to familial hierarchies of residence and descent (e.g. Binford 1972). Evidence from funerary archaeology has been utilised in several ways to investigate social groups in early Anglo-Saxon England. Cemetery populations have been used to infer community size (Arnold 1988: 166). However caution should be used when directly correlating burial populations to living communities as larger cremations cemeteries may have served multiple communities (Arnold 1981) and conversely multiple contemporary cemeteries served some middle and later Anglo-Saxon monastic foci (Hadley 2000b: 203-4) (see chapter 3.1). The arrangement or clustering of graves

within cemeteries has frequently been utilised to identify kin groups (Cooke and Dacre 1985: 54; Evison 1987: 145, Pader 1982; Philp 1973: 200-1, Welch 1980: 266), however interpretations of these groupings vary. Susan Hirst (1985: 102) considered that clusters of burials where the wealth of grave goods varied indicated households, comprising individuals from several ranks of society, rather than familial clusters, who would share a similar wealth status. Studies of Merovingian society, however, have suggested that status could vary within family groups in line with an “open ranked society” – where social differences within families were as important as status differences between family groups – contradicting the assumption made by Hirst (Härke 1997a: 139).

Osteological data have previously been integrated into studies that sought to provide a bio-cultural method of approaching kinship identity. In such studies the occurrence of non-metric traits – a range of skeletal features widely considered to reflect both genetic and environmental factors – is utilised as an indicator of genetic relationships between individuals. At Berinsfield (O), where burials span the mid-5<sup>th</sup> to mid-7<sup>th</sup> centuries, three kinship groups were identified based on non-metric traits, burial form and spatial patterning (Boyle and Dodd 1995: 133-7). The relatively even distribution of the sexes, and examples of richly furnished, moderately furnished and unfurnished graves in each of these clusters of burials, were argued to support the conclusion, as a household would be expected to comprise a mixed demographic and status group. The occurrence of a 6<sup>th</sup> lumbar vertebra and the combination of septal apertures and wormian bones was unique to a cluster of burials in the south east of the site, and, in contrast, non-metric traits were generally rare amongst a separate cluster of burials in the south west (Boyle and Dodd 1995: 133). A recent review of the utility of non-metric traits as markers

of identity by Andrew Tyrrell has, however, cast doubt upon their value for bio-cultural analysis. In particular, the complexity of the relationship between genetics, environment and non-metric traits has been highlighted, and two caveats have been emphasised: that some traits are more suited to application in genetic analysis than others (Tyrrell 1999: 394; 2000a: 151) and consideration of a combination of the least environmentally-determined traits is inherently more valuable than analysis based on single traits in isolation (Tyrrell 2000b: 301). In light of these arguments, the conclusions drawn about familial relationships at Berinsfield seem weakly supported, relying as they do upon single skeletal traits such as wormian bones (extra small bone pieces along the suture of the skull), supernumerary vertebrae, spina bifida occulta and the metopic suture (an extra suture running centrally through the frontal from nose to crown), which are known to be more environmentally-sensitive than other, for example dental traits (Tyrrell 2000b: 294). Whilst non-metric traits retain some potential as evidence of kinship relationships, the complexities inherent in their interpretation, combined with the caveat that early medieval kinship groups need not have been genetically related at all, currently make them of limited utility to a bio-cultural study of identity.

To conclude, Anglo-Saxon individual and group identity has the potential to have been determined by a wide range of factors based upon both physical characteristics and social roles. Biological evidence for sex, age and disease that can be determined from skeletal remains must be interpreted with caution if it is to be used in the reconstruction of aspects of identity. Biological categories of male/female, juvenile/adult, healthy/sick are utilised within social contexts to create the social categories of gender, age thresholds and disability. Similarly, a direct impression of the social status an individual held during life cannot be determined

directly from funerary contexts. Yet, there is the potential to overcome many of these weaknesses in the data by combining several strands of evidence for identity into one bio-cultural study which draws on both osteological and palaeopathological data and evidence for funerary practices from the archaeological record.

### 6.3 The demography of the sample population

The database produced from the six case-study sites contained osteological data for 1144 individuals. Demographic profiles and life tables for the six case-study sites combined as one population and separately as individual communities are presented in Appendix 7. Among the six case-study sites there are some notable variations in demographic profile (Table 6.2). The population at Adwick does not represent a standard mortality profile. There are very few individuals under the age of 18 amongst the remains, and some sub-adult demographic groups are not represented at all: for example, there are no neonates (birth-1 month), infants (1 month-1 year) or adolescents (13-17 years). The largest group are young adults (18-25 years), who make up nearly 50% of the total assemblage. This profile suggests either that the cemetery served only a restricted proportion of a larger population, or that a significant number of burials remain unexcavated beyond the boundaries of the site. In the latter case, this would indicate strict zoning within the cemetery by age at death, but this seems unlikely given the impression of the excavators that they had excavated the entire cemetery (Harvey 2008; see chapter 5.1). Weiss (1973) estimated that 30-70% of a pre-industrial population would die before the age of 15 years, and therefore any site at which juveniles make up less than 30% of the total

	Adwick	Ailcy Hill	Norton	Pontefract	Spofforth	Thwing	Total
Foetus	0	0	0	2	0	2	4
Pre-term	0	0	0	0.8	0	1.5	0.4
Neonate	0	1	0	20	31	17	69
0-1m	0	0.6	0	8.3	7.4	12.6	6.4
Infant	0	3	0	22	12	16	53
1-11m	0	1.9	0	9.1	2.9	11.9	4.9
Young child	1	1	1	54	11	13	81
1-6y	2.7	0.6	1.2	22.3	2.6	9.6	7.5
Older child	2	6	4	20	28	12	72
7-12y	5.4	3.8	4.7	8.3	6.7	8.9	6.7
Adolescent	0	8	8	13	18	2	49
13-17y	0	5.0	9.3	5.4	4.3	1.5	4.5
Young adult	17	8	9	9	44	9	96
18-25y	45.9	5.0	10.5	3.7	10.5	6.7	8.9
Young middle adult, 26-35y	3	20	19	18	47	21	128
	8.1	12.6	22.1	7.4	11.2	15.6	11.8
Old middle adult, 36-45y	6	12	14	12	39	22	105
	16.2	7.5	16.3	5.0	9.3	16.3	9.7
Mature adult	2	3	7	8	37	8	65
46y+	5.4	1.9	8.1	3.3	8.8	5.9	6.0
Juvenile	0	19	0	10	21	2	52
0-17y	0	11.9	0	4.1	5.0	1.5	4.8
Adult	6	78	0	54	132	11	281
18y+	16.2	49.1	0	22.3	31.4	8.1	26.0
Unaged	0	0	24	0	0	0	24
	0	0	27.9	0	0	0	2.2
Total	37	159	86	242	420	135	1079
	100	100	100	100	100	100	100

Table 6.2. Distribution of individuals by age at death at the six case-study sites (percentages in red).

population can be considered to under-represent non-adults. By this model, under-representation of younger individuals is apparent at Adwick, Ailcy Hill and Norton Bishopsmill. The under-representation of young children is well known in Anglo-Saxon cemetery populations and has been related to both selective burial practices and poor preservation of immature bone (Buckberry 2000; Crawford 1993; Lewis 2002b: 32-3; Lucy 1994). Evidence of selective burial within the sample of case

studies can be seen at Thwing, where neonates and infant burials cluster to the east of a building and line of post-holes (for discussion of this practice see below, 6.4 and chapter 7.2.2). If this zone of the cemetery had not been excavated, juveniles would also appear to be very infrequent in this population. Thus, we must allow for the possibility that clusters of infants have been missed at one or more of the other sites.

The sex profiles are mixed at all six sites (Table 6.3). The sample as a whole comprised a slightly higher proportion of adult males, with an overall sex ratio of 1.4 males for every female. However, given the large proportion of adults for whom the osteological determination of biological sex was not possible, it is unwise to read any significance into the general preponderance of males. The only exception is the population from Ailcy Hill, which has a markedly unusual sex profile, where males outnumber females by more than four to one. The excavators were able to infer changes in the population interred on Ailcy Hill over the three main phases of burial. A mixed demographic profile among the heavily disturbed phase 1 burials contrasted with a male bias in phases 2 and 3. *In situ* burials from phase 2 (c. A. D.660-880) comprised nine males, five unsexed individuals and no females and, when considered in light of documentary evidence for settlement in Ripon, it was suggested that these burials were those of a local monastic community. Whilst phase 3 was also male-dominated, the more unusual forms of burial and varied orientations led to the interpretation that outsiders were buried here during the last phase of interment after the main focus of burial had moved elsewhere (Hall and Whyman 1996: 120-4).



	Adwick	Ailcy Hill	Norton	Pontefract	Spofforth	Thwing	Total
Male	13 35.1	35 22.0	19 22.1	37 15.3	105 25.0	36 36.7	245 22.7
Intermediate	0 0	1 0.6	0 0	0 0	6 1.4	0 0	7 0.6
Female	10 27.0	8 5.0	17 19.8	24 9.9	84 20.0	31 23.0	174 16.1
Unsexed	14 37.8	115 72.3	50 58.1	181 74.8	225 53.6	68 50.4	653 60.5
Total	37 100	159 100	86 100	242 100	420 100	135 100	1079 100

Table 6.3. Distribution of individuals by biological sex at the six case-study sites. (percentages in red).

Data for the living stature of individuals from the case-study sites is presented in Tables 6.4 and 6.5. Average stature for males was 173.0cm, and females 161.7cm. These were both approximately 1cm above the average statures recorded for males and females in the Anglo-Saxon period (Roberts and Cox 2005: 195). There was 5cm variation in stature between the tallest populations at Ailcy Hill and Spofforth and the shortest populations at Pontefract and Thwing. In the forthcoming bio-cultural analysis, living stature was not found to provide any meaningful correlations with burial practices or location of burial, and therefore is not discussed further in this thesis.



	Adwick	Ailcy Hill	Norton	Pontefract	Spofforth	Thwing	Total
140-149.9	0 0	2 1.3	0 0	0 0	2 0.5	2 1.5	6 0.6
150-159.9	1 2.7	3 1.9	4 4.7	6 2.5	10 2.4	9 6.7	33 3.1
160-169.9	3 8.1	6 3.8	10 11.6	5 2.1	32 7.6	27 20.0	83 7.7
170-179.9	4 10.8	14 8.8	11 12.8	3 1.2	35 8.3	18 13.3	85 7.9
180-189.9	1 2.7	6 3.8	1 1.2	0 0	11 2.6	1 0.7	20 1.9
190-199.9	0 0	0 0	0 0	1 0.4	1 0.2	0 0	2 0.2
No data	28 75.7	128 80.5	60 69.8	227 93.8	329 78.3	78 57.8	850 78.7
Total	37 100	159 100	86 100	242 100	420 100	135 100	1079 100

Table 6.4 Distribution of individuals by living stature at the six case-study-sites.  
(percentages in red).

	Mean stature (cm)		
	Male	Female	All individuals
Adwick	173.0	162.0	169.8
Ailcy Hill	174.1	157.0	170.6
Norton	173.9	167.2	168.6
Pontefract	171.9	160.4	163.9
Spofforth	174.1	164.3	170.1
Thwing	170.5	159.6	165.5
Total	173.0	161.7	168.4
Anglo-Saxon average	172.0	161.0	Average: 166.5

Table 6.5. Mean stature at the six case-study sites compared with an average for the Anglo-Saxon period. (Average data from Roberts and Cox 2003: 195).

Prevalences of pathological conditions in the sample population are presented in Table 6.6. alongside general prevalences for the Anglo-Saxon period as a whole taken from published reports (Judd and Roberts 1999; Roberts and Cox 2003: 164-220).<sup>2</sup> There were some notable deviations in the sample population from average prevalences. Weapon trauma was particularly common, occurring in four separate cases across three of the case-study sites. Higher crude prevalences of enamel hypoplasia amongst the case-study population might also indicate a higher level of biological stress than experienced by other Anglo-Saxon communities, however all other stress-related pathologies occurred less frequently amongst the case-study sites than average.

Several unusual pathological conditions have been diagnosed in the case-study population. Ankylosing spondylitis, a progressive and proliferative ossification of soft tissue that fuses the spine, was identified in three individuals (0.8% TPR) (Figure 6.1). The condition is thought to relate to a genetic mutation and restricts spinal movement (Aufderheide and Rodriguez Martin 1998: 102-3). An individual at Pontefract had otosclerosis, fusion of the ear bones, which is the commonest cause of deafness in modern adults (Thompson 1984: 670) and which has been identified amongst Anglo-Saxon populations at Castledyke and Raunds Furnells (Roberts and Cox 2003: 174). Poor preservation of the remains of the individual from Pontefract resulted in the recovery of ear bones from only the right side, preventing confirmation of whether they were completely, or only partially, deaf, and this severely inhibits any interpretation of the impact of their condition. Nonetheless we can suppose that he suffered from some auditory impairment.

---

<sup>2</sup> Generally, pathological prevalences are expressed as either a crude prevalence rate – the number of cases of a pathology divided by the total population, or a true prevalence rate – the number of cases of a pathology divided by the total number of individuals for which presence or absence of that particular pathology could be observed. True prevalence rates are a more accurate representation of disease prevalence in archaeological populations.

Pathological condition	Prevalence True % (crude %)		Pathological condition	Prevalence True % (crude %)	
	Case-study sites	Average		Case-study sites	Average
Cribriform orbitalia	7.0 (2.7)	24.6 (7.6)	Spinal joint disease	37 (12.1)	(12.1)
Tibial periostitis	10.0 (3.3)	N/A <sup>3</sup>	Appendicular osteoarthritis	17.5 (8.2)	(8.3)
Enamel hypoplasia	16.6 (6.6)	7.4 (18.8)	Weapon injuries	(0.8)	-
Maxillary sinusitis	9.3 (1.7)	(4.7)	Fractures	(2.3)	3.5 <sup>4</sup>
Endocranial lesions	3.7 (1.5)	(0.07)	Lytic lesions at the joints	(3.1)	(1.5)
Scurvy	(0.3)	Rare	Leprosy	(0.1)	(1.07)
Rickets	(0.6)	Rare	TB	(0.3)	(0.9)
Non-specific periostitis	(2.7)	N/A <sup>3</sup>	Neoplastic diseases	(0.3)	(1.4)
Osteomyelitis	(0.3)	(1.3)	DISH	0.5 (0.2)	(1.8)

Table 6.6. Prevalences of a range of pathological conditions at the six-case-study sites combined as one population.

Deafness would have created difficulties for the social interaction of the sufferer.

Moreover, deafness is recorded in Anglo-Saxon literature as a disability

that may have prevented full involvement in society, for example, the later Anglo-Saxon laws of Alfred suggest limitations to the independence of the deaf and dumb.

Alfred 14 directs that the father of a person born deaf, so that they cannot hear

charges brought against them, or confess or deny wrongdoing, was responsible for

paying compensation for their misdeeds (Attenborough 1922: 71; Crawford in press

a). One further unusual pathological case from the case-study sample is worthy of

discussion here. A 6-7 year old juvenile from Spofforth had a severe cranial

deformity for which radiography and histological analysis by this author permitted a

<sup>3</sup> Comparable average data not available.

<sup>4</sup> Judd and Roberts 1999.

diagnosis of fibrous dysplasia (Craig 2009; Craig and Craig in prep.) (Figure 6.2). This individual had gross expansion of the bone of the left side of the face and mandible, thus the lesion would have resulted in a significant visible extension of the chin both anteriorly and laterally. The pattern of calculus on occlusal surfaces of the left molars the teeth suggested that the individual was avoiding mastication on the side of the deformity, potentially due to excessive tissue expansion, inflammation or discomfort.



Figure 6.1. Ankylosing spondylitis (from Aufderheide and Rodriguez Martin 1998: 103).



Figure 6.2. Deformity to the jaw of Spofforth 177 (6-7 years) (photo: author).



In some cases, the distribution of pathological conditions amongst the population preferentially affected certain age groups or one of the sexes. For example, cribra orbitalia and endocranial lesions were both significantly more common amongst juveniles (MW=21308,  $p=0.009$ ; MW=24757,  $p=0.001$ ) (Table A7.2.3).<sup>5</sup> The former was particularly prevalent amongst individuals who had died in late childhood or adolescence, i.e. between the ages of 7 and 17 years (KW=18.487,  $p=0.030$ ), and the latter condition was most common amongst infants, i.e. between 1 and 12 months (KW=26.23,  $p=0.002$ ) (Table A7.2.4). Although these two conditions preferentially affected different age groups, they were also experienced in combination by some children ( $\chi^2=22.884$ ,  $p<0.001$ ) (Table A7.2.1). Enamel hypoplasias were most commonly identified in individuals who had died in adolescence (KW=22.582,  $p=0.004$ ) (Table A7.2.4). This pattern of stress conditions amongst individuals who had died before attaining biological maturity is not unexpected (Larsen 1997: 63). Although the conditions described above would not necessarily cause death, those who were weakened by ill health and physiological stress during childhood would have had greater chance of succumbing to illness. One pathology commonly related to stress, tibial periostitis, was much more common among adults than juveniles (MW=7442,  $p=0.005$ ). The aetiology of tibial periostitis is complex and little understood (Weston 2008), however its common incidence in combination with enamel hypoplasia, especially the severe pitted form, at Spofforth (2, 50% of cases of pitted hypoplasia also had periostitis) suggests at least a partial relationship to biological stress in this population (Table A7.2.3).

---

<sup>5</sup> Tables with the prefix A7 can be found in Appendix 7.

The degenerative conditions spinal degenerative joint disease (DJD) and appendicular osteoarthritis (OA) were, as expected, significantly more common amongst adults (MW=7884,  $p<0.001$ ; MW=24007,  $p<0.001$ ), however juveniles were still, if infrequently, affected (Table A7.2.3). Evidence of spinal DJD was identified in three adolescents (aged between 13 and 17), all from Pontefract. Appendicular OA, in particular, was strongly linked to increasing age (KW=40.370,  $p<0.001$ ), with mature adults the most severely affected. Neither condition preferentially affected either sex (Table A7.2.4, A7.2.7).

Some pathological conditions were found to affect males and females in different proportions, however no statistically significant patterns were identified (Table A7.2.7). Males (17.8%) experienced more tibial periostitis than females (12.4%) and also had slightly more spinal DJD (males: 56.9%, females: 50%). A greater disparity between the sexes was seen in cases of maxillary sinusitis, which was more common amongst females (19.5%) than males (11.7%). During the early medieval period sinusitis does not widely appear to affect preferentially either sex. For example, females were more frequently affected at Caister-on-Sea (Sf) and Norton Mill Lane (Anderson 1993; Jacob 2004) but males more commonly experienced the condition at Worthy Park, Kingsworthy (Ha) and Raunds Furnells (Hawkes and Wells 1983; Roberts *et al.* 1998). Sinusitis is commonly related to living conditions as it can be caused by environmental pollution such as smoke and soot and exacerbated by poor ventilation (Lewis *et al.* 1995; Roberts *et al.* 1998), and therefore higher prevalences amongst females might suggest gendered division in activities amongst the sample considered in this study, although this division does not appear to be universal in Anglo-Saxon society.

There was a clear sex bias in the experience of trauma across all of the case-study sites (Table A7.2.10). Only males were identified with sharp force trauma (three cases, all blade wounds), blunt force trauma (one case) and dislocations (three cases). Long bone fractures, in contrast, were more evenly spread between the sexes. General fractures and dislocations are likely to be the result of accidental trauma, however it appears that males were those predominantly affected by interpersonal violence. This pattern has been noted across the Anglo-Saxon period (Roberts and Cox 2003: 168).

#### 6.4 The provision of grave forms, bodily positions, grave elaborations and goods

Certain grave forms appear to have been afforded more frequently to older individuals within the case-study populations. At Thwing steps and sockets in the grave cut were only found in adult graves (MW=2048,  $p=0.010$ ) (Table 7.3.4). More specifically, they do not occur in graves of individuals who died before the age of 25. Similarly, the dominance of right-sided burials that appears throughout the dataset becomes increasingly pronounced amongst older individuals, particularly those aged over 25 at death (KW=19.463,  $p=0.013$ ) (Table A7.3.12). Prone burial and positioning of the arms as if tied only occur in adult burials as do many of the other rare bodily positions: both tied individuals, all three skeletons with their skulls relocated as if they had been decapitated and the contorted burial from Adwick are all aged over 18 years. Conversely, some burial forms are more common amongst younger individuals. Oval graves were significantly more likely to contain juvenile remains than the other grave forms (KW=101.279,  $p<0.001$ )

and, when site plans are considered, appear to have been generally proportional to the size of their occupant (Table A7.3.6). Furthermore, the proportion of rounded graves increased amongst smaller (younger) children and no rounded graves were occupied by adolescents, who can be expected to have attained nearer adult stature. Notably, other than oval graves, no other burial form is preferentially utilised in juvenile graves. Thus in the vast majority of cases unusual grave forms and bodily positions were reserved for adult burials. Indeed, adults were also the primary recipients of so-called “deviant” burial rites in middle and later Anglo-Saxon execution cemeteries (Buckberry and Hadley 2007: table 5; Hayman and Reynolds 2005: 219), while in earlier periods, for example at Sewerby, prone burials are rarely afforded to juveniles (Lucy 1998: 57).

Age at death was a strong determining factor in burial location during the middle Anglo-Saxon period. At two of the case-study sites, zones close to standing structures were preferentially selected for the interment of neonates (aged from birth to one month) and infants (aged between 1 month and 1 year). At Thwing a large proportion of neonates and infants were preferentially buried to the west of a wooden structure (Figure 6.3). Graves of very young children also dominate the eastern-most edge of the cemetery, and, thus, they are also in closest proximity to a line of possible free-standing posts. It appears that these children were further differentiated, as infants dominate the area alongside the building while neonates are more numerous by the posts. In contrast, the opposite, south-east, corner of the cemetery is notably lacking in juvenile burials. At Pontefract more than half of the children from the latest phase of this cemetery population (phase 3/4) who died before their first year (14, 58%) were buried outside the eastern wall of a small square building, considered by the excavators to be a church or chapel (Figure 6.4).



Older children are more widely spread throughout the cemetery, but children over one year might also have been afforded differential burial. They are unusually numerous amongst the remainder of this phase of burial. As it is clear from excavation that the cemetery was much larger than the area uncovered, it is plausible that adults who died during this period were buried elsewhere in the cemetery, and therefore younger individuals were also preferentially buried in proximity to the building, but just not as closely as the youngest individuals. The dating of the last phase of burial at Pontefract has already been highlighted as problematic, and it is possible that the clustering of juveniles identified here post-dates the period of interest in the present study (see chapter 5.1). Nonetheless, the clustering at Thwing can be more confidently assigned to c. A.D. 650-850 and therefore demonstrates that juvenile clustering was a feature of some cemeteries in use between A.D. 650 and 850.

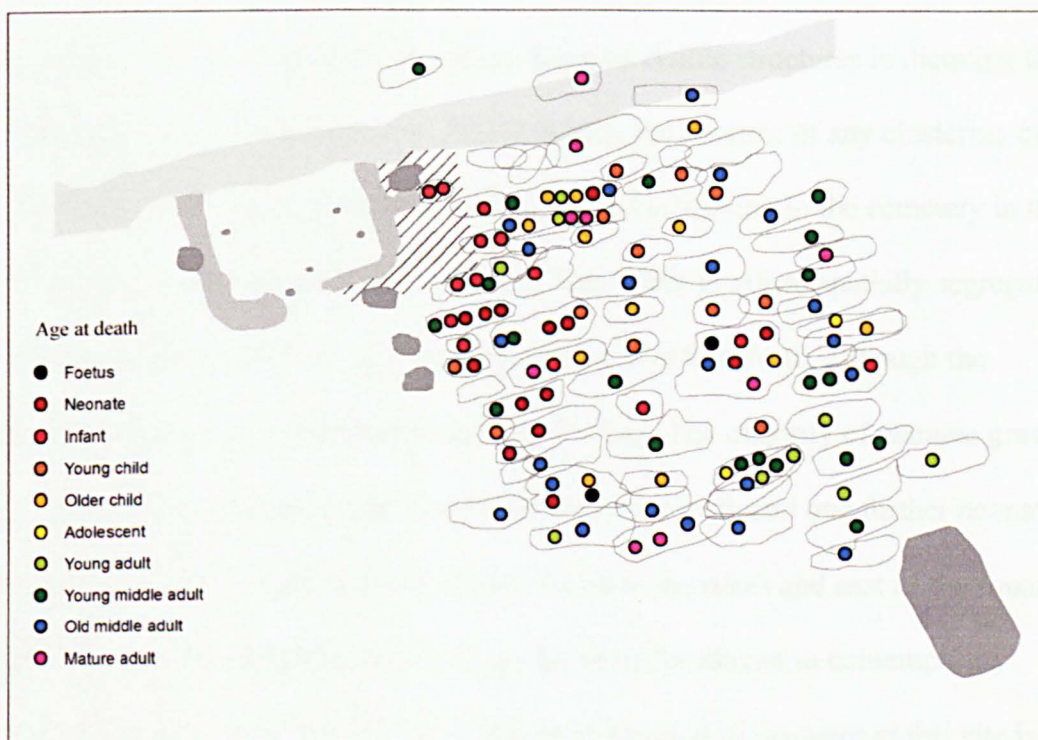


Figure 6.3. The clusters of infants at Thwing.

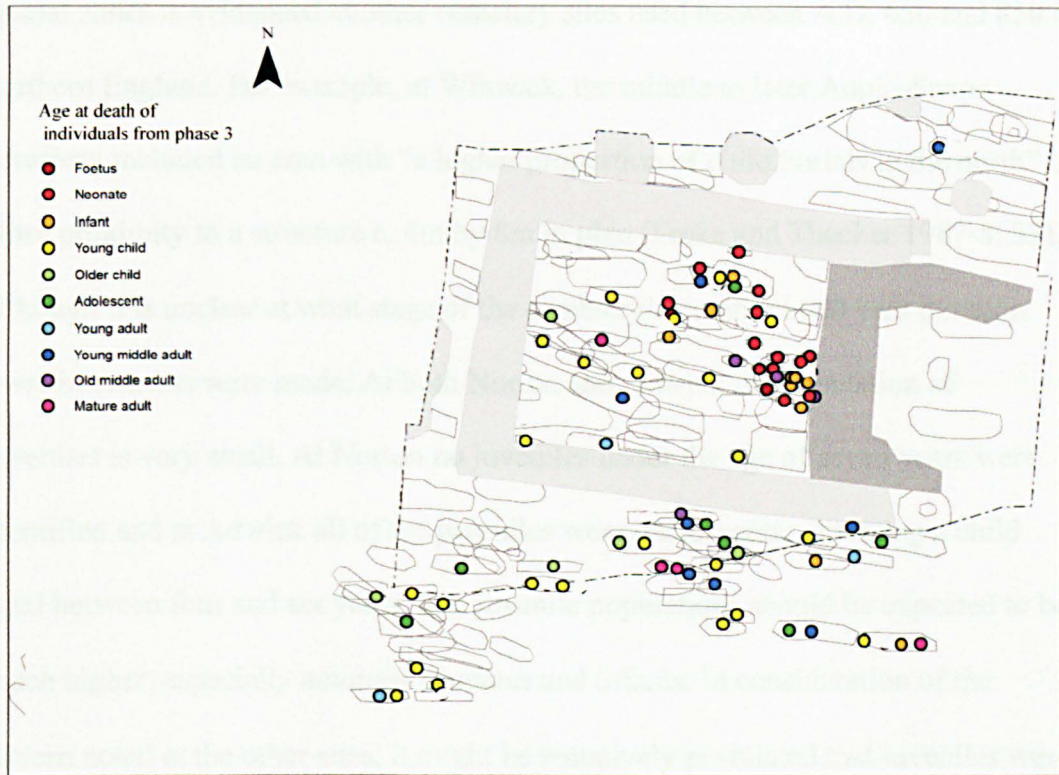


Figure 6.4. The cluster of infants at Pontefract. (Only burials from phase 3 are shown).

At both Thwing and Pontefract, the importance of visible structures in dictating the clustering of infant burials is clear. At Pontefract, the absence of any clustering of children in phases 1 and 2, prior to construction of a building in the cemetery in the c. 9<sup>th</sup> century, adds weight to this assertion. The desire to afford spatially segregated burial to younger children might also be evidenced at Spofforth, although the pattern is not as strong as at Pontefract and Thwing. The majority of neonate graves are situated in clusters along the line of the west-east wall, and one further neonate and an infant were buried in the isolated clusters to the north and east of the square structure; in both cases these positions are some of the closest to contemporary structures. Further evidence for the preferential location of neonates at this site is provided by the notable absence of children under the age of one year amongst the heavily populated zone in the south west. The differential burial of juveniles in



spatial zones is evidenced at other cemetery sites used between A.D. 650 and 850 in northern England. For example, at Winwick, the middle to later Anglo-Saxon cemetery included an area with “a higher proportion of child burials in the north” in close proximity to a structure c. 4m by 8m in plan (Freke and Thacker 1987-8: 33), although it is unclear at what stage of the cemetery’s potential 600 year duration these interments were made. At both Norton and Adwick the population of juveniles is very small. At Norton no juveniles under the age of seven years were identified and at Adwick all of the juveniles were adolescents, excepting a child aged between four and six years. The juvenile populations should be expected to be much higher, especially amongst neonates and infants. In consideration of the pattern noted at the other sites, it might be tentatively postulated that juveniles were preferentially buried in certain, unexcavated, areas of the cemeteries at Norton and Adwick or at other unidentified cemeteries nearby.

There were no significant correlations between biological sex and the form of the burial. For example, orientation ( $\chi^2=7.758$ ,  $p=0.804$ ), grave form ( $\chi^2=2.963$ ,  $p=0.564$ ) bodily position ( $\chi^2=1.374$ ,  $p=0.503$ ) and the side on which bodies were interred ( $\chi^2=1.925$ ,  $p=0.936$ ) were not significantly related to biological sex (Tables A7.3.23-A7.3.28). The unusual forms of bodily disposition – such as prone burial, binding of the hands and multiple burial – occurred in the graves of both males and females. Thus it appears that biological sex was not a determining factor in the burial form afforded to an individual.

Across all six case-study sites, the spatial distribution of graves also does not generally have any relationship to the biological sex of the individuals interred. This is also the case amongst populations from across early medieval Britain, for example, at the 5<sup>th</sup>- to 7<sup>th</sup>-century cemetery at Norton Mill Lane, the c. 5<sup>th</sup>- to 12<sup>th</sup>-

century cemetery at Llandough, and later Anglo-Saxon cemeteries in Yorkshire and Lincolnshire (Buckberry 2007: 121; Holbrook and Thomas 2005: 13; Sherlock and Welch 1992: 80-1, Fig 23, 24). The only possible example of widespread zoning by sex is found at Ailcy Hill, where the population is dominated by males during phase 2 and 3, radiocarbon dated to c. A.D. 660-880 and 660-990, respectively. Female graves could only be located on the site plan in four cases, all at the summit of the hill in charnel deposits relating to the first phase of burial, dated to c. A.D 550-660. Burials in the radiating trenches cut across the hill could not, however, be assigned a biological sex or exact phase. The excavators have postulated that the community buried at Ailcy Hill from the 7<sup>th</sup> century consisted entirely of males, first a monastic community, and then later, in the 10<sup>th</sup> century, a group of “deviant” burials (Hall and Whyman 1996). Nevertheless, it is possible that female burials were made elsewhere on the hill during these periods. In this latter scenario, a strict segregation of males and females would be implied and, indeed, there is evidence for this from later Anglo-Saxon ecclesiastical cemeteries such as St Oswald’s Gloucester and Old Minster, Winchester where groups of high-status male burials were spatially segregated (Hadley in press). However, without corroborating evidence for such a situation, the suggestion that females were buried in unexcavated areas of Ailcy Hill from the 7<sup>th</sup> to 10<sup>th</sup> century cannot be confidently offered as an alternative to the suggestion that the population was exclusively male during this period.

Two further patterns relating to the spatial positioning of graves in relation to biological sex might be suggested, both involving only small numbers of male or female burials. Adult graves were encountered intermittently amongst the juvenile clusters mentioned above at Ponterfract, Thwing and Spofforth. In several cases it could be established that these adult burials were interred during the same phase as

the juveniles. At Pontefract only two adult graves were incorporated with the infant cluster during phase 3. Both were 35-45 year old females, one of whom was buried in a chest with a lock. At Spofforth, the two isolated groups of graves, with clusters of six and three individuals respectively, were the only burials sited to the north and east of the foundations of a structure (Figure 6.5). Of the four adults, three are female (the fourth was only recovered as charnel). The other individuals are a neonate, an infant and two children aged seven to 12. These groups of women and children appear to have been afforded spatially separate burial from the main cemetery to the south. A similar pattern is indicated at the other sites where differential burial of juveniles is evidenced. At Thwing there is a concentration of female graves in the western-most row of graves (Figure 6.6). This area is also notable for its high numbers of neonate and infant burials. In sum, at these three sites, it might be hypothesised that female burials were deemed more appropriate to accompany the youngest individuals in death. The second pattern relates to the differential treatment of certain male burials. At Spofforth, the two graves separated from the remainder by the west-east wall were both prime age males (18-35). This pattern is mirrored at Thwing where the only burials around and beyond the possible cemetery boundary are also males. It is clear that one of these graves post-dates the boundary as it partially cuts through it. It has been argued that phase 3b at Ailcy Hill was used by a community that buried the majority of its dead elsewhere; thus, as with the male groups at Spofforth and Thwing, the male population buried here might also have been spatially segregated by burial at a site no longer used for the majority of interments. Such burials are often considered to be “deviants”. Both female burials amongst clusters of juveniles and “deviant” burials are explored in greater detail below (chapters 7.2.3).

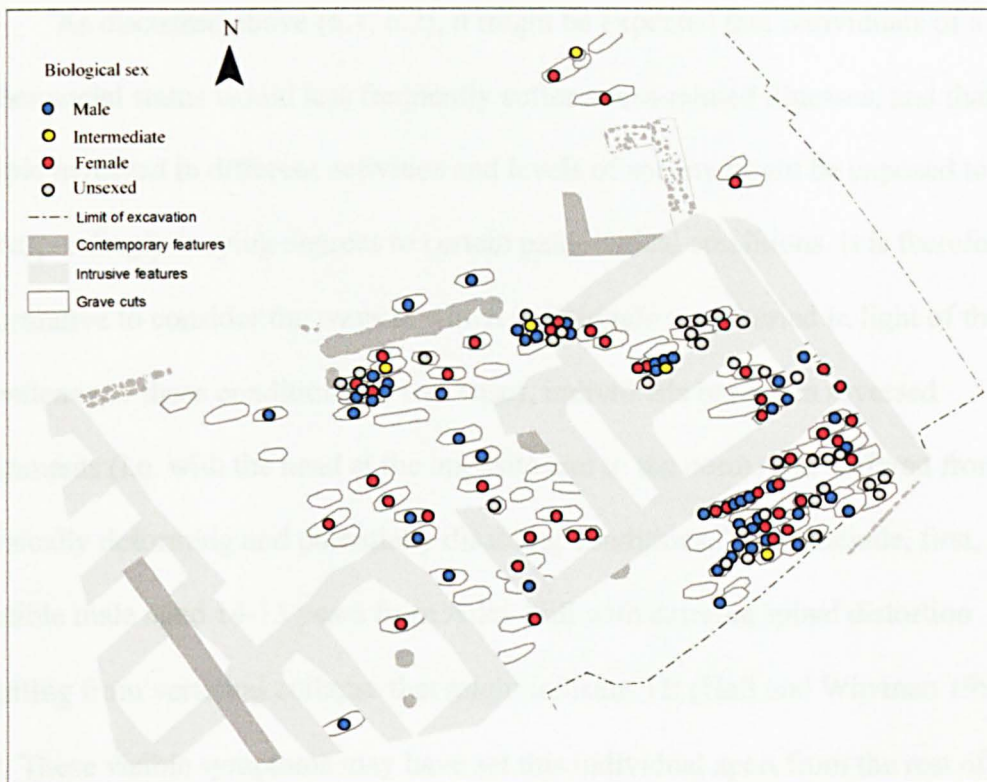


Figure 6.5. Biological sex of adults buried at Spofforth.

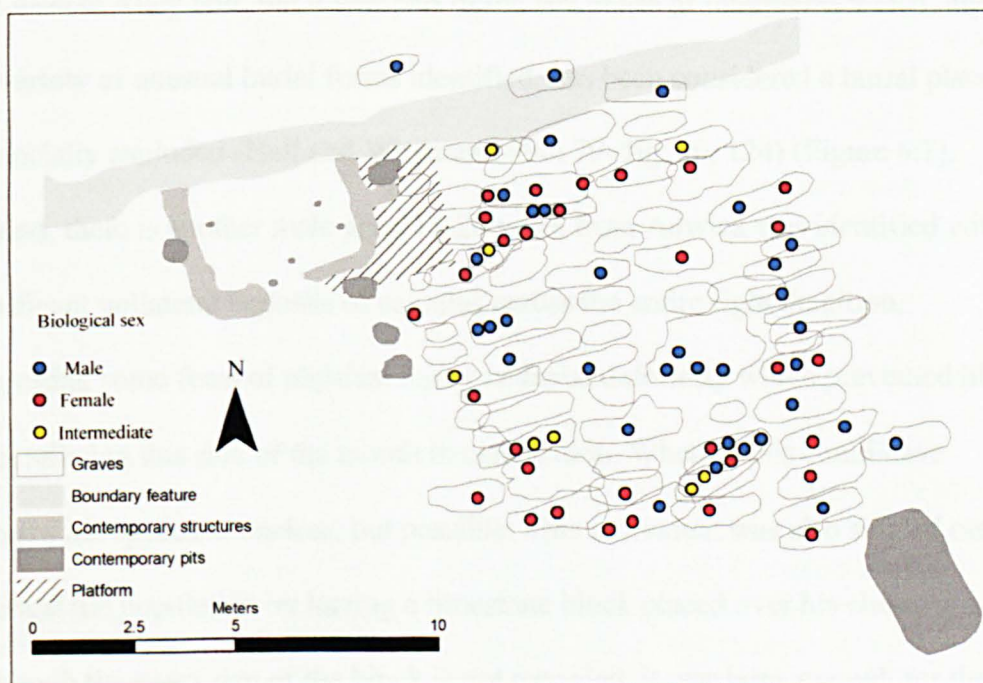


Figure 6.6. Biological sex of adults buried at Thwing.

As discussed above (6.1, 6.2), it might be expected that individuals of a higher social status would less frequently suffer stress-related illnesses, and that people involved in different activities and levels of society might be exposed to correspondingly varying degrees to certain pathological conditions. It is therefore informative to consider the ways in which individuals were buried in light of the prevalence of these conditions. In two cases, individuals buried on reversed alignments (i.e. with the head at the opposite end to the norm) had suffered from physically deforming and potentially disabling conditions. These include, first, a possible male aged 14-15 years from Ailcy Hill with extreme spinal distortion resulting from vertebral collapse that might indicate TB (Hall and Whyman 1996: 93). These visible symptoms may have set this individual apart from the rest of the population in life and, indeed, the burial evidence suggests that this individual was also, to some extent, set apart in death. Not only was it the only burial orientated east-west at Ailcy Hill, but it was part of the last phase of interments which, due to the variety of unusual burial forms identified, has been considered a burial place of the socially excluded (Hall and Whyman 1996: 79- fig. 10, 124) (Figure 6.7). Second, there is another male aged 18-20 years from Adwick was identified with significant unilateral deposits of calculus across the entire right dentition, suggesting some form of physical injury or facial deformity which prevented him from utilising this side of the mouth in mastication. Whether this could have affected his speech is unclear, but possible. This individual was also singled out amongst the population by having a limestone block placed over his chest. Although the exact size of the block is not recorded, it was large enough for the excavators to consider the possibility of it weighing down the body (Harvey 2008).



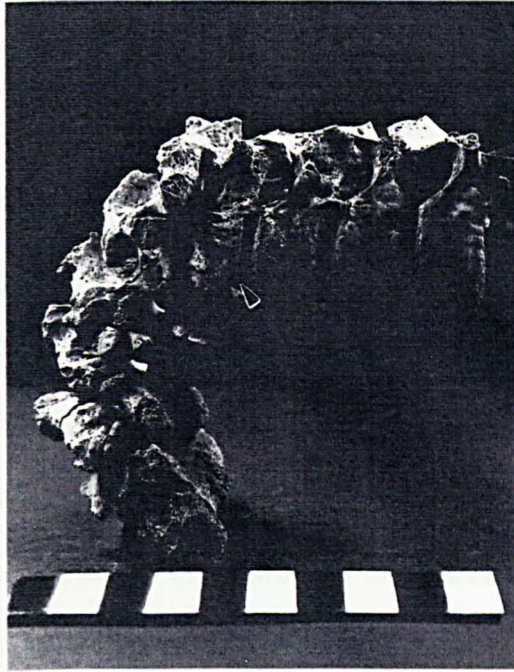


Figure 6.7. Tuberculous spine from Ailcy Hill (14-15 years, possible male)  
(photo courtesy of YAT).

Individuals buried prone appear to have experienced a different range of health and activity related pathologies from those buried in other positions. For example, half of prone individuals had tibial periostitis in comparison with a prevalence of only 13.2% amongst supine, left- and right-sided burials ( $\chi^2=9.507$ ,  $p=0.023$ ) (Table A7.3.39). Incidences of pitted enamel hypoplasia might be considered more frequent amongst prone individuals, given that there is one case among the six prone burials (16.7%) compared with only three cases (1.1%) among all other burial positions, however the small samples sizes here make this deduction questionable (Table 6.7). More convincingly, it can be seen that a much higher proportion of prone burials were diagnosed with spinal OA. It might have been expected that this pattern would be related to increasing age amongst prone burials, as prevalence of OA is known to increase with age, however, on the contrary, two



thirds of individuals in prone burials with evidence for OA were under 35 at the time of death. Furthermore, certain prone individuals experienced multiple health problems. At Thwing a female aged over 40 had experienced degenerative joint disease, as would be expected at her age, but also had fusion across two metacarpals, that may have restricted her dexterity, and significant asymmetry in the length of the humeri, which would have made one arm longer than the other. She was buried prone with her hands seemingly bound. In sum, in some cases, reversed burial appears to have been considered appropriate for individuals who experienced physical impairments. Proportionally more prone individuals also suffered from tibial periostitis and spinal OA, suggesting they were more susceptible to general infections and led active lives.

Position	Enamel hypoplasia			Total
	Absent	Linear	Pitted	
Supine or on side	206 82.1%	42 16.8%	3 1.1%	251 100%
Prone	5 83.3%	0 0.0%	1 16.7%	6 100%

Table 6.7. Occurrence of the two forms of enamel hypoplasia amongst individuals buried prone and supine or on their sides.

Despite the strong tendency for them to appear in combination in a single grave (see chapters 5.4.3 and 5.4.4), it appears that grave elaborations and grave goods were most commonly afforded to slightly different demographic groups. Elaborations are distributed between both adults and juveniles, however there is a tendency for older individuals, in particular those over 35 years, to receive elaborated burials more frequently (KW=20.153, p=0.017) (Table A7.4.2). A similar pattern was noted amongst burials of the 8<sup>th</sup>-11<sup>th</sup> centuries in Lincolnshire

and Yorkshire, where the frequency of more elaborate burial increased with age (Buckberry 2007: 123-4). Moreover, some of the more unusual forms of elaborate burial identified at York Minster were not afforded to children (Buckberry 2004: 206). When the chest burial rite (which makes up a significant proportion of all elaborated burials in the present sample) is considered separately, some interesting patterns emerge. Again chests are commonly afforded to older adults, particularly those between 35 and 45 years at death ( $KW=17.057$ ,  $p=0.048$ ), but there are also other age groups preferentially treated (Table A7.4.8). Children under the age of seven are almost never interred in chests but chest burials of juveniles aged between seven and 12 are frequent. In fact, older children are more commonly afforded chest burial than young adults aged between 18-25 years. Grave goods are preferentially provided to a different age group. Juveniles are notably excluded from this form of burial in comparison to adults ( $MW=128426$ ,  $p=0.025$ ) and it is younger adults, mostly between the ages of 18 and 25, who receive the majority of inclusions in their graves ( $KW=23.749$ ,  $p=0.005$ ) (Tables A7.4.3, A7.4.4). The frequency of grave goods, especially those with gendered associations, amongst adolescent and young adult graves has also been noted amongst earlier Anglo-Saxon graves (Stoodley 1999a: 117-8). It has been hypothesised that the abundance of grave goods in young adult graves relates to the increased loss to society experienced by the death of prime age individuals (Stoodley 2000: 465).

The relationship between elaborations and grave goods and the biological sex of the individual they are interred with is not significant. Roughly equal numbers of males (47, 18.8%) and females (35, 19.8%) are encountered in elaborated graves across the case-study sites, however elaborations are differentially afforded to the sexes at individual sites. At Adwick, Ailcy Hill,

Norton, Pontefract and Spofforth, males are preferentially afforded elaborate burial but at Thwing females are more frequently buried in elaborate graves (Table 6.8). Evidence from cemeteries in Yorkshire and Lincolnshire suggests that males more frequently received elaborate grave forms in the 8<sup>th</sup>-11<sup>th</sup> centuries (Buckberry 2007). Males were also associated with unusually elaborate graves in cemeteries of the same period elsewhere, for example the so-called “founder’s grave” – a 35-45 year old male buried under a carved stone grave-cover – at Raunds Furnells, a 10<sup>th</sup>- to 11<sup>th</sup>-century elaborate burial of a mature male at the centre of a cluster of burials at Wharram Percy and a 10<sup>th</sup>-century boat burial at York Minster (Boddington 1996: 67; Hadley in press; Heighway 2007: 226; Kjølbye-Biddle 1995: 500-5). Grave goods are found in both male and female graves, but due to the rarity of each type of grave goods, their relationship with biological sex cannot be investigated statistically. Nonetheless, it can be suggested tentatively that certain inclusions were preferentially included in male or female graves respectively. For example, evidence that individuals were interred wearing finger rings was found in two female graves in this sample, one from Spofforth (35-45 years) and another from Norton (16-20 years). This tendency for finger rings to be included in the burials of women is supported by evidence for eight burials from across middle Anglo-Saxon England, all of which (where a biological sex could be assigned) were female (Geake 1997: 56-7). The relationship between biological sex and burial provision amongst the present sample is markedly different from the ample evidence for gendered grave goods found in Anglo-Saxon cemeteries from the same northern regions in the 5<sup>th</sup> and 6<sup>th</sup> centuries (Lucy 1998). Gendered burial provision was also encountered amongst 6<sup>th</sup>- to 8<sup>th</sup>-century burials at Bamburgh. Here a group of males were interred with animal bones, and all exhibited osteological markers of

strenuous physical activity. Sarah Groves (in press a) has linked this to evidence from earlier cemeteries in the region, for example Norton, in which male weapon burials appear to exhibit similar markers of activity, to suggest that this later practice may have been a continuation of a high-status, gendered burial rite into the 7<sup>th</sup> century. One issue with Groves' interpretation at Bamburgh is that weapons burials in northern England are extremely scarce during the early Anglo-Saxon period (Stoodley 1999a: 85). In consequence it is not clear that there was a widespread gendered weapons burial rite in the north during the 5<sup>th</sup> or 6<sup>th</sup> centuries to be continued into the 7<sup>th</sup> century, and therefore the association of gendered burials with animal bones at Bamburgh with an early Anglo-Saxon gendered burial rite may be spurious.

Site	Male	Female	Total
Adwick	2 100%	0 0%	2
Ailcy Hill	6 100%	0 0%	6
Norton	3 60%	2 40%	5
Pontefract	16 67%	8 33%	24
Spofforth	4 57%	3 43%	7
Thwing	16 42%	22 58%	38
Total	47	35	83

Table 6.8. Prevalences of elaborations in the graves of males and females.

There are some cases where relationships between elaborate forms of burial and evidence for different levels of biological stress, health or pathological prevalences merit further exploration. Individuals buried with grave elaborations appear

statistically more likely to suffer from appendicular osteoarthritis, however on closer investigation of the data this is revealed to be the result of the pattern already indicated above for older individuals to receive both more elaborate burial and also suffer more degenerative diseases (Tables A7.4.24, A74.25, A7.2.26). It can be seen that individuals buried with elaborations or in chests do not have greater prevalences of appendicular OA than individuals of the same age in plain-earth graves. Thus arthritic changes alone provide no evidence for a difference in lifestyle between individuals buried in chests and the remainder of the population (see chapter 7.3 for further discussion). At Norton, an 8-9 year old juvenile was buried in a chest with a fossil crinoid. This unusual and, in the study area, unique grave inclusion might be considered amuletic (Geake 1997: 99; Meaney 1981: 101) and therefore would have been thought to confer luck, spiritual protection or health (see 7.5.1 for a discussion of several grave inclusions from this sample in the context of apotropaic beliefs). The latter function might be more significant when considered in light of the general health of the individual with whom the fossil was interred. Osteological evidence suggests that they experienced poor health for some time prior to their death: the child suffered from cribra orbitalia, suggesting chronic iron deficiency as a result of either a poor diet or a lowered immune response that increased their parasite load. Another unusual form of grave goods, a copper sheet, was encountered with an individual at Spofforth. Copper has long been utilised for its antibacterial properties, and appears to have been utilised for its medicinal properties in the Anglo-Saxon period. For example, copper plates lined with dock leaves were found bound to an infected humerus of a female excavated near Reading in 1890. Calvin Wells argued that this individual came from the 11<sup>th</sup>- to 13<sup>th</sup>-century Jack of Both Sides cemetery (Brk) however, alternatively, it is possible

the individual may have originated from a burial ground nearby dating to the Anglo-Saxon period, c. A.D. 500-1000 (Knüsel *et al.* 1995: 380; Roberts and Cox 2003: 214-5; Wells 1964) (Figure 6.8). The burial of individuals with medical apparatus used during their lives is also attested at Llandough where a middle-aged male was buried during the 5<sup>th</sup> or 6<sup>th</sup> century wearing a possible iron hernia belt (Holbrook and Thomas 1994: 53-64) (Figure 6.9). Whilst the individual from Spofforth had no osteological evidence of active infection (he did have mild tibial periostitis, however this appeared to be inactive at the time of death), flesh wounds or infections would not necessarily affect the bone. Therefore, it remains possible that the copper in the grave of the individual from Spofforth was a medical aid. Furthermore the apparent curvature of the copper plate and a hole punched through it would have aided its fit and fixing to the body.

It must be noted that these two examples of a possible relationship between health and burial treatment provide far from conclusive evidence that health was the mitigating factor in the provision of certain burial rites. Neither example provides the only case of that particular pathology, and, thus, other individuals might have suffered similar symptoms but received dissimilar burial. Nonetheless, it is considered pertinent to highlight the possibility that these burial rites were afforded as a result of the health experiences of the individuals described here.



Figure 6.8. Copper plates, originally lined with ivy leaves, that surrounded a humerus from Jack-of-Both-Sides cemetery (from Roberts and Cox 2003: 215).

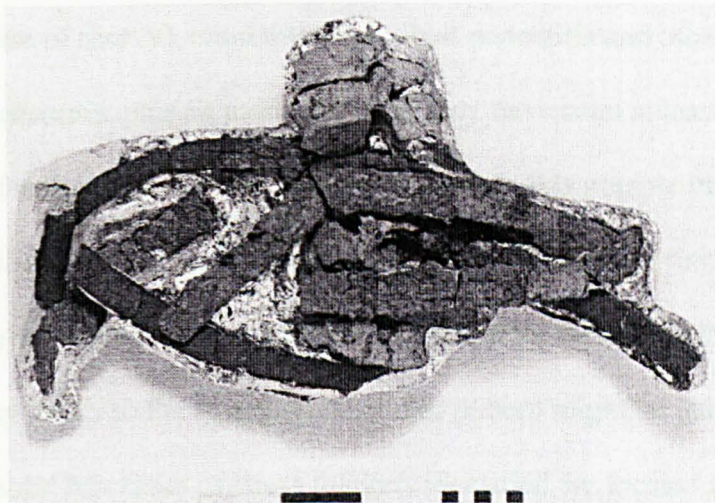


Figure 6.9. The iron bands of a hernia belt that were excavated from the abdomen of burial 630 at Llandough ( from Holbrook and Thomas 2005: 55).

In most cases, pathological conditions are too infrequent to provide any evidence of spatial patterning when considered in isolation, however in several cases there are groups of burials for which the prevalences of certain conditions differentiate them from others. At Norton there is a slight increase in the prevalence of stress markers (cribra orbitalia, tibial periostitis and cranial lesions) amongst the

graves clustered near the southern boundary of the cemetery and individual cases of pathologies such as sinusitis, rickets, osteoporosis and fractures also occur among this group of burials (Figure 6.10). This can, in part, be related to the chronology of the cemetery, as it appears that stress markers were more common amongst later graves, which also tend to cluster more strongly in this area. Thus the pattern represented here might relate to changes in overall health in the population over time, rather than revealing that the less healthy/more stressed individuals were differentially buried in a particular zone of the cemetery. At Pontefract there also appears to be an increase in population stress towards the 9<sup>th</sup> century, but here graves from all periods utilise the entire excavated space of the cemetery (Figure 6.11). In this case, individuals with cribra orbitalia, metabolic conditions (including one possible case of scurvy), cranial lesions, tibial periostitis and other cases of non-specific periostitis, plus an individual who may have been at least partially deaf were all buried in the south-western sector of trench 2. It is notable that all but one individual buried here were from phase 3, when the building was first constructed, and thus it may not have been considered appropriate for these individuals to have been buried any closer to the structure. A similar pattern might be indicated at Thwing, where the few cases of stress markers identified are located to the south and east of the cemetery, away from the building and post alignment that dominate the western side of the cemetery (Figure 6.12). At Thwing all cases of non-habitual trauma are also found in individuals buried towards the south and east of the site with a notable absence amongst the graves to the north and west.

At Spofforth a cluster of graves to the south of the west-east wall is notable for its frequency of spinal DJD (Figure 6.13). This group also experienced more appendicular OA, although other cases of this condition are widely spread



throughout the cemetery. An individual with DISH was also interred in this group to the south of the west-east wall. This condition is often associated with monasticism in the later Middle Ages, as it is notably more common amongst monastic communities than in lay cemeteries (Robert and Cox 2003: 246), but the condition perhaps more properly should be associated with opulent living and health conditions such as obesity and diabetes (Julkunen *et al.* 1971). DISH is not uncommon in the early medieval period, with at least sixteen cases recorded at Anglo-Saxon sites, but occurs less frequently than during the later medieval period (Roberts and Cox 2003: 202, 246).

As at Norton, individuals who experienced traumatic injury were buried in close proximity to each other at Spofforth in densely occupied areas of the cemetery. At Spofforth the graves of three fracture cases intercut in the cluster south of the west-east wall, furthermore, two cases of sharp force trauma (weapon injury) were buried in both this cluster (one case) and that close to the east (one case). At Pontefract the one case of sharp force trauma was buried close to the building near a cluster of juveniles and two older women.

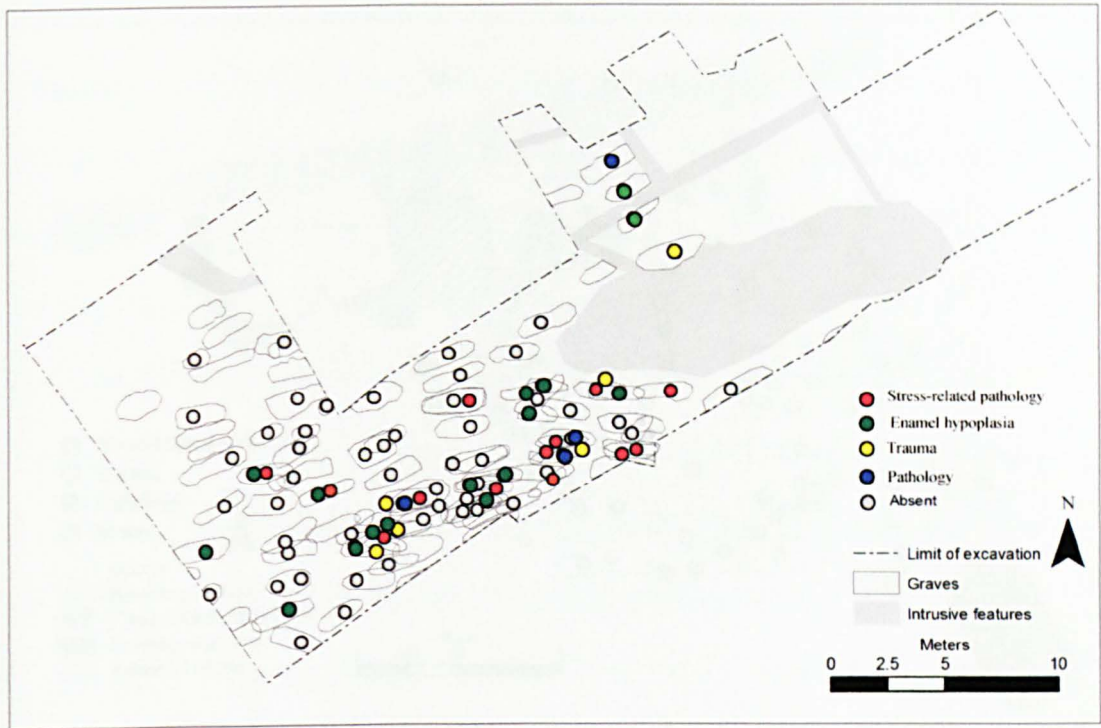


Figure 6.10. Various pathological conditions at Norton.

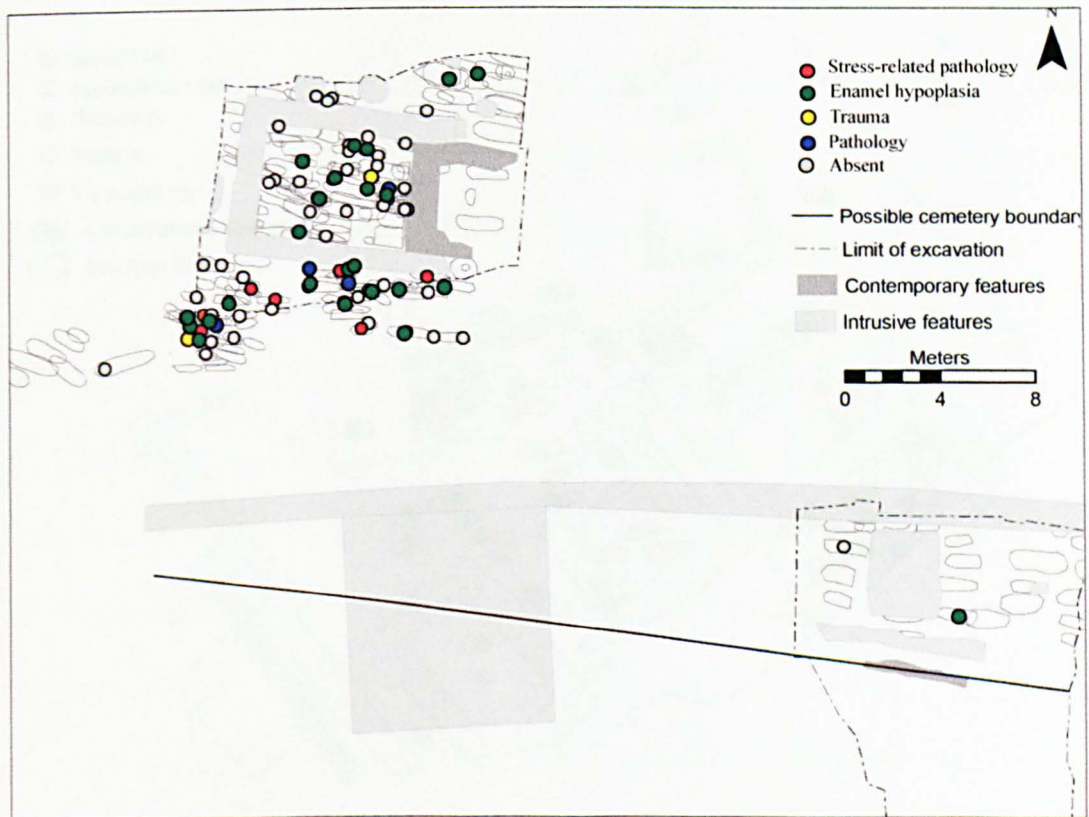


Figure 6.11. Various pathological conditions at Pontefract.

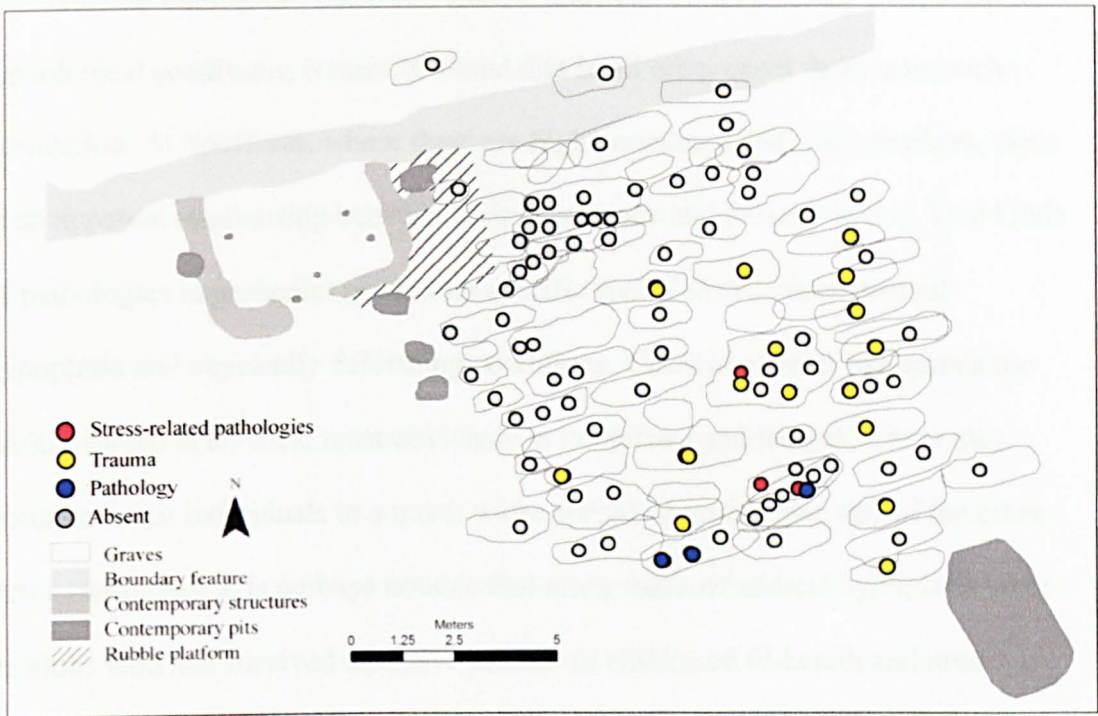


Figure 6.12. Various pathological conditions at Thwing.

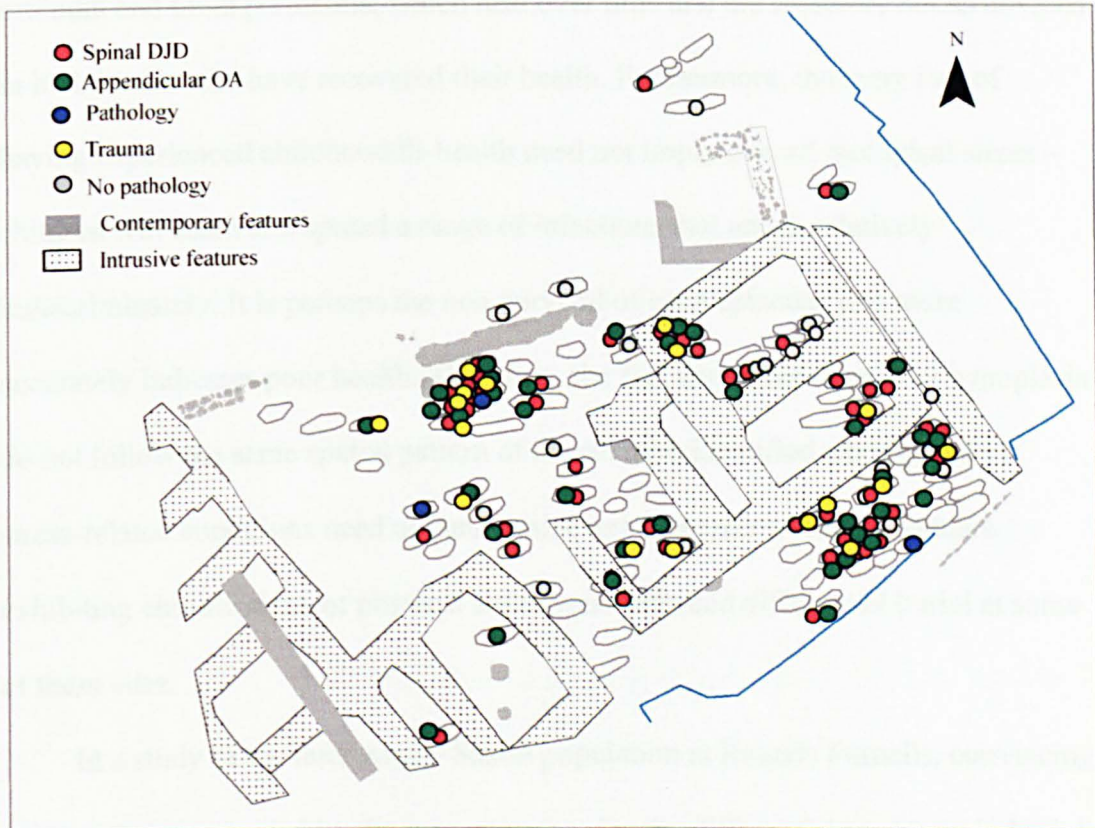


Figure 6.13. Various pathological conditions at Spofforth.

Having highlighted these correlations between burial location and particular pathological conditions, it must be noted that in all other cases there is no such correlation. At Spofforth, where there are high prevalences of stress markers, there is no apparent relationship between their occurrence and burial practice. Two kinds of pathologies in particular present no specific spatial distribution: enamel hypoplasia and physically deforming conditions. Cases of enamel hypoplasia are widely spread at all sites, most obviously at Pontefract and Norton, where they occur amongst individuals in a much wider spread of graves than any of the other stress conditions. It is perhaps notable that many cases of enamel hypoplasia were in adults who had survived intensive periods of childhood ill-health and must have been relatively healthy and resilient. These cases of enamel hypoplasia, therefore, probably do not represent biological stress as clearly as conditions such as cribra orbitalia and tibial periostitis, which heal over time and are therefore not as obvious in individuals who have recovered their health. Furthermore, the mere fact of having experienced childhood ill-health need not imply overall biological stress – children will catch and spread a range of infections that attack relatively indiscriminately. It is perhaps the non-survival of such episodes that more accurately indicates poor health. Therefore, the fact that cases of enamel hypoplasia do not follow the same spatial pattern of distribution identified amongst other stress-related conditions need not undermine any suggestion that individuals exhibiting chronic signs of physical stress were afforded differential burial at some of these sites.

In a study of the later Anglo-Saxon population at Raunds Furnells, convincing evidence was presented by the present author for the differential treatment in burial of individuals who had experienced greater stress. Individuals with the highest

prevalences of the stress-related conditions cribra orbitalia, tibial periostitis and linear enamel hypoplasia, and most cases of specific pathologies such as leprosy, were clustered together in the south-eastern corner of the cemetery. These individuals, who had seemingly experienced biological stress and poor physical health during life, were interred in the least elaborate burial forms used across the site. In particular, they were found to have been afforded burial marked above ground by stone markers or covers significantly less often than other individuals buried at Raunds. The position of these individuals, who appear to have had both a low health status and low social status, in the far corner of the churchyard suggested that space within the cemetery was also being used to further reinforce their low social position (Craig 2006; Craig and Buckberry in press). The evidence presented in this thesis does not, however, provide similarly clear results relating biological and social status. Thus suggesting, perhaps, that space was not being utilised in the same way.

It might be hypothesised that if spatial location of a grave was affected by the social position of the deceased, individuals who had lived with physically deforming pathological conditions might be afforded differential burial treatment. However, there is little evidence from the present sample to suggest that individuals who experienced physical impairment of any kind were buried in specific cemetery locations. At Spofforth the extended, supine interment in an earth-cut grave of a child with a deformed jaw and face is located to the east of the main burial population, in a less densely-occupied zone, but this most likely relates to the burial belonging to a later phase than the majority of the population (Figure 6.14). At Thwing the grave containing an individual with pronounced cranial asymmetry was positioned at what was then the furthest extent of burial, although it was intensively



intercut by later burials, and therefore does not seem to be spatially excluded (Figure 6.15). Finally, at Adwick, the individual with a possible jaw deformity, that resulted in abnormal calculus deposits, was centrally placed in the part of the cemetery excavated, thus suggesting no relationship between any stigma attached to their condition and their burial (Figure 6.16). Disability and burial provision are discussed in more detail in chapter 7.2.3.

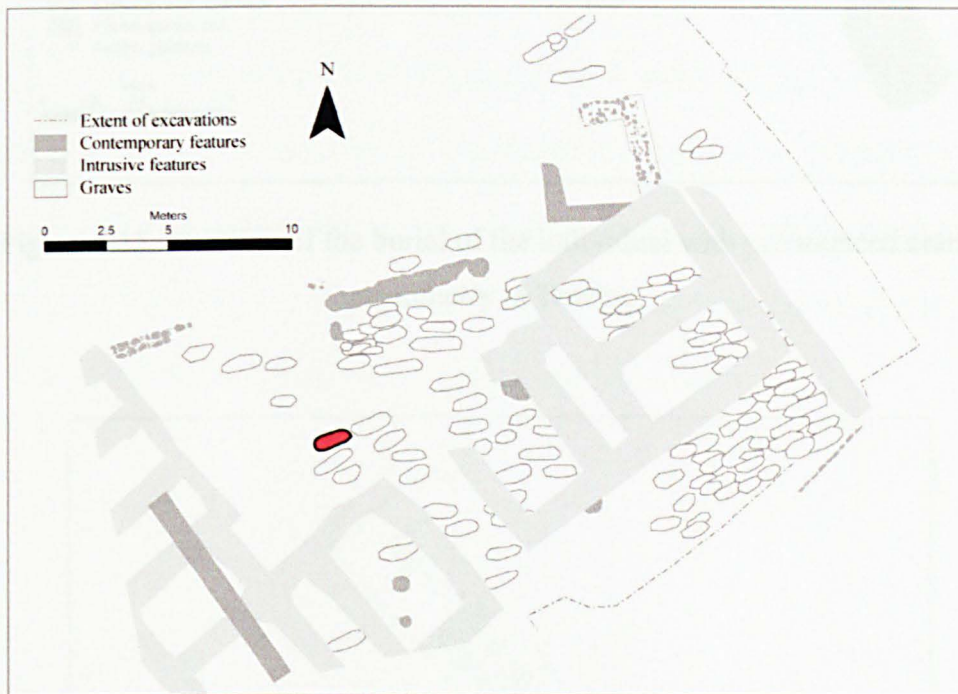


Figure 6.14. Location of the burial of the individual with a deformed jaw at Spofforth.

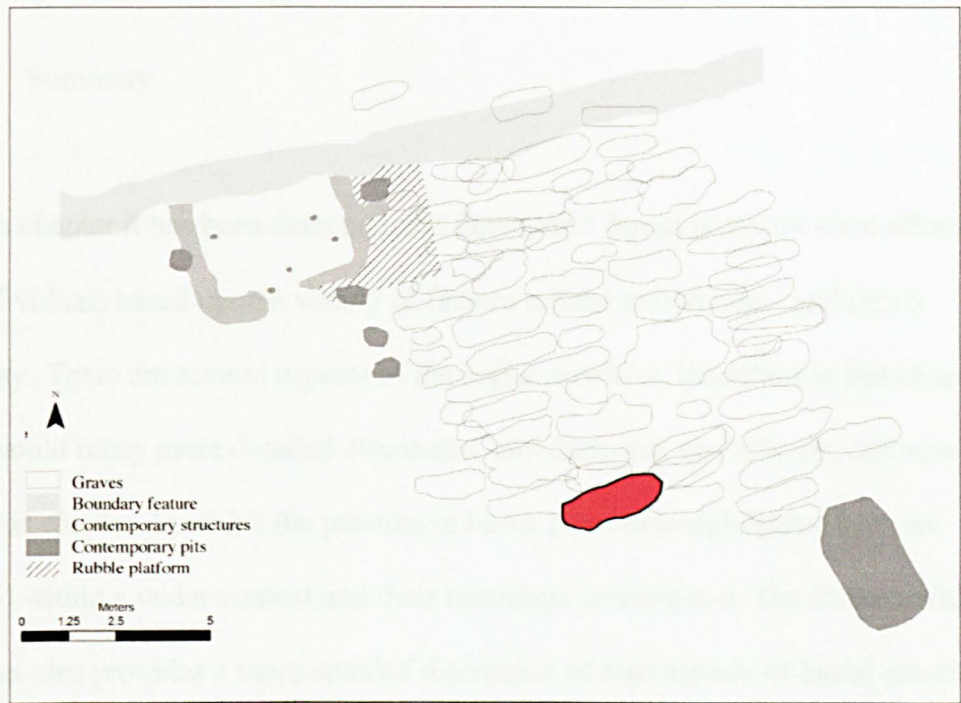


Figure 6.15. Location of the burial of the individual with pronounced cranial asymmetry at Thwing.

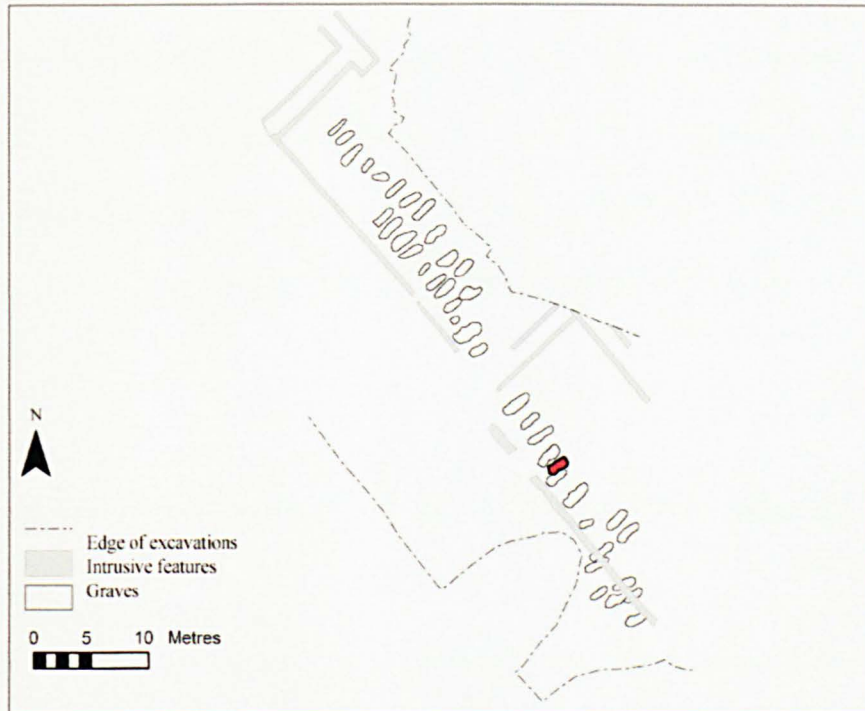


Figure 6.16. Location of the burial of the individual with a deformed jaw at Adwick.

## 6.5 Summary

In this chapter it has been demonstrated that certain burial practices were afforded to individuals based upon a variety of factors related to individual and group identity. There are several aspects of the burial provision identified in this chapter that would repay more detailed discussion, and these are, accordingly, addressed in the next chapter, in which the patterns in burial provision highlighted here are placed within a wider context and their meanings investigated. The forthcoming chapter also provides a more detailed discussion of four aspects of burial practices that have been identified in this and the previous chapter: the relationship between identity and funerary provision; the chest burial rite; the occurrence and role of small buildings within the cemetery; and the process of burial.



## CHAPTER 7

### KEY THEMES IN FUNERARY PRACTICES, c. A.D. 650-850

This chapter draws together some key findings from both the survey of burial practices at the case-study sites presented in chapter 5 and the bio-cultural study of their provision presented in chapter 6. The particular focus of this discussion is the contextualisation of the results from chapters 5 and 6 in relation to patterns of funerary practice throughout the early medieval period across Britain and the interpretation of the meanings that the various burial rites may have held for the communities who utilised them. The chapter begins with an introduction to the development of a theoretical approach to the interpretation of funerary practices. Next, four key themes in middle Anglo-Saxon funerary practices, identified during the analysis presented earlier in this thesis, are placed within their wider context to facilitate a discussion of their meanings. These are the social identity of individuals to whom certain funerary practices were provided; the chest burial rite; the role of buildings in middle Anglo-Saxon cemeteries; and the process by which the burial was created.

#### 7.1 The development of a theoretical approach to funerary archaeology

The origins of the development of a theoretical framework for the analysis of funerary archaeology can be seen in the work of culture-historians prior to the 1960s. Burial practices were considered to be manifestations of religious beliefs, and were equated with ethnic identity and archaeological cultures (Leeds 1913; 1936;

Lethbridge 1931: 82-84). Direct links continued to be made between the world of the living and the world of the dead, as represented by burial practices, in studies informed by processualist theories. Processualist approaches viewed society as one large interconnected system, where social and ideological spheres remained interlinked. This viewpoint permitted the equation of burial “wealth” (i.e. quantity and quality of grave goods) with social status (Alcock 1981; Arnold 1980; Härke 1992; Shephard 1979; Tainter 1975). The essence of the processual approach to mortuary data developed little on its predecessor, being as normative as the culture historical system, but focussing on wealth and social structures instead of religion and ethnicity (Härke 1997b: 21; Hodder 1980).

Post-processual theory permitted a very different means of interpreting funerary remains. Anthropological approaches were incorporated into burial archaeology to focus on the process and experience of death. Three main ideas characterise post-processual approaches to burial. First, burial practices are not an unambiguous reflection of everyday life (Parker Pearson 1982: 100-1; Richards 1992: 134; Ucko 1969). In consequence, the identities, roles and social situations represented in burial practices are not directly described, but modified to represent ideals or projected personas (Hodder 1980: 165). They represent a different, but not necessarily false, reality (Barrett 1991: 5; Shanks and Tilley 1982: 130). This complex relationship between ideology<sup>1</sup> and reality suggests that ritual is not just a passive reflection of wider concepts of society and the world, but an active influence

---

<sup>1</sup> Ideology can be defined in terms of the ways in which people conceptualise the world around them. It is their own lived experience of the world, which bears a resemblance to, but is not the same as, their actual relation to the world (Parker Pearson 1982: 100). Through their embodiment in social action and manipulation by agents, ideologies become as “real” as the reality upon which they were originally based (Shanks and Tilley 1982: 130).

over how individuals thought about these concepts. Ritual not only reflects ideology, but also creates it (Giddens 1979: 165-197, Härke 1997b: 23). Second, the dead do not bury themselves. The form and contents of the grave reflect the views of the mourners and society as much as they do that of the deceased (Parker Pearson 1999: 3). Thus, funerary rites are created, manipulated and rejected by multiple agents. It is unclear exactly who these individuals were and to what extent they were involved. Suggestions range from participation in the burial ritual by potentially the entire range of individuals who had social relationships with the deceased (Saxe 1970: 6) to ritual specialists such as the Anglo-Saxon “cunning woman” discussed by Helen Geake (2003: 269) (see below 7.5.2). Finally, the meanings of features within burial rites are not static, nor uni-dimensional, but contextual and open to interpretation by both those originally present at the burial and future observers (Barrett 1987; 1991; Lewis 1980: 19; Richards 1992: 134; Parker Pearson 1999: 32; Tilley 1989: 188).

Symbolism<sup>2</sup> in burial ritual has been most intensively researched in relation to grave goods. Artefacts may have been placed in graves because of their associated meanings, which may relate to the social identity of the deceased, but alternatively may represent broader cosmological or political themes (Parker Pearson 1982; Shanks and Tilley 1982: 134). The symbolism of funerary monuments has received similar attention (Bradley 1993; Carver 1993; 2001: 1). Whilst it has been argued that all aspects of material culture have inherent symbolism (Richards 1992: 131; Shanks and Tilley 1987: 75), Martin Carver (2001: 2) has argued that multiplicity of

---

<sup>2</sup> Symbolism has been discussed in detail elsewhere (Bordieu 1979; Richards 1992). Symbols have inherent meanings, which are inextricably linked to the contexts they operate in. They have been argued to categorise information, regulate and direct appropriate behaviour, establish and legitimise dominant culture. Importantly for interpreting archaeological symbols, there need be no intrinsic (nor intuitive) relationship between an object and what it symbolises.

meaning of symbols need not mean that all artefacts acted as symbols in the same way and therefore their meanings are highly contextual.

Post-processual approaches emphasise the place of burial within a wider sphere of human action. It is likely that various archaeologically invisible practices accompanied burial, for example processions, ceremonies, speech, singing and feasting (Halsall 1998: 327; Parker Pearson 1999: 10, 32; Shanks and Tilley 1982: 133). These aspects may have formed an equal, or even greater, part of what constituted burial rites than the grave itself. Processual models would suggest that cemeteries where neither age, sex nor social status were expressed in the grave represented less complex societies, however where not directly indicated in burial rites, these aspects of identity may still have been differentiated in life (Hodder 1980: 166). It is important that burial archaeology is acknowledged to be only a partial insight into a wider funerary rite (Härke 1997b: 22).

The remains and artefacts that can be recovered from burial contexts were selected by those who created the grave. As a result, it is important to consider what items may not have been appropriate to put into the grave. This argument is most relevant when considering grave goods, and their differential usage over time. Items which were inherited or gifted would not necessarily become grave goods, yet may have held an enduring mnemonic function within the community. The archaeological remains of funerary practices are selectively filtered by those who create them, but also by the taphonomic processes that affect archaeological material. Many organic materials, such as wood and textiles, are almost never preserved in burial contexts, and thus our knowledge of their role in funerary practices is limited.

In sum, the post-processual approach to burial rites emphasises choice and selectivity. Variety within funerary practices from grave to grave suggests that those

who orchestrated burial made choices based upon aspects of the identity of the deceased or a wider social reality which must have held meaning (Barrett 1991: 3; Carver 2001: 3) (see below, 7.5.2). Whilst it cannot be ignored that burial rites will have held meanings that reflected beliefs about death (Carver 2002: 135), many aspects of identity were communicated to the living. Sam Lucy (1997b) has argued that the aspects of identity that were emphasised would have depended on which aspects were important enough (by the standards of the community) to be signalled and perpetuated following death. However it must be borne in mind that the aspects of identity deemed appropriate to express in death need not invariably mirror those considered important in life.

Four aspects of the funerary practices in northern England between A.D. 650 and 850 have been selected for further discussion in this chapter. These are: first, the ways in which aspects of individual and group identity were reflected in, and related to, the burial rites afforded to certain people; second, the meaning of the chest burial rite; third, the role of buildings within cemeteries; and finally, the processes by which individuals were interred in the ground and the administration of burial rites. These aspects of burial practice were considered worthy of further discussion for several reasons. Aspects of individual and group identity appear to have profoundly affected the provision of burial rites throughout the Anglo-Saxon period, and therefore the relationships between identity and burial practice identified in chapter 6 between A.D. 650 and 850 require detailed investigation. The chest burial rite seems to have been particularly distinctive both to the period and the region of this thesis. Thus far, chest burials have rarely been discussed in print, and where they are considered, the form and construction of the chests themselves is afforded much greater attention than their provision (Ottaway 2007: 122-4; Kjølbye-Biddle 1995). Further

investigation of the chest burial rite is, therefore, required to understand its provision in more detail. The important role of buildings as focal points within cemeteries has become apparent throughout the present research, however it has also become clear that they are often assigned functions with insufficient supporting evidence or critical judgement (see chapter 5.1). In consequence, the role and function of buildings in cemeteries is given further attention here. The process of burial is rarely afforded sufficient attention in studies of Anglo-Saxon funerary practice, however, in recent years there have been several attempts to uncover the events that took place at a burial and the people responsible for conducting them (Geake 2002; Gilchrist 2008). It is hoped that the data presented in this thesis from modern, well-recorded excavations will provide the detailed evidence required to contribute to this continuing debate.

## 7.2 The expression of social identity in burial practices, c. 650-850

In this section the differential funerary treatment of individuals is considered in relation to aspects of their identity. Several aspects of the middle Anglo-Saxon burial rite identified at the case-study sites warrant further discussion in the context of the expression of identity. These are considered below in their wider chronological and geographical context, and include the changing expression of biological sex/gender, burial ritual as a means of social exclusion, the provision of multiple burial, and the relationship between burial and the lifecycle – in particular the differential treatment of neonates and infants.

### 7.2.1 The changing role of gender

Biological sex was a significant determinant of the assemblages of grave goods characteristic of early Anglo-Saxon cemeteries. In northern England, furnished cemeteries with comparably diverse assemblages of grave goods are not so widespread in the 5<sup>th</sup> and 6<sup>th</sup> centuries, however, there are burials with demonstrably gendered assemblages, such as those investigated by Sam Lucy (1998: 103) and Nick Stoodley (1999a; 1999b) in East Yorkshire. A disproportionate emphasis on characteristically female grave assemblages is noted at some furnished northern sites during the late 7<sup>th</sup> century, for example at Castledyke, where more than twice as many females than males were buried with gendered grave assemblages (19 females and 8 males) (Geake 1997: 128; 2002: 147) and at Street House, where a group of lavishly furnished burials with female-gendered goods date to the latter half of the 7<sup>th</sup> century (Sherlock 2008). The increase in the numbers of elaborate female assemblages in the latter half of the 7<sup>th</sup> century is argued to be accompanied by a decline in emphasis upon the male grave assemblage, with fewer types of grave goods having demonstrable masculine links than feminine links (Geake 1997: 128, 141 table 6.3; Stoodley 1999b). Amongst the six sites considered in detail in this study, the relationship between biological sex and burial provision was extremely limited. Grave goods were scarce and no firm correlations were apparent, nor was there any relationship between the provision of any other burial forms and biological sex. For example, chest burials were broadly equally afforded to males and females at all sites where a mixed sex profile was encountered.

A variety of explanations have been offered for the decline in the expression of biological sex in funerary rites from the 7<sup>th</sup> century. Nick Stoodley (1999b: 104-5)

suggested that patterns of inheritance and authority may have affected the expression of gender in favour of a small number of elite (usually male) graves. In contrast, the importance of familial or household status in the funerary rites of the later Anglo-Saxon period has been emphasised (Buckberry 2007: 126; Hadley 2004a; Stoodley 1999b: 104-5), and it is possible that an increasing importance placed upon these occurred at the expense of expression of gender in the grave. Alternatively, gender may have begun to be symbolised in alternative ways in funerary rites that are not visible archaeologically, for example in ceremony or action. Whatever its causes, we cannot assume that the reduction in sex-specific grave goods in middle Anglo-Saxon England reflects a similar decline in the social distinctions between men and women. In fact, there is evidence from northern cemeteries to suggest that gender roles remained fundamental to social identity but began to be expressed in a different way than in previous centuries.

Men and women were differentiated by the locations of their burial, primarily in ecclesiastical cemeteries. At Hartlepool, for example, name-stones from the cemetery at Cross Close indicate a female-dominated population of some considerable status, whilst in the Church Walk cemetery to the north west, a cluster of elderly males may suggest a contemporary burial zone for men. These two groups of individuals may well have been the monks and nuns of the mixed monastery (Daniels and Loveluck 2007: 80-1, 90-1). Male-dominated populations were also encountered at other sites with Minster associations, for example at Ailcy Hill and Wearmouth (Hall and Whyman 1996; Cramp and Lowther 2005). The potential for a link between the burial of ecclesiastics and the expression of gender identity from the 7<sup>th</sup> century is highlighted by a variety of sources. The segregation of monks and nuns in the monastery at Barking (GL) is described in detail by Bede. That they inhabited



separate areas of the monastery is clear, however, it is also implied that the nuns were to be buried in a different part of the cemetery from the monks should any of them succumb to the plague which was afflicting the house at the time (HE iv, 7). Furthermore, the links suggested at Hartlepool between ecclesiastical and elite status and the separation of males and females in certain gendered burial zones is also supported by historical evidence. We know that high-status women were attracted to church positions at Hartlepool and Whitby. Hild, Abbess of Hartlepool and the later Whitby, was the daughter of a nephew of King Edwin of Deira (HE iii: 24) and also the aunt of King Ealdwulf of East Anglia. In addition, Abbess Ælfflæd of Whitby was the daughter of King Oswiu of Northumbria (HE iv: 23). In sum, the relationship between biological sex and burial practices underwent a significant change from the 7<sup>th</sup> century in northern England. Gendered grave goods characteristic of some earlier cemeteries in the region decline, apparently alongside the expression of gender itself in the majority of graves. In one sector of society the distinction between the sexes is, however, frequently maintained in the funerary rite through burials in spatially-distinct zones. It can sometimes be demonstrated that this form of segregated burial was afforded to ecclesiastical men and women, but it must not be assumed that other sectors of society who sought burial at Minsters, for example lay elites, were excluded from this practice. This tradition does not reflect a continuation of earlier practices, appearing instead to reflect the segregated lives lived by members of religious institutions.

Another potentially gendered division in the provision of burial has been identified in the spatial clustering of small numbers of females. These burials are located amongst burial groups otherwise dominated by juveniles. The burial of juveniles in defined areas of particular cemeteries is discussed in more detail below

(7.2.2), however, it is the role of the small number of female burials that accompany them that is considered here. The clustering of adult and infant burials has been described in other Anglo-Saxon cemeteries, however, in many of these cases it is not females, but male burials which accompany juvenile graves (Hadley in press). In the middle Anglo-Saxon cemetery at Great Houghton (Nh), for example, an adult male interred in a grave with post-holes at each corner (perhaps marking the plot or supporting some form of canopy) was buried in a plot isolated by several metres from other burials, except that of a 4-5 year old child (Chapman 2000-1: 16-19). Moreover at the later cemetery of Raunds Furnells two graves of juveniles encroach on the area occupied by a male burial under a carved stone slab, thought to be the “founder’s grave” (Boddington 1996: 45, 67) and these appear to form a spatially-distinct burial cluster. In these examples it is the adult grave that appears to have been the focus of the group, however in the cases from the present study the relationships between adult males and juvenile are less clear. At Thwing and Ponterfract, female graves are found alongside large clusters of juvenile graves in close proximity to standing structures. It may, therefore, be the standing structures, rather than the adult graves, that were the focus of these groups. Clusters of juvenile burials in close proximity to certain focal features are known from many sites in northern England in the middle Anglo-Saxon period (see discussion below 7.2.2), but in only certain cases do female graves accompany them. The women are, therefore, apparently part of the cluster of infants, but not its focus. Perhaps they shared some form of identity with these children? A range of possible explanations can be offered for this practice. In a recent paper, Sally Crawford (in press a) has considered the significance of the early medieval concept of “*unmaga*”. This term can be translated as “childlike”, and indeed is sometimes used to refer to children themselves

(Attenborough 1922: 195; Crawford In press a). Crawford has, however, linked “*unmaga*” more widely to the helplessness and lack of independence characteristic of some mental and physical impairments. In addition, law codes indicate that lack of independence may have necessitated the withdrawal of adult status, thus providing another link between childishness and impairment. The question can be posed, then, whether the women buried in clusters of juveniles identified here were “*unmaga*”, or childlike in their behaviour, perhaps in consequence of mental impairment. It is difficult to reconcile this suggestion with the burial only of women with the infants in the examples described here. Why would only women be afforded childlike status based on their mental or physical abilities? This is especially inconsistent considering that it appears that males were more often excluded from normal modes of burial or the burial population itself, for example, in execution cemeteries (Hadley in press) (see discussion of “deviant” burial below, 7.2.3).

An alternative explanation might relate to concepts of care and protection. The association of adult and juvenile graves in clusters has often been linked to familial relationships or the need to afford the very young the protection of an adult even after death (Hadley in press). These two explanations need not be mutually exclusive, however the latter perhaps best fits the evidence presented in this study. The large groups of neonates and infants accompanied by only small numbers of female burials are unlikely to be conventional family units, but a few adult female “mother figures” might be considered sufficient to protect a large group of children after death. The gendered role of women as care-givers including mothers, midwives and undertakers has recently been reviewed in later medieval contexts (Gilchrist 2008) (see below, 7.5.2). It might be possible to trace a similar identity amongst the women considered here. One possible solution to the question of their identity is that

they are those who died in childbirth. Archaeologically identifiable examples of peripartum mortalities are not common, and none was encountered amongst the sample considered in this study.<sup>3</sup> However, Anglo-Saxon examples of death in childbirth are certainly known, including a 6<sup>th</sup>- to mid 7<sup>th</sup>-century burial from Worthy Park, Kingsworthy and a 11<sup>th</sup>- to 12<sup>th</sup>-century burial from St Nicholas Shambles (GL). In the former a female was excavated with juvenile bones in and around the pelvic area, suggesting the child was not fully expelled at the time of death or burial (Hawkes and Wells 1975; 1983: 24) and in the latter the remains of a full term foetus were encountered in the abdomen of a female with masculine pelvic characteristics that may have contributed to difficulties during childbirth (Wells 1988: 71-3) (Figure 7.1). Anglo-Saxon sources tell us very little about childbirth, however pre-Christian Irish sources (including to *Colloquy of Ancients*, though to have been compiled from oral accounts around 1200) indicate that women who died in childbirth could be afforded special status and honour in their burials (Crawford in press a; Leigh Fry 1999: 182-3). It is not until the 13<sup>th</sup> century that Christian sources begin to link childbirth with contamination and thus it may be more appropriate to consider middle Anglo-Saxon women in relation to the Irish model than to the much later Christian ideals (Gilchrist 2008: 43). The clusters of females and juveniles at Pontefract, Spofforth and Thwing are all in close proximity to standing buildings, areas that appear to have held higher status or greater holiness (see chapter 6.). One tentative suggestion is that the identity of a mother was conferred in death upon these unlucky women, who had not had a chance to fulfil this role in life, by the practice of

---

<sup>3</sup> The identification of evidence of parturition from features of the pelvis in skeletal remains has been considered in some detail (Houghton 1974, 1975, Spring et al. 1989; Tague 1988; Ullrich 1975), but these studies produced conflicting results regarding its effectiveness. A more recent study, utilising individuals with known life histories from the 18<sup>th</sup>-century Spitalfields collection, concluded that none of the pelvic traits commonly linked to parturition were directly indicative of parity status to a degree that would make them effective osteological indicators of childbirth (Cox and Scott 1992).

burying them with groups of infants. Whilst no explanation for the placement of adult females amongst clusters of juveniles in cemeteries dating to between A.D. 650 and 850 can be confidently favoured, it has been argued here that the identities of these women were intertwined – perhaps through childlike behaviour or their reproductive histories – with the infants that they were buried with.

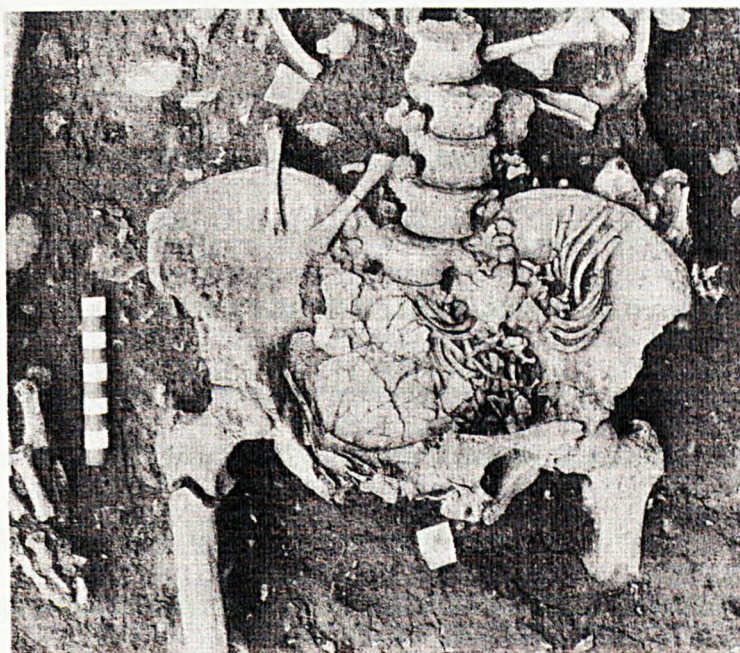


Figure 7.1. The burial of a woman from St Nicholas Shambles with foetus *in situ* in the pelvic girdle (from Wells 1988: 72).

### 7.2.2 The bitter death? The burial of the youngest members of the community

In contrast to the evidence for biological sex, it appears that age at death could have a significant impact on the burial rites afforded to many individuals in the middle Anglo-Saxon period. The most noteworthy practice relates to the burial of children who died before the end of their first year. In several cases the youngest individuals

were buried in a restricted area of the cemetery, with a standing structure as a focal point.

Infants and children are generally underrepresented in early Anglo-Saxon cemeteries across England (Crawford 1991; 1993: 84; Lucy 1994: 26), including at several sites from northern England such as Sewerby and West Heslerton (Lucy 1998: 35). Many explanations have been postulated for the paucity of juveniles in 5<sup>th</sup>- to 7<sup>th</sup>-century cemeteries including differential decomposition, recovery bias, shallow burial and active exclusion (Crawford 1993: 84-5; Evison 1987: 146; Gordon and Buikstra 1981; Lucy 1994: 26-27; Mays 1998: 22; Molleson and Cox 1993: 16). The discovery of infant burials in several early Anglo-Saxon settlement contexts, particularly in sunken-featured buildings at sites such as West Stow and Wharram Percy, suggests that the youngest individuals may also have received a different form of funerary treatment, away from the main cemetery focus (Crawford in press b; Hamerow 2006: 13-4; Milne and Richards 1992: 84; West 1985).

Differential treatment of infants seems to remain a feature of funerary practices from the 7<sup>th</sup> century, albeit with significant differences in the means by which the youngest members of the burial community were distinguished (Crawford 1999; in press b). In cemeteries from the 7<sup>th</sup> century onwards, infants were more commonly encountered in the cemetery populations and in several cases are preferentially buried in certain areas. There is little evidence for the zoning of infant burials in the few cemeteries from the 5<sup>th</sup>-7<sup>th</sup> centuries where they have been identified in significant numbers (Crawford in press b) and, indeed, amongst the cemeteries from northern England used during this period, there was no clustering of infants comparable to that identified in later cemeteries (e.g. see Drinkall and Forman 1998: 222; Hirst 1985:

34; Lucy 1998: 69-75; Marlow 1992: fig 28<sup>4</sup>). The spatial zoning of infant burials is much more common amongst 9<sup>th</sup>- to 11<sup>th</sup>-century cemeteries, where the interment of infants close to church walls has frequently been identified, and termed “eaves-drip burial”. Commonly thought to relate to baptismal ritual, this practice has been suggested to reflect uncertainty within early Christian communities over the efficacy of baptism (Boddington 1996: 55; Crawford 1999: 85-9; Hadley 2009). The origins for this theory seem to lie in anthropological studies. There appears to have been a long-held fear throughout European history that the unbaptised infant was never at rest and could easily return as a revenant to haunt their family (Barber 1988; Wilson 2000: 216). More specifically, Wilson (2000: 216) records anecdotal evidence from the 19<sup>th</sup> century of the clandestine burial of an infant under the eaves of the sanctuary roof of a church, hoping that the water running off the roof would bestow some kind of posthumous baptism. This story provides some evidence for practices that sought baptism after death, although their antiquity is not clear.

A series of pragmatic explanations have also been offered to explain the spatial clustering of groups of infants from the 7<sup>th</sup> century, however they are not entirely convincing. It has, for example, been suggested that an epidemic illness or famine might necessitate the rapid, successive burial of abnormally large numbers of young children, but the intercutting of juvenile burials, for example at Pontefract, makes it unlikely that clusters of infant burials represent only one phase, or even a relatively short period, of burial. Moreover, explaining clusters of infant burials by reference to epidemics fails to provide reasons for the specific location of these clusters, which are typically adjacent to upstanding monuments in the cemetery.

---

<sup>4</sup> Some clustering of individuals under 12 years was noted by Sam Lucy (1998: 69-70, 74) at Sewerby and West Hleslerton, however the pattern was far from as strong as those noted amongst the later cemeteries in this sample. Moreover, there was no apparent differential treatment of infants as a group.



Alternatively it has been suggested that proximity to church foundations would have prevented the digging of deep graves, such as would be required for adult burials, and thus this location became most appropriate for the smaller, shallower graves of infants (Anderson 2007: 98). However, there is no intrinsic reason why the foundations of some of the small buildings from this sample should have interfered with the depth of burial for more than a few metres away from their position. Indeed a few adult graves, especially of women, are interspersed with the infants in several cases (see chapter 7.2.1), suggesting that there was no physical barrier to the digging of adult graves in those areas dominated by infant burials.

These functional explanations having been discounted, the potential stimulus for intentional segregation of infant burials in some cemeteries utilised between A.D. 650 and 850 can be considered in more detail. The “eaves-drip” model is not an entirely satisfactory explanation for clusters of infants in middle Anglo-Saxon cemeteries. At many later Anglo-Saxon sites infant burials cluster around churches, for example at Raunds Furnells where the “eaves-drip” phenomenon is best known (Boddington 1996: 54-5, 69). As a result, many subsequent studies have actively associated clusters of juveniles with church buildings to the extent that groups of infant burials are frequently used to infer the position of a church even where there is no supporting structural evidence (Buckberry 2007: 125). For example, at Hartlepool a cluster of infant burials in the south-east corner of Church Walk cemetery led to the suggestion that a contemporary church lay just outside the area of archaeological investigation (Daniels 1999: 112) (see chapter 3.1). However, the supposition that all juvenile groups were interred under the eaves of churches has the potential to retard our understanding of the topography of cemeteries by masking the possibility that other features attracted groups of children’s graves. Indeed, amongst the sample

considered in this study, the placement of infant burial groups was not always associated with a church. At Thwing, for example, there is evidence for the burial of neonates along a line of three post-holes, reconstructed as a line of three free-standing posts. The interments at this site were made from as early as the 7<sup>th</sup> century, and therefore this may be one of the earliest examples from the region of the burying of the youngest children in clusters. Furthermore, it can be seen that not all examples of juvenile clustering necessitated proximity to a church, or even a building, and that neonate burial zones could occur in locations where the “eaves-drip” effect could not have been created. Nonetheless, the role of a standing structure of some form does appear instrumental in the location of many juvenile burial clusters at Thwing and elsewhere. This is especially clear at Pontefract, where differential burial of infants begins at the same time as the construction of a rectilinear building in the 9<sup>th</sup>-10<sup>th</sup> century. The importance of standing structures with religious significance as focal points suggests that the zones utilised for infant burials were important, perhaps they were high-status or particularly holy areas by virtue of their proximity to the most visible focus of the site.

At this point, consideration of why only the youngest children were distinguished in burial zones amongst the sample in this study is appropriate. Cultural distinctions between the very young child, who could not speak and was completely dependant on others, and older children are implicit in the vocabulary of Old English written sources and suggest an inherent and enduring difference in the conceptualisation of infants in Anglo-Saxon society (Crawford 1999: 54; 2007: 84; in press b). The death of children was also treated differently from that of adults. Abbot Ælfric of Eynsham, writing during the late-10<sup>th</sup> and early-11<sup>th</sup> century, described the “bitter death” of a child in contrast to the “unripe death” of an older

adult and the “natural death” of the old (Thompson 2004: 10). Archaeological evidence can also provide evidence that the degree of independence a child had from its parents may have been instrumental in the creation of their social persona. Isotopic analysis of northern populations from Black Gate and Wharram Percy suggests that weaning at around the age of one year was a community-wide age threshold (MacPherson *et al.* 2007; Mays 2007: 93) and Simon Mays (2007: 93-4) has tentatively linked this threshold with the tendency for infants under the age of one year to be buried immediately north of the church, suggesting that the spatial patterning of burial may be referencing the age of weaning. He did, however, note that this could not be a complete explanation for the location of infant burials as some of the very young were also buried away from the church.

The “eaves-drip” model suggests an explanation for differential burial of infants relating to the role of baptismal ritual in early Christian communities. This same emphasis upon baptismal rites has recently been adopted in the description of 7<sup>th</sup>- to 9<sup>th</sup>-century cemeteries. For example, Chris Loveluck (2007: 205) suggests that infants buried together at sites such as Hartlepool were “probably unbaptised”. However, the evidence for the relevance of baptism amongst the general population from the 7<sup>th</sup> to 9<sup>th</sup> centuries is limited. At the beginning of the 5<sup>th</sup> century St Augustine argued that a child who died unbaptised would be condemned to Hell (Crawford 1999: 85), thus beginning a period of Christian doctrine that placed the unbaptised in a precarious position. Baptism of both adults and children is documented throughout the middle Anglo-Saxon period, for example Bede records the baptismal activities of the Roman missionary Paulinus at York, Yeavinger and along the River Swale (NY) during the 7<sup>th</sup> century. Yet whilst Bede claims that “crowds ... flocked to [Paulinus] from every village and district” (HE ii, 14), the

extent to which baptism was available to everyone at this time remains unclear. In his review of evidence of places of baptism in Anglo-Saxon England, Richard Morris (1991: 16) emphasised that, in the centuries directly after the conversion, the need to find someone to perform baptism and the requirement to travel to an appropriate location on a suitable holy day could combine to dissuade parents from seeking baptism for their infants. Baptism was incorporated into 7<sup>th</sup>-century lawcodes, for example, the laws of Ine of Wessex, dated to c. 694, which indicated that an infant must be baptised within 30 days of birth or a fine – albeit a relatively small one – was imposed on its parents (Crawford 1999: 85; Ine 2, Whitelock 1955, 364). The extent to which these directives permeated everyday life is not clear, nor can we be sure that similar prescriptions to those enumerated in Ine's code were in place in more northern territories at a similar time. Moreover, even if baptism were to have been a relatively widely understood concept within middle Anglo-Saxon Christian rites, this source does not make any reference to burial as an ameliorative practice for the unbaptised.

The availability of evidence connecting differential burial of infants with baptismal ritual is greater for the period between the 9<sup>th</sup> and 11<sup>th</sup> centuries than it is for the 7<sup>th</sup> to 8<sup>th</sup> centuries. Anglo-Saxon fonts, unknown before the 9<sup>th</sup>-10<sup>th</sup> centuries, begin to be encountered in contexts that may suggest links between baptism, church and cemetery (Hadley in prep.; Morris 1991: 17). At Repton (Db), for example, a mausoleum was also identified as a baptistery due to the presence of water channels in its floor. The building was built on an extant cemetery and burials made after its construction clustered close to its south and east walls (Biddle 1986: 16-22; Morris 1991:19). Furthermore, Richard Morris (1991) has presented evidence that widespread baptism only became readily available from the 10<sup>th</sup> century, which

might serve to emphasise further the inappropriateness of connecting the baptismal links of “eaves-drip” burial with clusters of juveniles in cemeteries before c. A.D. 900. Dawn Hadley (in prep.) has recently suggested that “eaves-drip” burials from the 10<sup>th</sup> and 11<sup>th</sup> centuries across England might relate to the pattern of juveniles associated with high-status male burials, and that these two forms of funerary rite could reflect part of the social and political expression of local lordship. This explanation would not suit earlier examples of juvenile clustering, which occur before the accepted development of regional lordship Hadley refers to, and therefore, if her argument is to be accepted, it could be suspected that juvenile clusters from earlier cemeteries reflect a different practice.

Interpretation of the clusters of neonate and infant burials encountered amongst northern cemeteries from A.D. 650-850 presents several problems. Zoning does not occur at all sites and there is no identifiable pattern in the sorts of cemeteries where it does. Instrumental in this issue are the problems in determining the character of many cemeteries dating to c. A.D. 650-850. For example, at Thwing it is assumed that the relationship between the cemetery, a multi-phase settlement and a Bronze-Age barrow indicate a high-status complex, but at other sites the limited scale of excavation means that this kind of contextual information is not available and this, in turn, restricts the degree to which links with Minsters, status and settlement can be determined. Chris Loveluck (2007: 205) has emphasised the high prevalence of juvenile burials at middle Anglo-Saxon Minsters, suggesting that they may have been strongly-desired locations for higher-status or local families to inter their young dead. At Pontefract, Hartlepool, Whithorn and Flixborough, Minster associations could be suggested to have affected the funerary practices utilised, however at the well-excavated and documented Minster cemeteries of

Wearmouth and Jarrow there is no evidence for juvenile clustering of this kind (Cramp and Lowther 2005; Lowther 2005). Moreover, there is no evidence for Minster associations at Thwing, where juvenile clustering is demonstrated in this study to have been strong. Amongst the cemeteries dating to c. A.D. 650-850 from northern England that can be associated with communities of different types, it can be seen that the occurrence of neonate and infant clusters is not characteristic of any one sort of cemetery, community or type of settlement.

### 7.2.3 A deviant rite in middle Anglo-Saxon northern cemeteries?

The exclusion of certain individuals from the normal burial community became increasingly common from the 7<sup>th</sup> century (Cherryson 2008: 122; Reynolds 1997; 2002: 188; 2008; 2009). There are over thirty burial grounds dating from c. 700-1100 that are believed to have provided burial places for those excluded from community cemeteries (Geake 1992: 87-88; Reynolds 1997; 1999). However, in only one case has this practice been identified in middle Anglo-Saxon northern England, at Walkington Wold. These so-called “deviant” cemeteries are conventionally identified by unusual forms of funerary rites (Aspöck 2008: 15; Saxe 1970) including careless burial in disorganised groups, unusual positions, multiple graves and/or pits containing multiple burials and by seemingly disrespectful treatment such as binding of the hands or weighting-down of the body with stones (Buckberry and Hadley 2007; Geake 1992: 87; Harman *et al.* 1981: 168; Hawkes and Wells 1975: 118-22; Hayman and Reynolds 2005: 219, 239; Hirst 1985: 36-37; Meaney 1964: 287-8; Reynolds 1998; 2009). The majority of excluded individuals are young adult males (Hayman and Reynolds 2005: 239), a small number of which have produced

osteological evidence of decapitation, which is considered to have been judicially motivated (Buckberry and Hadley 2007; Hayman and Reynolds 2005: 244). In combination, this evidence has been used to suggest that those who behaved inappropriately in life, including the judicially executed, received differential treatment in death (Hadley 2004a: 311; in press; Reynolds 1999: 105-10).

It should be recognised that idiosyncratic forms of burial practice in Anglo-Saxon contexts can, in some cases, be considered artefacts of taphonomy or the result of accident or error on the part of those who administered funerary rites rather than an intentional marker of identity. For example, unusual body positions may have resulted from soil movement during the decay of a container (Reynolds 1988), or cadaveric spasm (Knüsel *et al.* 1996), while at the later Anglo-Saxon phase at St Helen-on-the-Walls, burial on a reversed alignment from the norm was explained as accidental error rather than as a deliberate statement (Dawes and Magilton 1980: 13). These examples demonstrate the importance of considering the full range of potential processes by which the characteristics of unusual burial rites may have been created. Yet, whilst it is important to consider the role of non-intentional mechanisms in determining the appearance of a burial, the explanations outlined above are not sufficient to explain those interments where unusual body position is combined with non-normative funerary rites. Nor are they adequate to account for cases where taphonomy or disturbance could not have been responsible, for example where the hands and feet were seemingly bound. If we assume that many, if not most, “deviant” burials were articulated as an intentional part of funerary rites, aspects of the identity of “deviants” become relevant to our understanding of their provision. Various interpretations have previously offered an insight into the significance of “deviant” burial forms in particular cemeteries. In line with culture historical theories, Margaret

Faull (1977: 5) considered that prone burials in early Anglo-Saxon contexts, such as the single example from Holywell Row (Sf), could be the interments of foreigners, thus they were of a distinctive cultural origin from those afforded the normative supine burial rite. It is more common, however, to attribute judicial motives to many non-normative burial rites. Anthropological parallels emphasise a general fear of the dead, particularly the “dangerous dead” including individuals who were considered somehow different during their lifetime (Aspöck 2008: 20-2). In this context, measures such as prone, bound and weighted burial can be seen as a means to appease or control certain individuals (Daniell 1997: 165).

The relationship between “deviant” burial and criminal behaviour in Anglo-Saxon England has been investigated in some detail (Buckberry 2008; Buckberry and Hadley 2007; Carver: 1998: 137-153; Reynolds 1997; 1998; 2002; 2009). Later Anglo-Saxon law-codes suggest that churchyard burial was denied to criminals, the unbaptised and suicides (Reynolds 1997: 27), however such sanctions appear to have been largely irrelevant in middle Anglo-Saxon northern England, where only one execution cemetery has been identified and a range of the burial practices characteristic of “deviant” burial are encountered amongst standard cemetery populations. Evidence for judicial execution forms the only direct means of linking unusual burial and criminal behaviour (Knüsel *et al.* 1996: 122). The only unequivocal evidence for this practice between the 7<sup>th</sup> and 9<sup>th</sup> centuries in northern England comes from Walkington Wold, where one burial (sk 11) with a peri-mortem fracture to the base of the mandible was radiocarbon dated to A.D. 640-775. It is conceivable, however, that this period saw execution by some alternative, osteologically unidentifiable means, for example hanging rarely leaves identifiable marks on the skeleton and so cannot be reliably identified amongst archaeological



populations. It is certainly the case that there is evidence that hanging was practiced. Late Anglo-Saxon gallows has been tentatively identified at Ashted (Sr), Stocksbridge Down (Ha), South Acre (Nf) and Sutton Hoo (Hayman 1992: 17; Poulton 1989; Reynolds 2009: 158) and a pictorial representation of a hanging is included in the 11<sup>th</sup>-century Old English *Hexateuch* (Figure 7.2).



Figure 7.2. Depiction of a hanging from the Old English *Hexateuch* (from Carver 1998: 141).

In addition, the burial of individuals with their hands tied has been linked to hanging (Hayman and Reynolds 2005: 238; Reynolds 2009: 165), and has been identified in northern England at Adwick, Ailcy Hill, Black Gate and Thwing (although there may be other relevant explanations (see below)). Despite the limitations on identifying judicial execution, some burials from cemeteries utilised c. A.D. 650-850 provide tantalising evidence of the link between decapitation and “deviant” burial. A 25-30 year old male from Spofforth was buried in a relatively shallow grave without his skull. This burial was included amongst the wider cemetery population at Spofforth,

however it was interred in a sprawled, prone position towards the southern edge of the cemetery. The separation from the remainder of the population of possible decapitated individuals is more pronounced at Thwing, where the two burials with skulls seemingly placed separately into the grave from their associated bodies are positioned at the far north of the site and are the only two interments made beyond a trench that forms a boundary separating them from all other graves (see chapter 5.4.2).

Caution must be used when linking so-called “deviant” burials with suggestions of “deviant” behaviour. For example, the prone burial rite, where an individual is buried face down, has developed a negative connotation in studies of the Anglo-Saxon burial rite, but in some cases such connotations cannot be substantiated (Hadley in press: 6; Hawkes and Wells 1975: 118-22; Hirst 1985: 37; Lucy 2000: 78). The incorrect use of osteological evidence to support claims that prone individuals suffered injury or mutilation has hindered the development of a more nuanced consideration of the provision of prone burial. For example, at Kingsworthy, injuries on the thigh of a prone burial are repeatedly claimed to be typical of rape victims (Arnold 1988: 133; Hawkes and Wells 1975), yet it is extremely unlikely that such injuries, presumably acute soft-tissue wounds, would affect the bone (Reynolds 1988).

The demographic profile of “deviant” burials from middle Anglo-Saxon northern England corresponds with a pattern identified elsewhere, that is the preferential provision to adult males of “deviant” burial as a possible consequence of judicial punishment. All of those buried at Walkington Wold (both middle and later Anglo-Saxon interments) were adult males (Buckberry and Hadley 2007: 323) as were the headless individuals from Thwing and Spofforth. Provisionally, it can be

suggested from the evidence presented in this study that adult males were more likely to be executed and subsequently receive “deviant” burials than females in the middle, as well as the later, Anglo-Saxon period.

The provision of unusual burial to individuals with physical impairments or disfigurements in Anglo-Saxon contexts across England is the subject of several recent papers (Crawford in press a; Hadley in press; Hemer and Craig in press). These emphasise the value of considering osteologically identifiable physical impairments in a social context to illuminate cultural attitudes to disability. It is notable that some physically impaired individuals in middle Anglo-Saxon northern England were afforded unusual burial rites (see chapter 6.4). Whilst it cannot be proven that their physical appearance or condition was the cause of this differentiation, it is worth keeping in mind that the perception of this individual during their lifetime may have prompted those responsible for the burial to deviate from common funerary practice. In contrast, in other cases those who may have suffered disability were included in normative rites, which for the populations considered here tend to be extended supine interment in a plain earth grave or some form of wooden container (see chapter 5.5). There is a complex relationship between the archaeological identification of physical disease and the manifestation of disability; not all impairments would have caused disability while osteological methods are unable to identify numerous conditions that would (e.g. Cross 2007: 180; Dettwyler 1991; Waldron 2000: 31; Wood *et al.* 1992). This makes it problematic to generalise about the funerary rites afforded the disabled. Our understanding of early medieval attitudes to disability serves to reinforce the complex relationship between diseases that we can identify in skeletal remains and the experience of disability. Sally Crawford (in press a) has recently highlighted

evidence from the law codes that indicates that the ability to ride, walk, bear arms, see, speak and hear were vital to a free man's ability to perform his duties, emphasising that it was the inability to engage in social activities that created disability, not the experience of disease itself. That in some cases we can connect differential burial with physical impairment, suggests that burial rites were one arena through which physical difference could be signalled in middle Anglo-Saxon northern England. However as some individuals who had diseases with seemingly a great potential to have resulted in disability were not differentiated in their burials, it is apparent that the provision of these burial rites was based upon much more complex concepts of social involvement, ability and contemporary reactions to physical or mental difference.

In their review of "deviant" burial, Graham Hayman and Andrew Reynolds (2005: 239) conclude that "the use of prone burial in execution cemeteries establishes beyond doubt the shameful aspect of this body position". However, a group of prone burials found in northern middle Anglo-Saxon ecclesiastical contexts exhibiting none of the other characteristic features of "deviant" burial practice, suggest that prone burial may have had a much more complex meaning. Small numbers of prone burials were encountered in Anglo-Saxon phases of Minster cemeteries, including six at Wearmouth, one at Jarrow and one in phase 2 at Ailcy Hill (Hall and Whyman 1996: 88; Lowther 2005: 177; Cramp and Lowther 2005: 82, 85). Additional evidence suggests these burials were elaborated in ways considered more indicative of high status than deviancy, for example two of those at Wearmouth were associated with stone markers (sks 64/22, 67/08) and one other contained evidence for the use of both a coffin and shroud (sk 69/08) (Cramp and Lowther 2005: 600). Interestingly, the individual from Ailcy Hill was also buried with hands

and feet seemingly bound, but his location, centrally amongst a group of male burials linked to the 7<sup>th</sup>-century monastic community established by St Wilfrid, argues against him having had a criminal past. In the sample of cemeteries considered in this study further prone interments with no other “deviant” characteristics have been identified, including: a young male who otherwise received a normative west-east extended burial at Norton; two individuals at Seaham burial in plain earth graves; and a male buried in a container in a cluster of elaborated burials at Spofforth.

In her consideration of early Anglo-Saxon burial rites, Sam Lucy (2000: 80) concludes that, whilst some prone burials are unusual, the vast majority are treated no differently from the other graves in the cemetery. The presence of prone burial in relatively significant numbers at middle to later Anglo-Saxon Minster and churchyard sites across England, such as Beckery chapel (So) and Shipton-under-Wychwood (Ox), in addition to those in the region considered here, has led Dawn Hadley to re-evaluate the meaning of prone burial. She argues that it is unlikely to reflect punishment or be a result of careless burial, but that it may instead have had a penitential significance (Hadley in press). It is possible, then, that there were two, mutually exclusive, uses of the prone burial rite in middle and later Anglo-Saxon England. In fact the two might be seen as linked when the role of developing Christian ideology is considered. Penitential behaviour appears to have been a concept understood, at least by some churchmen and women, during the early medieval period. For example, the Irish ecclesiastic Adamnán is recorded as having fasted as a penance for past crime (HE iv, 25). Overtly austere lifestyles may also have resulted in pious statements in the funerary record: for example St Æthelthryth’s (d. 679) request to be buried in a wooden coffin is unusual in comparison to the more elaborate forms of stone coffins recorded in other saint’s

lives (Thompson 2004: 104-5; HE iv, 19). Perhaps this request was an extension of the simplicity and deprivation in which she is recorded to have lived her life. That prone burial was widely considered to be a “deviant” rite may have served to render it appropriate as a statement of humility by engendering explicit associations with the outcasts of society. That Christian figures, above all Christ himself, were judicially executed as criminals appears to establish another possible connection between the socially excluded and positive aspects of Christian identity. Indeed, Andrew Reynolds (1998: 254-7), amongst others, has previously identified a strong relationship between Christian ideology and Anglo-Saxon attitudes to crime, punishment and law (also see Loyn 1984; Wormald 1997: 586). This penitential use of prone burial would have only functioned as part of a Christian milieu, which correlates well with its presence at early ecclesiastical sites. The two examples of prone burial from Spofforth allow us to confirm the contemporaneity of these two meanings ascribed to prone burial. One individual in a container was seemingly afforded a normative, relatively high-status burial and was interred in a prestigious locations at the site, however the other prone burial was a sprawled male, and one of the most likely amongst the sample considered in-depth in this thesis to have been judicially executed. Here it that appears both meanings were not only contemporary but articulated by the same community at the same burial site.

In a recent review of deviancy in funerary practices, Edeltraud Aspöck (2008: 29) has emphasised that “what we call ‘deviant burial’ rites are at the same time an integral part of the normal burial practices of most communities”. The evidence from middle Anglo-Saxon northern England has demonstrated this, and served to emphasise how important it is to consider unusual burial practices in their context. Their meanings could be appropriated and subverted for different purposes and even

utilised to project two seemingly contradictory identities in contemporary practice. The evidence from Walkington Wold suggests that the judicially executed formed a significant proportion of those afforded non-normative burial in middle Anglo-Saxon northern England. Moreover, physical impairments resulting in social exclusion had the potential to stimulate “deviant” burial. These practices may have not only reinforced punishments meted out during life, but also served to represent negative expectations of the post-mortem fate of the deceased. But the wide range of “deviant” rites apportioned in very different ways suggests an alternative relationship between non-normative burial and nascent Christian identities. There are conceptual links between “deviant” burial as a judicial punishment, as a marker of physical difference or as a marker of penitence. All three rely upon the existence of a repertoire of burial rites that were used to distinguish from the norm and create negative connotations. These may have been symptomatic of fear, punishment or piety – concepts that need not have been so divorced in the early medieval consciousness and which the teachings of early Christianity may have only served to reinforce.

#### 7.2.4 Multiple burial, multiple meanings, what sort of identities?

Multiple burial is not frequent in middle Anglo-Saxon northern England, but it is a practice that is present in small numbers at a significant proportion of sites (Figure 7.3). A variety of methods were utilised in the interment of two or more individuals in the same grave, including placing one individual above another or alternatively side by side, and the practice of reopening an extant grave to insert a later burial. Given this variability it is not surprising that multiple burial should be considered to



have had multiple meanings (Stoodley 2002). As a non-normative rite in a period where the majority of corpses were interred individually in distinct grave cuts, the multiple burial rite potentially presents a reflection on the identities of those afforded it.



Figure 7.3. A double burial at Spofforth (photo courtesy of NAA).

Since there is no evidence for the curation of Anglo-Saxon corpses for any significant time prior to burial (Crawford 2007: 239), where two or more bodies were interred simultaneously, it can, thus, be suggested that their deaths must have occurred within a short period of time. Whilst we cannot assume that all simultaneous deaths resulted in contemporary double burial, it appears that it was a prerequisite of this practice. It is conceivable that two or more deaths in a short

period would have been an unsettling experience for early medieval communities, particularly in situations where the deceased were related or had died a sudden or unexpected death (whether a result of illness, accident or aggression) (Crawford 1993: 89; 2007: 86; Stoodley 2002: 120). In contrast, in several cases, for example at Jarrow, Bamburgh and Thwing, multiple burials were created by the superposition of successive interments, and therefore need not have been contemporary deaths. The pattern of disruption of primary interments at the latter two sites suggests enough time had elapsed between burials for bodily decay to be well advanced. Several stimuli might be suggested for the practice of successive multiple interment. At Thwing interments inserted into extant graves were more common in what appears to have been a more desired location in the cemetery, close to a standing building and a row of free-standing posts. This was seen particularly amongst neonates and juveniles who were often buried as a secondary interment over an earlier adult grave and were more commonly interred in this area. In all cases the deliberate superposition of graves makes a statement of remembrance and association between burials over an extended period (Crawford 2007: 39) and suggests connections between the perception of the identities of paired individuals which may include kinship links, similarities in status or another form of common identity.

That certain individuals were more likely to receive all forms of multiple burial, whether contemporary or successive, is suggested by the data from this study. Although all ages and both sexes were present in multiple burials, adult and juvenile pairings were particularly common. This pattern has also been noted amongst multiple burials in both early and later Anglo-Saxon contexts (Crawford 2007; Hadley in press; Stoodley 2002: 118). Females appear to have been more commonly buried with children in earlier Anglo-Saxon cemeteries whereas in later Anglo-Saxon

cemeteries it is males who are more frequently interred with children, a development which has been related to the growing role of family status at the expense of acquired status in the middle Anglo-Saxon period (Hadley in press). Notably, however, double burials containing an adult and child in this sample did not preferentially include either males (Jarrow, Wearmouth, Spofforth) or females (Jarrow, Spofforth, Pontefract), and in addition there were a further two cases of juveniles interred with unsexed adults (Jarrow, Garton II). It might be suggested that the multiple burial rite was undergoing a transition between the characteristically early and late Anglo-Saxon forms.

The high incidence of children interred with adults during the 6<sup>th</sup> to early-8<sup>th</sup> centuries at Castledyke led the excavators to consider a differential, not quite “full” adult status for children that meant they did not require their own grave (Drinkall and Foreman 1998: 334). In this argument, the child can be likened to an object ancillary to a “proper” adult burial in a manner that questions the equality of the individuals in a double burial. This interpretation might be particularly apt amongst very young children, whose dependence on their parents may have brought them closer to object than person (Crawford 2007: 87-9). Family ties were also considered relevant to the adult and juvenile double burials at Jarrow, where successive double burials are considered to represent family plots utilised over a significant period (Lowther 2005: 184-5). In multiple burials from the early Anglo-Saxon period containing one or more adults, Nick Stoodley found male and female pairings to be more common. One certain example of this combination comes from just outside the present study area at Castledyke. The excavators were reluctant to suggest that this burial was a married couple as the female (45+) was significantly older than the male (17-25) (Drinkall and Foreman 1998: 334). The four examples of vertical double burial at

Norton Bishopsmill School have been suggested to be male-female pairs (Johnson 2005: 9-10), however it should be noted that only two individuals – two males from two separate graves – could be accurately assigned biological sex. These examples highlight the potential importance of the interlinking of identities created when more than one person is buried in a single grave, but demonstrate the problems encountered when attempts are made to ascertain how individuals in double burials may have been connected.

That individuals in double burials may have shared particular forms of identity is further indicated by the prevalence of elaborate forms of burial. In middle Anglo-Saxon northern cemeteries double burials are more commonly afforded elaborate burial, for example where either one or both interments are in chests, than single interments. Thus they might more frequently have belonged to the sector of society for which this rite was appropriate. A similar pattern was noted amongst early Anglo-Saxon multiple burials, where coffins were more numerous than amongst single burials (Stoodley 2002: 109). An alternative explanation is that the event of multiple burial might have stimulated the provision of more elaborate funerary rites. A recent paper by Sally Crawford (2007: 85) observed that multiple burial of children together is rare amongst early Anglo-Saxon cemeteries as, indeed, it is in the present sample. The provision of chest burial for the very young is also unusual, and thus when we find at Pontefract a double burial of a neonate and a young child (aged c. 1-6) in a chest, the coincidence of two of the more unusual rites apparently reflects upon the unusual event of simultaneous death amongst two children with some shared identity.

A range of explanations have been suggested for double burials in middle Anglo-Saxon England, which should not necessarily be viewed as mutually

exclusive. A late 12<sup>th</sup>-century *Life of St Peter of Cornwall and Launceston* recorded the death of a holy man who was buried together with his granddaughter in one coffin in the churchyard (Hull and Sharpe 1985: 27; Crawford 2007: 86). It is clear from this account that the concurrence of their deaths was a factor in their multiple burial, but emphasis is also placed in the text upon their familial relationship and the similarities in their identities through links made between his holiness and her death in a state of innocence (Crawford 2007: 86). The rarity of the multiple burial rite suggests that unusual circumstances were a prerequisite of its use, but the frequency with which one or two double burials appear in many cemeteries dating to c. A.D. 750-850 in northern England also indicates that it formed a widely articulated means of burial.

In some contexts, multiple burials may be seen to have conveyed a more sinister message. This seems to have particularly been the case for multiples of more than two in middle Anglo-Saxon northern England. Only two examples can be identified where three distinct individuals were buried together and both are found in “deviant” contexts, at Walkington Wold and in phase 3b at Ailcy Hill. It should be borne in mind that, in both cases, the burials date to the latter half of the middle Anglo-Saxon period as defined in this study, and perhaps slightly later. Three concurrent natural deaths would be a relatively unlikely occurrence, certainly less likely than two simultaneous deaths, and therefore less easily explained by chance. At Ailcy Hill the triple burial of three probable males during the potentially “deviant” phase of burial on this site provides no indication of their manner of death, however, at Walkington Wold all three individuals interred in a triple burial with radiocarbon dates of A.D. 640-775 and 900-1030 were headless, and one of the three had secure osteological evidence of decapitation, thus it appears their deaths were

intentionally brought about (Buckberry and Hadley 2007: 312, 317; Hall and Whyman 1996: 93). The sinister associations of triple burials have also been noted across England during the 7<sup>th</sup> to 11<sup>th</sup> centuries (Reynolds 1998: 170; 2009: 174-77), and it appears their use in northern cemeteries was articulated in a similar manner.

In sum, multiple burial appears to have been utilised to express two very different aspects of identity in middle Anglo-Saxon northern England. Double burials, whether contemporary or simultaneous appear to have been linked to higher-status groups who utilised certain forms of burial rite. In the former it is plausible that the death of two individuals with linked identities in a short period of time was a mitigating factor, however amongst burials where an individual was inserted at a later date, it seems that identity played a dominant role in directing burial practices. Triple burials are very rare amongst the sample considered here and appear universally in contexts that can be linked to deviance or penal sanctions, indicating that they held a very different meaning to double interments in 7<sup>th</sup>-9<sup>th</sup> century northern cemeteries.

### 7.3 The chest burial rite

The use of wooden chests as burial containers has been demonstrated at 17 sites in northern England identified by this study (Figure 7.4).<sup>5</sup> The chest burial rite has been noted in numerous site reports and mentioned briefly in published works (e.g. Hadley 2002: 209; Hall and Whyman 1996; Hall *et al.* 2008: 67-8; Kjølbye-Biddle 1995; Lucy and Reynolds 2002: 16; Manby in prep.; Newman 1989;

---

<sup>5</sup> For the purposes of this discussion of chest burials three sites from north Lincolnshire have been included in analysis. This reflects the apparent spread of the chest burial rite into the area just south of the present study area.



Nicholson 1997: 413-415; Ottaway 1996; Wilmott in prep.), but has yet to be considered as a distinctive practice in any detail. In this study the chest burial rite has been found to be one of the most characteristic funerary practices of the period c. A.D. 650-850 in northern England. In the following discussion several aspects of the chest burial rite are considered: the distribution of cemeteries in which chest burials appear; the form and identification of chests encountered in burial contexts; the archaeological and literary contexts in which chests appear in the early medieval period; and, finally, the provision and potential meanings of the chest burial rite.

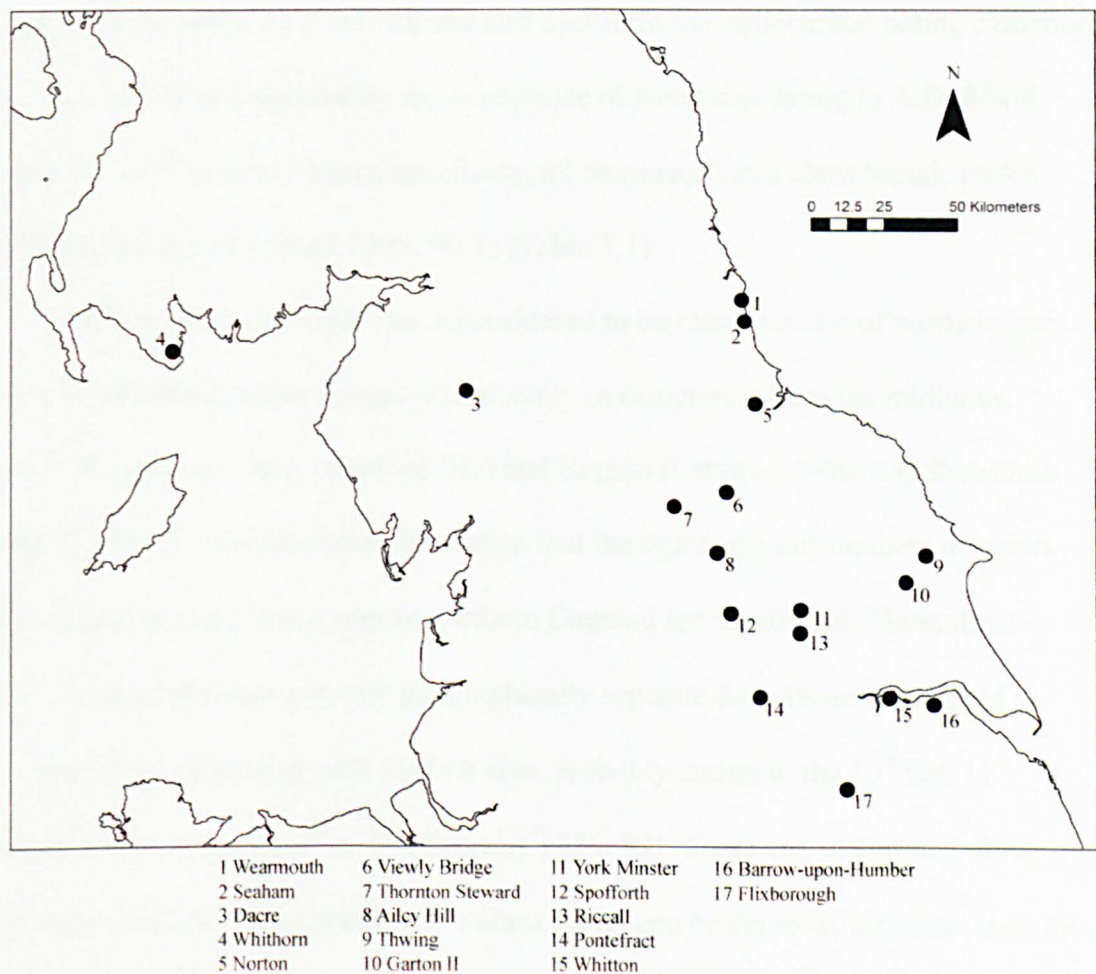


Figure 7.4. The location of chest burials across northern England.



Chest burials are not common in those northern cemeteries in which they are found. The available metalwork indicates a minimum of 57 *in situ* chest burials across northern England, however, many more may be represented by extensive out of context metalwork assemblages. The largest number of chest burials at any one site were found at Thwing where there were 15 *in situ* chest burials and a further 15 graves with out of context fittings, and at Spofforth where chest fittings can be directly associated with 13 graves. Smaller numbers are much more common and the vast majority of sites have fewer than ten. Fortunately, radiocarbon dates are plentiful for contexts in which chest burials occur. These centre around the 8<sup>th</sup> and 9<sup>th</sup> centuries in all cases. At York Minster and Spofforth the radiocarbon dating evidence for chest burials is supported by the occurrence of two coins dating to A.D. 841-8 and an 8<sup>th</sup>- to 9<sup>th</sup>-century coin respectively, all recovered from chest burials (NAA 2002; Philips and Heywood 1995: 90-1) (Table 7.1).

Whilst the chest burial rite is considered to be characteristic of northern sites here, chests have also been noted occasionally in cemeteries from the midlands, namely Winchester (Ha), Hereford (He) and Repton (Ottaway 1996: 99; Shoesmith 1980: 27, 36-7). This reinforces the notion that the much greater numbers of chests encountered in many more sites in northern England are significant. These three more southern sites are not only geographically separate from those considered in this thesis, but chronologically distinct also, probably dating to the 10<sup>th</sup> and 11<sup>th</sup> centuries rather than the 7<sup>th</sup> to 9<sup>th</sup> (Ottaway 1996: 99). There are, in contrast, few cemeteries in northern England where chest burial can be demonstrated later than the 9<sup>th</sup> century. At Riccall (NY) hinges similar to those from the chests discussed here were encountered within the cemetery, and it seems likely that they came from a chest burial (Hall et al. 2008: 67). Recently published radiocarbon dates suggest that

Site	Maximum number of chest burials	Dating evidence
Ailcy Hill	6	A.D. 660-830 (radiocarbon dates from 2 chest burials)
Barrow-upon-Humber	3	A.D. 740-1180 (radiocarbon dates from 6 burials)
Dacre	“numerous”	8 <sup>th</sup> -9 <sup>th</sup> century from coins
Garton II	1	Late 7 <sup>th</sup> -8 <sup>th</sup> century from grave goods
Flixborough	1	7 <sup>th</sup> to early 11 <sup>th</sup> centuries from site phasing
Norton	7	A.D. 650-960 (radiocarbon dates from 3 chest burials)
Pontefract	4	A.D. 830-1100 (radiocarbon dates from 2 phase 2 burials)
Riccall	1	A.D. 68-1165 (radiocarbon dates from 6 burials)
Seaham	2	A.D. 670-880 (radiocarbon dates from 2 burials)
Spofforth	16	A.D. 660-880 (radiocarbon dates from 4 chest burials) c. 8 <sup>th</sup> -9 <sup>th</sup> century from coin
Thornton Steward	1	A.D. 660-1020 (radiocarbon dates from 3 burials)
Thwing	30	A.D. 758-1028 (radiocarbon dates from 2 chest burials)
Wearmouth	1	mid 7 <sup>th</sup> -11 <sup>th</sup> century from historical records and coins
Viewly Bridge	5	A.D. 640-860 (radiocarbon dates from 4 burials)
Whithorn	6	8 <sup>th</sup> -9 <sup>th</sup> century from site phasing
Whitton	1	A.D. 560-960 (radiocarbon dates from 3 burials)
York Minster	5	A.D. 696-1218 (radiocarbon dates from 6 burials) and post-841 by two coins.

Table 7.1. Frequencies and dating of chest burials across northern England. All references are as in tables 1.1 and 1.2 except for: Barrow-upon-Humber, Flixborough, Riccall (NY) and Whitton (L) (Foreman in prep; Geake *et al.* 2007; Hadley 2004b; Hall *et al.* 2008).

the majority of interments at Riccall were late Anglo-Saxon, and as such, the site has not been included in the sample from the present study. However, one burial (sk 4, A.D. 680-805) was middle Anglo-Saxon in date, and therefore it is plausible that the chest burial made at this cemetery was also contemporary with other northern examples. The northern and southern groups of chest burials are further distinguished by their morphology – slotted hasps are more commonly used in place of locks at the southern sites (Ottaway 1996: 113). This evidence suggests that examples at Winchester, Hereford and Repton were a separate form of the chest burial rite, perhaps originating from, but not necessarily articulated in the same way, as the earlier examples from northern England.

Although the chests encountered in burial contexts share features such as hinges, locks, hasps and straps, there is great variation in the form of these metal fittings both between and within sites. For example at Wearmouth, four groups of hinge plates were identified based on form and function, but these were considered crude in comparison to the more decorated forms from Dacre, Garton, Whithorn and Ailcy Hill (Clogg 2005: 293-303). In addition, tin-plated nails were associated with chest burials at Whithorn (Nicholson 1997: 413) and two nails at Spofforth were plated with a non-ferrous metal (NAA 2002: 60). Evidence of joinery and construction of wooden burial containers can be found at several Anglo-Saxon cemeteries. Exceptional wood preservation at the later Anglo-Saxon cemetery at Barton-upon-Humber has resulted in the identification of completely wooden containers, where pegs and dowels were used in place of iron nails, and the present research might also partially illuminate the process by which various other wooden containers, including chests, were built (Rodwell and Rodwell 1982: 290-2) (Figure 7.5). At Ailcy Hill the main body of the chests seem to have followed a similar peg

and dowel construction, with iron nails only used for reinforcement or repair.

Analysis of mineralised wood suggests they were made from radial or tangential split timbers fixed together by rebated butt joints (Watson 1996: 113). The dimensions of the timbers utilised in chest construction have been calculated at three sites. Planks varied from 22-33mm in depth at Ailcy Hill (Hall and Whyman 1996: 84-93) and measurements taken from nail shanks at Wearmouth and Whithorn indicate a similar thickness (Nicholson 1997: 413, Clogg 2005: 293-5). It was possible to reconstruct the overall dimensions of a substantial number of chests only at Thwing (13, 87%), where preservation was good and disturbance limited. Length averaged 1.4m with a range between 0.6 and 2.1m. Width was generally uniform at around 0.3-0.4m and height between 0.2 and 0.3m (Manby in prep.).

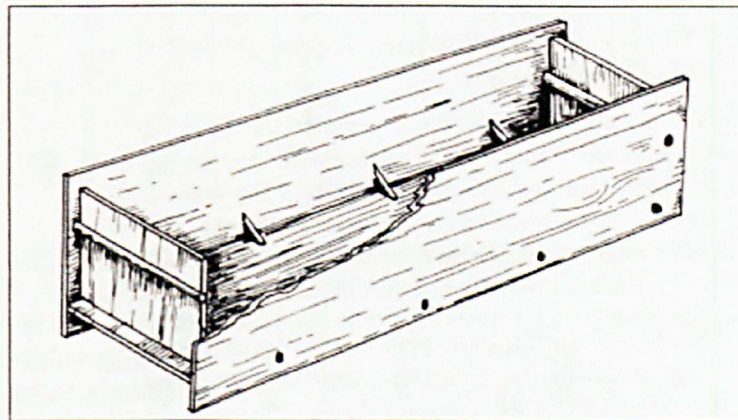


Figure 7.5. Container constructed with pegs and dowels from Barton-upon-Humber (from Painter 1995: 28).

The distinction between coffins and chests is often inadequately made in the archaeological literature. The terms coffin and chest are occasionally, and confusingly, conflated. For example, all containers at York Minster are referred to as



coffins despite having locks and hinges (Kyølbye-Biddle 1995), while at Thwing, unpublished reports group coffins and chests together to give a total of 25 graves, approximately 25% of the burial population (Manby in prep.). It would appear from Patrick Ottaway's (1996; 2001; 2002; in prep.) analysis of the metalwork from many of the relevant sites, that hinges and locks, which would be redundant on a coffin, are the most diagnostic features of chests. In consequence, in this present study, metal hasps, hinges, locks and keys were considered indicative of chests rather than of coffins as they suggest functional and moveable components, presumably hinged lids (Figures 7.6 and 7.7).<sup>6</sup>

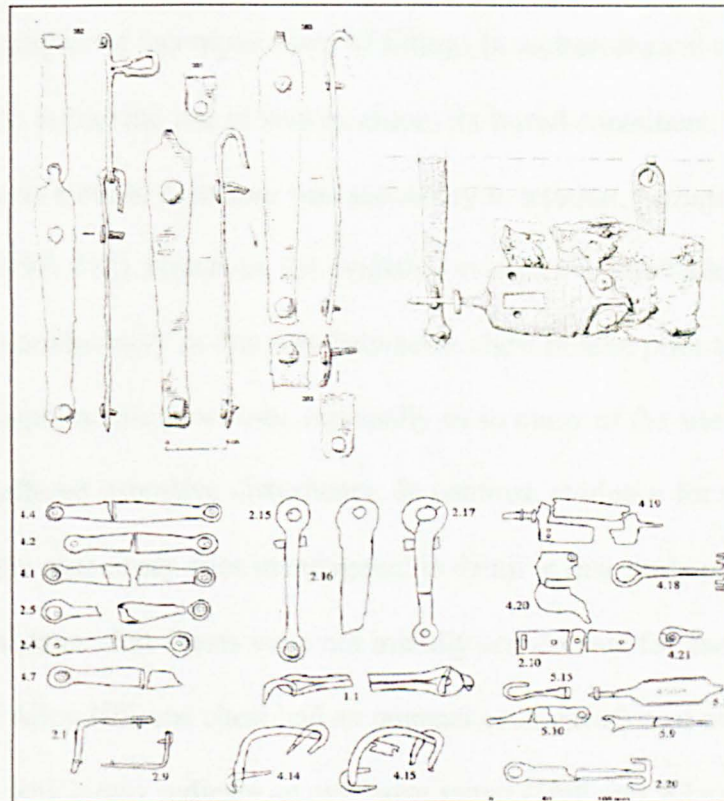


Figure 7.6. Chest fittings from sites across northern England (after Hall and Whyman 1996: 90; Kjølbye-Biddle 1995: 492; Nicholson 1997: 414).

<sup>6</sup> This definition of a chest burial resulted in the omission of some containers from the corpus due to insufficient evidence of hinged lids. For example at Hartlepool Church Walk a juvenile and adult were buried in a container with metal nails and strips which may have been a chest, but could not be confidently identified as such from the available remains.

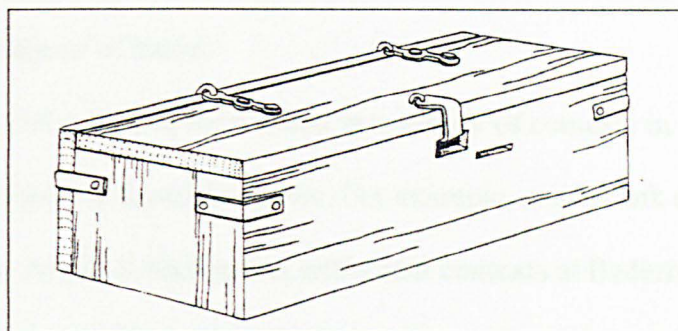


Figure 7.7. Reconstruction of a chest from Thwing (from Watson in prep.: 8).

Birthe Kjølbye-Biddle (1995: 517) considered the chests used in 9<sup>th</sup>-century burials at York Minster to be domestic storage chests reused as burial containers. Similarly, examples of incomplete sets of fittings in archaeological contexts have been argued to reflect the use of broken chests for burial containers, suggesting that their function as a burial container was secondary to another, perhaps domestic, use (Nicholson 1997: 413). However, the available evidence is insufficient to differentiate convincingly in this way between a chest broken prior to burial and one damaged by taphonomic processes, especially as so many of the sites where chests occur have suffered extensive disturbance. In contrast, evidence for repairs made to chests from the case-study sites investigated in detail in this study provides more conclusive evidence that chests were not initially constructed for use in funerary practices. At Ailcy Hill one chest had an unusual concentration of nails at the western end, which may indicate an extensive repair (Hall and Whyman 1996: 93). Moreover, at Thwing a similar concentration of nails suggests repair at the eastern end of another chest. In addition, grave 29b, which contained the remains of an infant, had a large lead patch on the floor (Manby in prep.). Whether these chests were repaired in order to be used as burial containers or some time before to allow

continuation of a different function, it seems clear that they were not specifically made for the purpose of burial.

Wooden chests have been found in a variety of contexts in Anglo-Saxon England, including the domestic sphere. For example, solid plank chests have been excavated from Anglo-Scandinavian settlement contexts at Bedern and Coppergate in York (Ottaway and Rogers 2002: 658). Chests appear to have been a common and versatile method of transporting and storing goods during this period, and it is likely that they performed similar functions during preceding centuries. The will of Wulfwaru, a 10<sup>th</sup>-century noblewoman, records her legacy, including substantial amounts of land in Somerset leaving “to all my household women, in common, a good chest (*godes casteneres*) well decorated” (Will of Wulfwaru, Whitelock 1930: 62-5). Although the text is not explicit about what the chest was used for, its bequest to “household women (*hiredwifmannum*)” suggests a domestic function, probably storage, although the mention of decoration and specific bequest suggests it is something more than just a humble functional box. Bede’s early 8<sup>th</sup>-century *Life of St Cuthbert* records that the Abbess Ælffled of Whitby utilised a chest/box for the storage of a girdle she had been sent by St Cuthbert that had miraculously cured both Ælfflæd and one of her nuns (VSCuth xxiii, Colgrave 1940: 230-5). Again, this chest was owned by a woman, but in this case it is found in a high-status ecclesiastical context. The link between chests and ecclesiastical spheres is developed further in the *Life of St Cuthbert*, in a description of the removal of Cuthbert’s relics to a “light chest” (*theca*) by his brethren, 11 years after his burial, at which time his body was found to be incorrupt (VSCuth xlii, Colgrave 1940: 290-5). This source links chests to the storage of human remains and it is assumed that the box must have been large enough to have accommodated the still-articulated body of the saint, making it



similar in function and construction to those encountered in funerary contexts in the 7<sup>th</sup> to 9<sup>th</sup> centuries. A possible issue with this assessment of the appearance of chests in literary sources regards the determination of whether they are referring to similar objects. It has not been possible to determine whether the *casteneres* of the Old English source and the *theca* of the Latin texts are comparable objects, or whether they are different types of box. Bearing this caveat in mind, the previous discussion provides, at the very least, an indication of where chests or similar storage boxes may have been used in daily life.

Chests can also be found in a variety of funerary contexts in the earlier Anglo-Saxon period, although their use until the 7<sup>th</sup> century is notably different from that of the 8<sup>th</sup>-9<sup>th</sup> centuries. Small chests and boxes are encountered amongst grave assemblages in the 5<sup>th</sup>-7<sup>th</sup> centuries, particularly at later 6<sup>th</sup>-century sites in Kent (Lucy 2000: 57). This practice continues into the 7<sup>th</sup> century, where grave assemblages from the inhumation graves at Sutton Hoo included several small boxes (Evans 2005: 214, 260). A silver strip over 10cm in length and pierced by nails was found in mound 2 (Figure 7.8). It was interpreted as a decorative feature from a larger box or chest, and is similar to the strapping found on the chests discussed in this paper (Evans 2005: 256). Although not used as burial containers, the boxes from Sutton Hoo show similarities in decoration and construction with those used in burials. Their context suggests that they may have had both high-status associations and symbolic functions in the burial rite. In sum, chests appear in many contexts in the Anglo-Saxon historical and archaeological record. Boxes appear as grave goods in 6<sup>th</sup>- and 7<sup>th</sup>-century funerary contexts, but despite similarities in their construction to later chest burials, these boxes are utilised in a very different way from those considered in this study. Larger chests were probably utilised in domestic contexts



throughout the Anglo-Saxon period. Later documentary sources suggest that chests were owned by high-status secular and ecclesiastical women during both the middle and later Anglo-Saxon periods. They were used for storage, but also regarded as sufficiently valuable pieces of furniture worth writing into a will. The evidence highlighted here for chests in Anglo-Saxon contexts indicated they were used widely across the county, so why 7<sup>th</sup>- to 9<sup>th</sup>-century chest burials are only found in the north, and later examples only in the south remains unexplained.

The presence of a functional, moving lid is considered to differentiate a chest from a coffin in this study. In many cases, the lids of chests utilised in 7<sup>th</sup>- and 9<sup>th</sup>-century burials had associated locks and, less frequently, keys. Locks were found in chest burials at Ailcy Hill, Seaham, Spofforth, Thwing, Viewly Bridge, Whithorn, Flixborough, Pontefract and York Minster and keys at Ailcy Hill, Spofforth, Norton Bishopsmill, Thwing and Whithorn. Reconstructions at the latter suggest that chests were locked and the keys placed on the lid before burial, however the chests at Seaham and Pontefract appeared to be unlocked at the time of interment (Ottaway 2001: 15; Wilmott in prep.: 6). A possible funerary context for locks and keys can be provided by consideration of later documentary evidence. Recent work by Victoria Thompson (2004: 125-6, 129-31) on later Anglo-Saxon burial rites has illuminated the symbolism of locks and keys within early Christian beliefs, which linked keys to St Peter, the keeper of the gates of Heaven and the guardian of the dead. Doors also appear frequently in Christian imagery of this period as the gates to both Heaven and Hell. Thompson (2004: 129-31) has likened the grave to a doorway, and the lid, hinges and lock of a chest, when considered from above, could have been similarly viewed as a doorway. Although the written evidence these deductions are based upon

is mainly from the 10<sup>th</sup>-11<sup>th</sup> centuries, it is plausible that earlier chests may also have had links, through complex Christian imagery, to St Peter and the gates of Heaven.

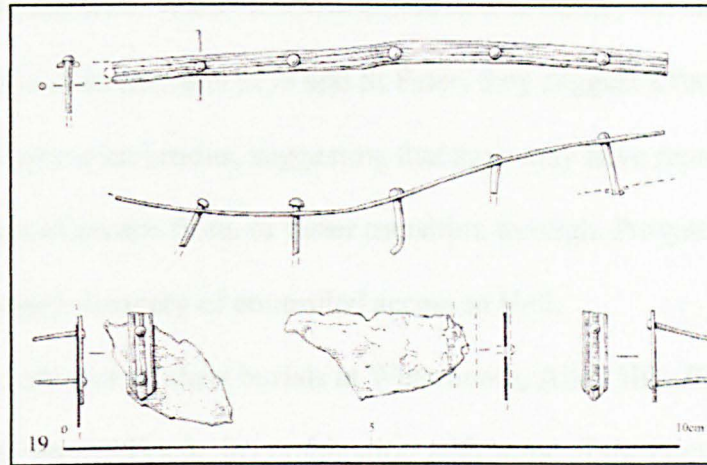


Figure 7.8. Metal strappings from a box interred as a grave good in Sutton Hoo Mound 2 (from Evans 2005: 257).

Archaeological evidence for keys and locks as grave inclusions, independent of chest burials, is also attested from the early Anglo-Saxon, later Anglo-Saxon and later medieval periods (Gilchrist and Sloane 2005: 178; Lucy 2000: 45). Latch-lifters are a common inclusion in early Anglo-Saxon grave contexts. These objects are suggested to have been worn as part of the female costume at the waist, seem to be symbolic household keys (Lucy 2000: 45). Locks were placed on the shrouded bodies of later Medieval individuals, including a female and adolescent at Hereford Cathedral (11<sup>th</sup> century) and two further females at St Mary Grace's London (GL) (14<sup>th</sup>-16<sup>th</sup> century). The positions in which locks and keys were placed on the body suggest that they served a symbolic function, for example, the positioning of a lock on or around the pelvic area may indicate a relationship to the important characteristic of sexual purity or chastity (Gilchrist and Sloane 2005: 178). Keys have been found in graves at Shaftesbury Abbey presbytery (Do), St Mary Merton

(GL) (12<sup>th</sup> -13<sup>th</sup> century) and St Mary Spittal (GL) (13<sup>th</sup>- and 16<sup>th</sup>-century graves). As with the documentary evidence presented here for chests in non-funerary contexts, both latch-lifters and later medieval locks and keys seem to have been particularly associated with females. Whilst Roberta Gilchrist and Barney Sloane (2005: 178-9) acknowledge the links between keys and St Peter, they suggest a further explanation for their use as grave inclusions, suggesting that keys may have represented a symbolic means of escape from, or faster transition through, Purgatory and evoked links to apocalyptic imagery of controlled access to Hell.

The occurrence of chest burials at Wearmouth, Ailcy Hill, Ripon, York Minster, Whithorn and Dacre, in combination with some of the documentary evidence presented above, has led to suggestions that chest burials were particularly associated with high-status ecclesiastical sites (Lucy and Reynolds 2002: 16; Nicholson 1997: 415; Ottaway 1996: 113). Amongst the sample considered in this study, the highest proportions of chests amongst *in situ* burials were encountered at Ailcy Hill, Thwing and Spofforth. The evidence from Ailcy Hill has certainly contributed to the association between chests and ecclesiastical contexts. However, neither Thwing nor Spofforth can be reliably associated with any monastic context. The apparently high proportion of chest burials at Ailcy Hill might also be misleading. The site was only partially excavated, in isolated trenches orientated radially about the summit of the natural hill. This has resulted in the omission of a significant proportion of the population from our assemblage, and created a bias towards certain areas of the sites, including the summit of the hill, which appears to have an especially dense area of chest burials. At all of the sites considered across northern England, chest burials were found to cluster in certain areas of the cemetery (see chapter 5.4.3), thus there is the potential at Ailcy Hill for large areas of burial

with no chests to have existed, but not to have been excavated. In addition, a large assemblage of charnel was also recovered from the site, which significantly increases the potential total burial population. When both charnel and out of context chest fittings are included, it is unlikely that more than 4% of the burials at Ailcy Hill were in chests. In fact, when out of context remains at the case-study sites are included in analysis, it is Thwing, not Ailcy Hill that stands out as particularly unusual. Over 22% of the population appear to have been interred in chests, in contrast to under 10% at the other more completely excavated sites (Table 7.2). The cemetery at Thwing lies inside a multi-period prehistoric earthwork, in close proximity to a seemingly high-status middle Anglo-Saxon settlement that includes structures comparable in form to those at Yeavinger. Thus it is not ecclesiastical contexts, but rather it is higher-status contexts more broadly that appear to be most clearly associated with high proportions of chest burials in northern England.

Site	Number of chest burials (total including out of context chest fittings)	% <i>in situ</i> chests in <i>in situ</i> burials	% all chests in all burials
Ailcy Hill	6 (8)	16.2%	4%
Barrow-upon-Humber	2	1.9%	-
Garton	1	1.7%	-
Hartlepool Church Walk	2 (3)	1.1%	3.4%
Flixborough	1	5.6%	-
Norton	4 (9)	4.1%	9.2%
Pontefract	4	5.7%	-
Riccall	1	1.6%	-
Seaham	1 (2)	3.8%	7.7%
Spofforth	13 (16)	7.7%	c. 5.3%
Thwing	15 (30)	11.4%	22.7%
Wearmouth	1 (4)	0.6%	2.2%
Viewly Bridge	3 (5)	9.1%	10.6%
Whithorn	4 (6)	6.5%	9.7%
Whitton	1	2%	-
York Minster	5	4.2%	-

Table 7.2. Proportions of chest burials in cemeteries in northern England.

Chest burials do not only occur in high status cemeteries, but nevertheless, their association with high status individuals is highly plausible. The overall investment required in the production of chests, whether for the purpose of burial or initially for domestic use, may have limited their availability to only certain individuals within a community. The deliberate deposition of domestic chests, thus preventing them from serving their initial function, suggests a form of conspicuous consumption, which is likely to have been limited to wealthier groups. Patrick Ottaway (1996: 113) suggests that the custom of chest burial may be related to “high rank rather than, for example, ethnic or other social affiliations”. Whilst his suggestion that chest burials could be a high-status practice is supported by evidence presented here, his assumption that status took precedence over any other form of identity had yet to be tested prior to the present study. In his summary of chest burials across Britain in the recent Wearmouth and Jarrow report, Phillip Clogg (2005: 303) asserts that, based on current evidence, it was difficult to envisage how the contextualisation of chest burials could be taken further. Yet, the bio-cultural approach taken in this study has provided a new insight into the provision of these unusual burials. In past consideration of chest burials it has been noted that “in most cases where these graves have been recovered the human remains have not been studied in detail, but where results are available, it appears that chest graves were usually, but not exclusively, those of adult males” (NAA 2005: 23). The cautious tone of this statement reflects the limited synthetic analysis that had, at that time, been undertaken on chest burials. In fact, the data from the sites considered here indicate that the demographic profile of the chest graves is mixed, including 13 juveniles and 30 adults, among which were 12 males and 17 females and one unsexed individual (Table 7.3). Females are particularly common in chest graves at

Thwing and Spofforth, the sites at which chest burials are most numerous, where they outnumber males. The most notable pattern in the provision of chest burial relates to the age at death of the occupant (Table 7.4). The youngest individuals within the population are underrepresented and, in fact, only two children under 1 year in chest burials have been encountered at any middle Anglo-Saxon site (a neonate in coffin 6 from Whithorn and skeleton 88, a three month old infant in a small repaired box from Thwing). At four of the six case-study sites considered in this study, no individual under the age of c. 8-12 years was buried in a chest. Thus the chest burial rite was largely one reserved for adults of both sexes, but appears not to have been widely appropriated for the youngest children and infants.

Sex	Total individuals	Individuals in chests
Male	242, 20.5%	12, 27.2%
Female	169, 14.2%	17, 38.6%
Unsexed	772, 65.2%	15, 34.1%

Table 7.3. Biological sex of individuals interred in chests.

Age at death	Total individuals	Individuals in chests
0-1 month	70, 10.7%	0, 0%
1-12 months	52, 8.0%	1, 2.6%
1-6 years	31, 4.7%	2, 5.1%
7-12 years	70, 10.7%	5, 12.8%
13-17 years	49, 7.5%	2, 5.1%
18-25 years	85, 13.0%	5, 12.8%
26-35 years	130, 19.9%	7, 17.9%
36-45 years	101, 15.5%	12, 30.8%
46 years and over	65, 10.0%	5, 12.8%

Table 7.4. Age at death of individuals interred in chests.

Examination of pathological conditions experienced by the individuals buried in chests provides another indication that a distinctive group within society was afforded this burial rite. It reveals evidence of extremely active, and perhaps violent, lifestyles. In excess of 58% of adults in chest burials have degenerative joint disease, an exceptionally high figure for the Anglo-Saxon period in general (Roberts and Cox 195) and significantly higher than the prevalences of this condition amongst non-chest interments at the case-study sites considered in this thesis (34.7% spinal DJD and 14.3% appendicular OA). This disparity was found to relate to the increased age of individuals in chest burials, and therefore did not provide conclusive evidence of greater activity amongst those interred in chests when considered in isolation (see chapter 6.4). However, fractures, dislocations, activity-induced skeletal asymmetry and markers of habitual activity such as lytic lesions at the joints, spondylolysis and os acromiale<sup>7</sup> are also present at elevated levels amongst the individuals buried in chests, including some of the juveniles. Several cases from within the chest-burial population stand out. Skeleton 196, a mature adult male from Spofforth had such severe changes to the right acetabulum that he may have suffered some deformity or traumatic insult to the femoral head, which is unfortunately too badly preserved for analysis. Skeleton 1045, an older male from Ailcy Hill not only suffered arthritis of the elbow and hand joints and degenerative joint disease of the spine, but also had a marked asymmetry of the humeri, indicative of habitual and strenuous unilateral loading of the upper body. In addition skeleton 43, an older adult female, from Thwing experienced osteoarthritis of the sacro-iliac joint, degenerative spinal joint disease, including fusion of four mid-cervical vertebrae and lipping at the lumbar and

---

<sup>7</sup> Spondylolysis is a fracture to the neural arch (posterior portion) of the vertebra and os acromiale is the separation of the acromion of the scapula. Both are thought to result from strenuous physical activity and habitual muscular movement.



lower thoracic bodies and a chronic dislocation of the left elbow. It is apparent from this evidence that those buried in chests experienced more strenuous and stressful physical lifestyles than those afforded other sorts of burial.

Two individuals who received chest burial had received sharp force trauma to the cranium at or around the time of death (Figure 7.9). Skeleton 247 from Spofforth (radiocarbon dated to A.D. 660-830) and 1043 from Ailcy Hill were both males, the former aged c. 18-25 and the latter between 35 and 45. In addition, to cranial trauma, the young male from Spofforth also showed evidence of strenuous activity including spinal lesions consistent with Scheuerman's disease – a juvenile spinal condition with similarities to Schmorl's nodes, which are commonly seen as evidence of intensive axial loading of the spinal column – and bilateral os acromiale. The older male from Ailcy Hill also showed evidence of strenuous activity including widespread spinal and appendicular degenerative joint disease. Examples of cranial trauma are generally very rare in Anglo-Saxon cemeteries (Roberts and Cox 2005: 169), therefore it seems significant that two, from two different sites, are buried in a similar manner.

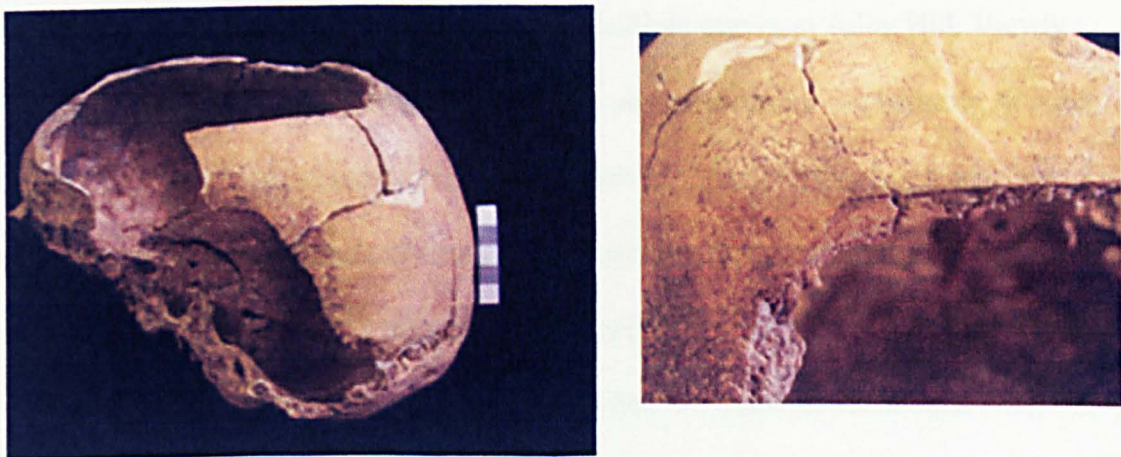


Figure 7.9. Sharp force trauma to the cranium of skeleton 247 from Spofforth with an enlarged image of the cut mark (left) (photos: author).



Consideration of the occurrence of other forms of grave elaborations and inclusions found in conjunction with chest burials provides an alternative method of approaching social status amongst these populations. Whilst it can be hypothesised that certain rare items, whether made of unusual and valuable materials or imported from a distance, would have had a restricted circulation amongst those of higher social status, we must be careful to avoid equating quantity of inclusions directly with wealth and therefore social status (see chapter 6.2). Whilst the frequencies and range of forms of grave goods are restricted during the middle Anglo-Saxon period, chest burials at the case-study sites contained a relatively wide range of other grave inclusions. Single grave inclusions from chest burials comprise a fossil with a juvenile at Norton and a mid 8<sup>th</sup>-century Northumbrian sceatta interred with an old middle adult female from Spofforth (NAA 2002: 19).

Chest burials are commonly found concentrated in certain areas of cemeteries, or they occur in clusters with other graves (see chapters 5.4.3 and 5.4.4). For example at Spofforth, Norton, Dacre, Pontefract, Whithorn and York Minster chest burials are found in only one or two main areas of the cemetery. At Ripon, a site with multiple cemeteries, the chest burials are found in only one cemetery, that at Ailcy Hill. Chest burials can also be found in multiple graves at Ailcy Hill, Viewly Bridge and Pontefract. These double interments are all different in character: at Ailcy Hill both bodies are in separate chests but one grave cut; at Norton only one of the two burials is in a chest; and at Pontefract one grave had two children placed in one chest while another grave cut contained a coffined interment accompanied by a chest containing charnel. These examples suggest no defined multiple chest burial rite, but instead emphasise that the position of chest burials within cemeteries was strongly focal.

That individuals buried in chests at 7<sup>th</sup>- to 9<sup>th</sup>-century cemeteries in northern England share a relatively rare form of burial and were frequently buried in close proximity to each other suggests two scenarios. The first is that chest burial was utilised for a very short period of time. However, evidence from the sites analysed in this study argues against this suggestion, as at Ailcy Hill, Norton Bishopsmill and Pontefract chest burials can be found in two or more phases of burial. This is substantiated by radiocarbon dates at Pontefract for chest burials occurring across the entire span of the 8<sup>th</sup> to 10<sup>th</sup> centuries. Furthermore, evidence for the intercutting of chest burials at Spofforth and York Minster suggests that they were not contemporary and took place over a period of time long enough for the earlier burial to have decayed to a stage where the act of intercutting was possible. A second, more plausible, suggestion is that the rarity and clustering of chest burials again emphasises its appropriateness as a funerary rite for only certain members of society. The location of these clusters with respect to other cemetery features, thus, appears significant. Clusters at Spofforth, Pontefract and Ailcy Hill occupy central positions within the cemeteries, near a contemporary stone structure, the remains of a contemporary building and on the summit of the hill respectively. At Whithorn, the chest burials are also located inside a small stone building. Analysis of later Anglo-Saxon cemeteries has suggested that the proximity of a grave to the religious focus of a site may relate to the status of the individual interred there (Buckberry 2007: 125), and indeed it has been repeatedly suggested in this study that structures within the cemetery provided a similarly significant focus for burial in the 7<sup>th</sup> to 9<sup>th</sup> centuries, thus, the location of chest burials at several sites serves to provide further evidence for their use by higher status groups.

To summarise, chests are not a common form of burial container, however they can be found frequently between the 7<sup>th</sup> and 9<sup>th</sup> centuries in northern areas of England in a restricted number of cemeteries. In form, chests vary considerably both between and within cemeteries, however they all have evidence of a hinged lid which differentiates them from other forms of wooden coffin. Previous associations made between chest burial and ecclesiastical sites or the burials of older males cannot be sustained. The individuals interred in chests come from most age groups and both sexes although there is a tendency for older adults and children between the ages of 7 and 12 to be buried in this way. Infants are rarely found in chests, therefore this form of burial may have been considered inappropriate for them. Archaeological and documentary evidence argues that the age of majority for Anglo-Saxon children came during the early teens (Crawford 1999: 53; Härke 1997a: 126) (see chapter 6.2). Thus, if we consider the age profiles of chest burials in light of this evidence, perhaps chest burial was not appropriate for those without adult status. It may also be possible to consider the frequency of older child burials in chests in this context as perhaps the loss of an individual at the point of adulthood was specially marked by chest burial. In several cases, individuals interred in chests had very active lives, suggested by skeletal evidence for trauma. Individuals buried in chests in the north of England also appear to have been set apart from the rest of the buried population. Where they occur, chest burials tend to cluster in certain parts of cemeteries, often in proximity to a religious focus or centrally within the site. This evidence from the present study suggests that the individuals buried in chests were considered by contemporary society to be a distinct group, and afforded a higher social status in their burial rites than others.

#### 7.4 Buildings in cemeteries c. A.D. 650-850

The focus of mortuary archaeology is often implicitly subterranean: the grave, its inclusions, containers and the disposition of the body. Whilst these aspects of the grave may have held important meanings, they were only visible for a brief period of time, before the grave was covered over. The role of cemeteries as more than locations for the disposal of the dead has been raised in the recent archaeological literature in several ways. For example, Sarah Semple (1998; 2004) and Howard Williams (1999; 2002) have emphasised the role of burial grounds as landscape features, which were engaged with as territorial markers, places of assembly and places of interface with the past. If the cemetery were to be not just a burial ground, but also a location visited and experienced by the living, the visible, above-ground monuments will have held an important role in defining its character. If we follow this suggestion, we must begin to see the cemetery as a place in its own right, created and visited by the living, rather than just a static place of disposal of the dead, and it becomes important to characterise how this place would have looked and how the features above the ground may have influenced those below it.

The presence of standing buildings within cemeteries has been identified in this study as a feature of some funerary sites dated to c. A.D. 650-850. This is most clearly demonstrated at Minster sites, as the location of a church within a cemetery has its origins in the middle Anglo-Saxon period in northern England and the presence of ecclesiastical structures and associated cemeteries is evidenced both archaeologically and historically from the 7<sup>th</sup> century (see chapter 3.1). The function of several rectilinear structures identified in some other 7<sup>th</sup>- to 9<sup>th</sup>-century cemeteries in this study is, in contrast, much more ambiguous. These include small, singled-

celled buildings constructed in either wood or stone at Thwing, Pontefract and Spofforth.

The foundations of a small wooden building were excavated in the north-west corner of the cemetery at Thwing with internal dimensions of 3m by 4m and a gap in the southern wall c. 1.5m in length that appeared to be an entranceway (Manby in prep.) (Figure 7.10). The eastern and western walls were cut centrally by large post-holes and a series of smaller post-holes of no discernable plan were sunk into the interior. A rubble platform extended from the eastern wall of this building. The excavator interpreted this as the possible remains of an earlier structure, but the evidence for this is limited to the platform and a series of postholes encountered in the eastern foundation trench of the small wooden building. A group of burials, particularly infants, clustered to the east of the building and some cut into the platform, thus appearing to be associated with the main building rather than any putative earlier structure. The building overlay a Bronze-Age foundation but was cut by an east-west orientated trench that was dated to c. A.D. 860 based upon stratigraphic relationships with radiocarbon dated burials, thus is likely to have been contemporary with burials made in the cemetery until the beginning of the 9<sup>th</sup> century. After this date interments continued to be made on the site, but no replacement for the building was constructed within the cemetery. The building has been described as a “mortuary chapel” by the excavator (Manby in prep.), however no discussion of its function has yet been attempted.

Another example of a rectilinear structure was excavated in the eastern part of site B at Pontefract (Wilmott in prep.: 33) (Figure 7.11). It was constructed during the c. 9<sup>th</sup> century at the earliest, therefore was considerably later than the example from Thwing. This building was cut through the pre-existing cemetery in an area of

burial that had previously been marked by two large free- standing posts. The burials of infants clustered around this structure, and that the infant burials appear as soon as the building is constructed, provides strong evidence for their inter-relationship. As at Thwing, the structure was very small, with internal dimensions of c. 2.8m square, but the building from Pontefract developed very differently to that at Thwing. It appears to have continued in use after the cemetery ceased to accept burials during phase 3 of activity on the site, being extended by the addition of another cell in phase 4, probably no later that the 11<sup>th</sup> century.

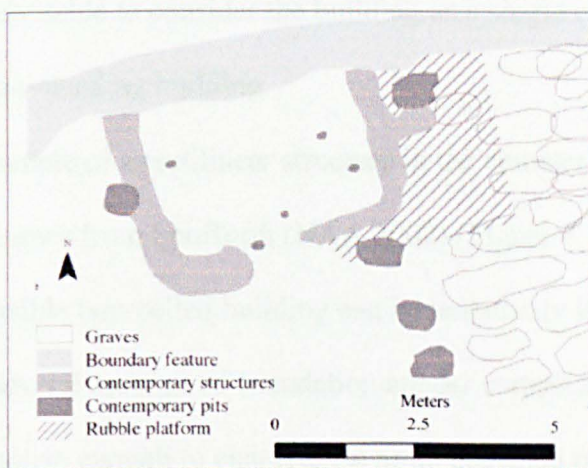


Figure 7.10. The excavated structure and three post-holes at Thwing.

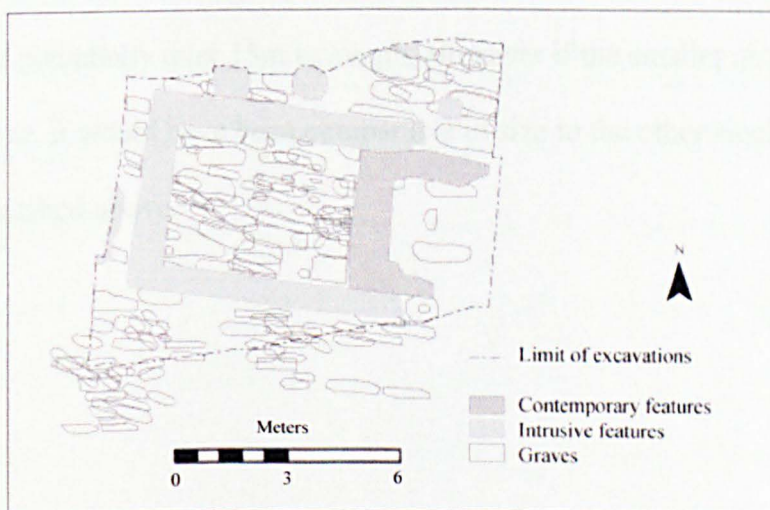


Figure 7.11. The excavated structure at Pontefract (only the cell in dark grey is demonstrably contemporary with the burials).

A variety of hypotheses for the function of this building are presented by Tony Wilmott (in prep.: 33). During its incarnation as a single-celled structure, the building is often referred to as a “mortuary chapel”, however as an alternative it was suggested that it could have been a tower or belfry, perhaps part of a much larger series of buildings that lay outside the edge of excavation to the west. The limitations of the excavation at Pontefract severely inhibit the process of formulating interpretations of this structure, as it remains possible that it could have joined or aligned with others that remain unexcavated. Nevertheless, without proof of further buildings it seems advisable to consider the building as a single cell which developed into a two-celled, free-standing building.

The final example of a rectilinear structure in the cemeteries investigated in detail in this study comes from Spofforth (NAA 2002) (Figure 7.12). Here the foundations of a possible two-celled building can be tentatively identified from the site plan, although several sections of foundation appear completely missing and only one cell is complete enough to characterise as an enclosed building. The structure’s central location amongst the burials without intercutting suggests that it was contemporary with them. If this was a two-celled building it could have been substantial, at potentially over 15m in length. However if the smaller more complete cell stood alone, it would have been comparable in size to the other single-celled examples described above.



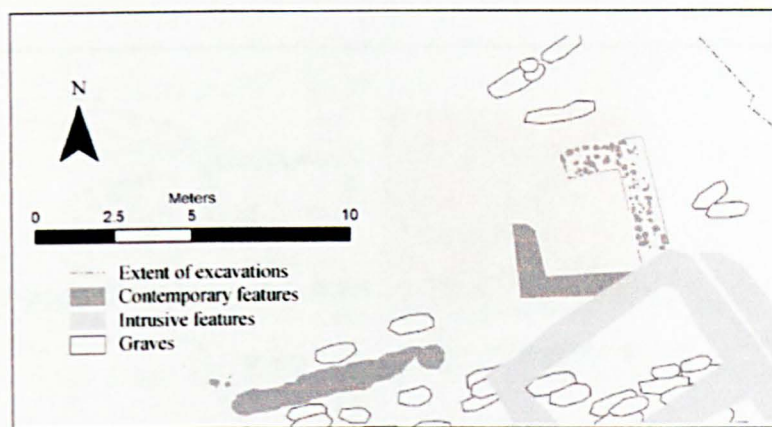


Figure 7.12. The excavated structure at Spofforth.

Two further examples of small, single-celled structures were identified in northern cemeteries that were not one of the six case-studies: at Ledston and Whithorn. At Ledston, a small structure was identified by its foundations, which were cut into the limestone ground surface. Sampling inside this building revealed a juvenile cranial fragment that was radiocarbon dated to the 7<sup>th</sup>-8<sup>th</sup> century (Ian Roberts *pers. comm.*). No further analysis has been undertaken on this site, and it is currently unpublished. The building at Whithorn has received much more detailed analysis and therefore can be characterised in more depth. A c. 4m by 6m structure was constructed with stone footings as part of the early 8<sup>th</sup>-century reorganisation of the extant monastic site (Hill *et al.* 1997b: 139) (Figure 7.13). The building seems to have provided a particularly strong focus for burial. The first phase appears to have attracted burials around it, especially those of infants and children (Hill *et al.* 1997b: 168), and later several chest burials of adults were made inside. The building at Whithorn was modified and developed several times before its destruction by fire around A.D. 845. The incorporation of two windows with coloured glass into the structure's second phase makes it the most elaborate example described here (Hill *et al.* 1997b: 144).



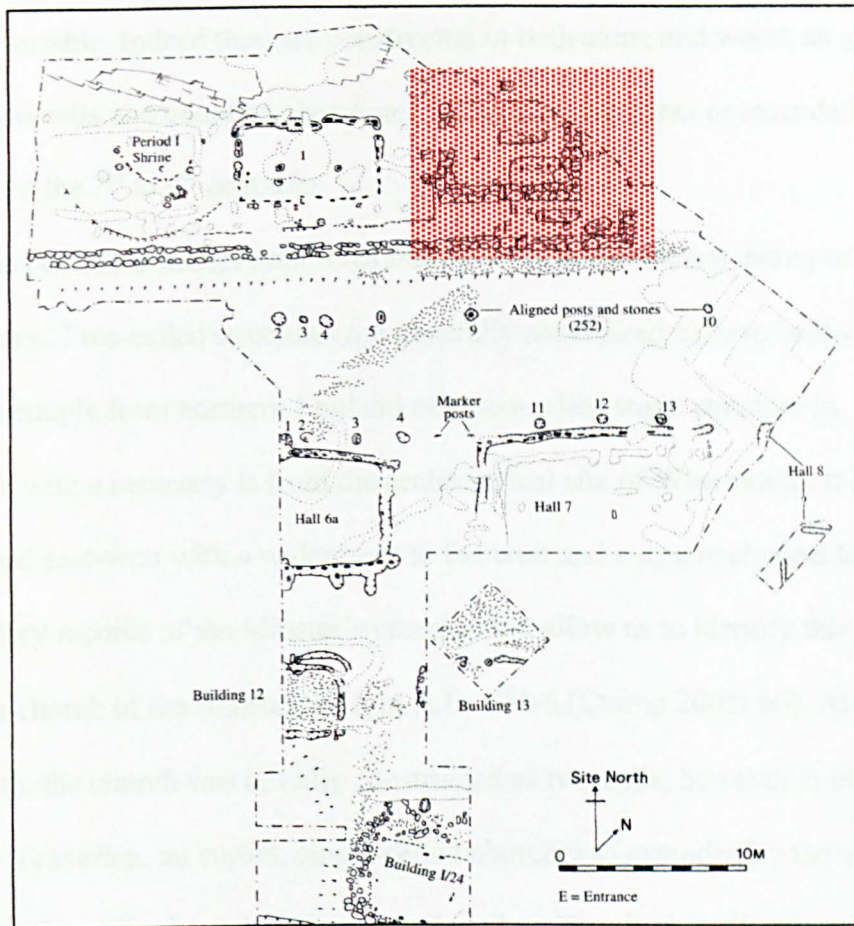


Figure 7.13. The “mortuary chapel” at Whithorn (shaded red) (after Hill *et al.* 1997b: 140).

To summarise, the rectilinear structures encountered in the sample of middle Anglo-Saxon sites considered in this study share significant features. Their role as focal points within cemeteries is evidenced by the clustering of burials around them, and occasionally, inside them. The burials of juveniles in particular appear to have been afforded burial adjacent to these buildings, and it has been argued above (7.2.2) that this relates to the particular significance of that location, perhaps as a particularly holy place. They are generally small buildings, very different from the significant monastic churches associated with burial grounds known from across the

region. The construction, form and development of these buildings is, however, strikingly variable. Indeed they are constructed in both stone and wood, as one or, perhaps, two cells and could be abandoned without replacement or extended during the course of the 7<sup>th</sup> to 9<sup>th</sup> centuries.

The published interpretations of buildings from cemeteries dating to c. A.D. 650-850 vary. Two-celled structures are generally considered to have been churches. The first example from northern England of a two-celled stone structure in association with a cemetery is from the ecclesiastical site of Wearmouth. It had two cells aligned east-west with a wider nave to the west and a square chancel to the east. Documentary records of the Minster's construction allow us to identify this building as the first church of the Minster, built in A.D. 674-6 (Cramp 2005: 66). At Wearmouth, the church was initially constructed as two cells, however at other sites, such as at Yeavinger, an earlier, single-celled church was extended by the addition of a chancel to form the characteristic two-celled plan. The single-celled wooden structure at Yeavinger, which measured over 5m by 10m and had a doorway in each wall (Hope-Taylor 1977: 70-85), was later extended into a two-celled building by the addition of an annexe to the west.

Whilst two-celled buildings are generally described as churches, many of the single-celled buildings within cemeteries in this sample have been described as "burial chapels" or "mortuary chapels" regardless of whether human remains were encountered within them. At Whithorn, and less clearly at Ledston, the recovery of human remains from the interior of the buildings suggests that interments were made inside (Hill *et al.* 1997b: 164-8; Ian Roberts *pers. comm.*). At Pontefract and Thwing there is no evidence for internal burials, but the buildings are still occasionally described as "mortuary chapels" (Manby in prep.; Wilmott in prep.: 33). There

appears to be little coherence in the terminology used to describe these structures and rarely is their presumed function elaborated upon in any detail. This inconsistency throws into question the basis upon which the functions of these structures are designated and whether a genuine distinction can be made between church, chapel and mortuary chapel amongst this sample.

In order to consider the context of the buildings encountered in middle Anglo-Saxon cemeteries in northern England, in the following discussion a review of rectilinear structures in early medieval cemeteries across Britain is presented. These structures include pagan shrines, various forms of churches and chapels and square barrows. Their discussion here is intended to highlight the possible affinities and roles of the buildings encountered in this study. The occurrence of buildings within cemeteries is not characteristic of the early Anglo-Saxon period (Hirst 1985: 24). It has been widely assumed that pagan shrines were often separate from the location of burial, although the possibility that they were ephemeral structures that are missed in archaeological excavation of burial grounds has also been noted (Hope Taylor 1977: 262). Indeed, structures that might be interpreted as pagan shrines have been encountered in both cemeteries and settlements, for the most part at sites in southern England (Blair 1995: 16-20), and only at Yeavinger is a convincing example presented for pre-Christian structures associated with burials in the north of England. In his review of pagan shrines, John Blair (1995) noted a long tradition of square ritual enclosures which can be identified at Iron Age, Roman and some early Anglo-Saxon sites. Documentary sources provide a similarly vague record of these pre-Christian ritual structures as the sparse archaeological record. A variety of potential pagan religious foci are mentioned in documents including: cult foci based around mounds, trees or posts and cult enclosures. The latter apparently included fenced or

hedged enclosures (*septa*) as described by Bede at Goodmanham (HE ii, 13) and the existence of more substantial buildings is implied in references to temples (*fana*) by Bede and in Aldhelm's letter to Herefrith, written c. A.D. 680. In Bede's record, the temple of King Raedwald is still standing to be seen by King Eldwulf, some twenty or thirty years after Raedwald's death, suggesting it was a substantial structure (HE iii, 30; Blair 1995: 2-3). Another well-known reference to Pagan cult sites is included in Pope Gregory's letter to Bishop Mellitus, written in A.D. 601, where he advises that there is no need to tear down pagan temples (*fana idolorum*), but instead that they could be adopted as Christian foci through the sprinkling of holy water and the placement of relics within (HE i, 30). John Blair (1995: 3) interprets the *fana* mentioned in the *Historia Ecclesiastica* as roofed buildings or substantial construction.

A variety of new forms of building begin to be found in cemeteries from the 7<sup>th</sup>-9<sup>th</sup> centuries across England. There is written, architectural and archaeological evidence for the construction of over 90 churches in England during the 7<sup>th</sup> century (Morris 1983: 35-8). These are conventionally, but certainly not universally, divided into two architectural styles reflecting the differing process of conversion in southern and northern England: south-eastern churches with apsidal chancels particularly noted in Kent, and Northumbrian churches with a narrower appearance and a square-ended chancel (Morris 1983: 34; Cherry 1976: 158). Examples of the Northumbrian style include the Minster churches of Wearmouth and Jarrow and the church at Escombe (CD) founded c. A.D. 675, but even these churches, constructed at around the same time and under the auspices of the same individual, Benedict Biscop, show considerable architectural variation. Indeed a wide variety of buildings of different style and appearance have long been considered to be Anglo-Saxon churches (Cherry

1976: 159; Morris 1983: 38; Rodwell 1989: 67). Another form of early medieval church is characteristic of areas of Celtic Christianity. Churches in Wales and south-western England tend to be small in size (c. 5 metres square or less) (Petts and Turner in press b: 21), as were many early church structures in Ireland (Laing 1977: 171-2) and the keeils of the Isle of Man, some of which may date back to the 7<sup>th</sup> or 8<sup>th</sup> centuries (Dugdale 1998: 42) (although recent excavations are beginning to indicate keeils may be mostly of 10<sup>th</sup> century or later date (Wilson 2008: 18)). It has been suggested that the Celtic Church did not appear to have had a strong tradition of congregational worship, and therefore limitations in the number of people that could be housed in these small churches was not prohibitive to their function (Dugdale 1998: 187). In other western British contexts, smaller buildings may have been subsidiary structures to other, larger buildings. Early medieval church groups in western British cemeteries have recently been subject to review (Petts and Turner in press b). A variety of small churches and chapels were identified from 8<sup>th</sup>-12<sup>th</sup> century sites such as Clynnog Fawr (GW), St Helens, Scilly and Tintagel (Co). Some of these were associated with burials like those amongst the sample considered in this study, for example the building at Clynnog Fawr was a focal point for a cluster of burials (Stalleybrass 1914). It appears that there were strong regional variations in the form of churches of early medieval date. There is the potential for both English and western British styles of church building to have been influential in northern England during the middle Anglo-Saxon period, so it seems that we must expect variety in the form and dimensions of any churches that were located in cemeteries.

The occurrence of interments inside buildings in cemeteries dating to between the 7<sup>th</sup> and 9<sup>th</sup> centuries across Britain has been demonstrated in several cases, either through the presence of internal burials themselves, or archaeological or

documentary evidence for their use for storing human remains. These buildings are generally termed “mortuary chapels” and, in England, examples have been excavated at Wells (So) and Repton and inferred from documentary records at Winchcombe (Gl). At Wells, the Anglo-Saxon Minster was located on the site of a 4<sup>th</sup>-5<sup>th</sup> century mausoleum that contained a late-Roman burial (Rodwell 2001: xvii) (Figure 7.14). The presence of a silver penny of Anlaf Sihtricsson, ruler of York c. A.D 941-44 in the infilling layers within the mausoleum suggests that it stood throughout the middle Anglo-Saxon period, to be demolished in the mid-10<sup>th</sup> century (Rodwell 2001: 78). A cemetery developed to the west and north of the mausoleum during the 7<sup>th</sup> century and, in addition to providing a focal point for graves, it appears that the mausoleum continued to be used for the storage of human remains throughout its use as charnel recovered from its fill was radiocarbon dated to between the 6<sup>th</sup> and 10<sup>th</sup> centuries (Rodwell 2001: 78-9). The stratigraphic evidence suggests that these were not interments within the building, but instead perhaps that skeletons originally housed elsewhere in the cemetery were translated to the mausoleum (Rodwell 2001: 78-9). The crypt of St Wystan at Repton also originated as a free-standing structure to the east of an early church. It was a 7m by 6.6m structure with a floor sunk 1.8m below ground and a height above ground of only 1.2m. Thought to have been first constructed for the body of Æthelbald, who died c. A.D. 757 (Taylor 1979: 1-2), this mortuary chapel was later incorporated into a new church on the site, and the subterranean level became a crypt. It is likely that more information about this structure was obtained during recent excavations at Repton by the Biddles, however this is not available in a published format at the time of writing, and therefore not further discussion of this building can be attempted. Another example of a possible mortuary chapel from Anglo-Saxon England is recorded at Winchcombe in



documentary and antiquarian records. A free-standing mausoleum for the Mercian royal family may have existed as part of a larger complex of Anglo-Saxon ecclesiastical structures from around the 10<sup>th</sup> century (Bassett 1985: 89- 94). This example has not been investigated archaeologically.

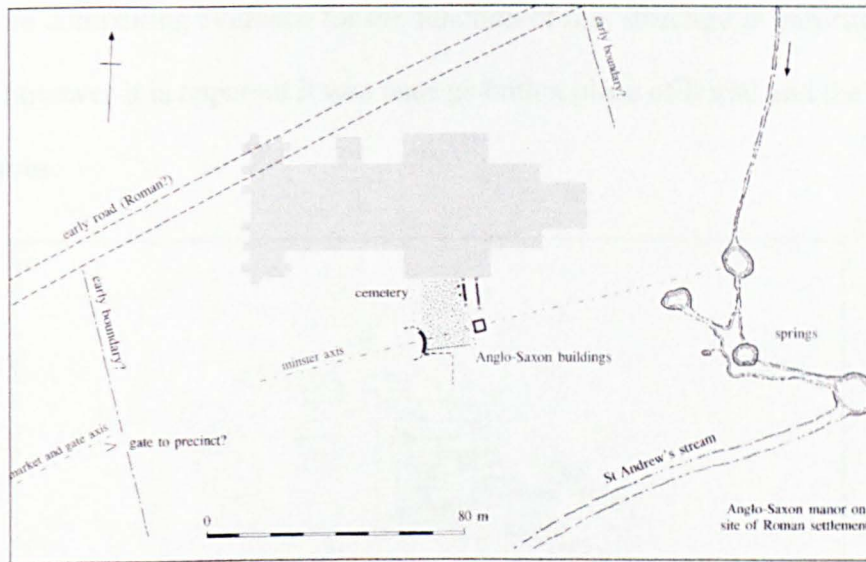


Figure 7.14. Activity around Wells in the 10<sup>th</sup> century showing the mausoleum structure (black square, central) (from Rodwell 2001: 86).

Buildings in some early medieval Welsh cemeteries appear to have acted as mortuary chapels by providing locations in which to place the dead. At Capel Eithin (An), a rectilinear timber structure measuring 4.9m square internally was excavated. It appeared to have had an entrance to the east and was probably roofed. An adult burial was positioned centrally within the building, accompanied by the grave of a child (Figure 7.15). Both graves were partial cists, sealed by a clay floor. Another lintel grave was dug at a later date, partially cutting the first adult grave. In addition to providing a location for burial for a prolonged period, the structure also acted as a focal point for external burials, with the partial cist graves of mainly adults clustering



around it (Edwards 2002: 231-2). At Llandegai (GW) a rectangular wooden structure 4.2 m by 3.6 m containing a centrally-placed grave was located on the edge of an inhumation cemetery overlying a Neolithic cursus (Houlder 1968: 221). Initially interpreted as a primitive chapel associated with a saint's grave, it has also been suggested that this may have been another form of high-status grave (Edwards 2002: 230). More compelling evidence for the function of this structure is unfortunately lacking, however it is apparent it was used as both a place of burial and the focus of other graves.

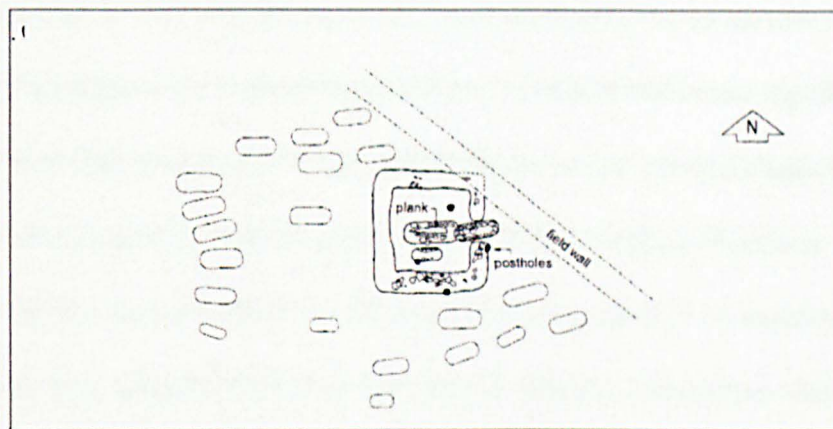


Figure 7.15. Structure and burials at Capel Eithin (from Edwards 2002: 231).

Square-ditched features around single or small groups of burials have been identified archaeologically at sites across Britain (Webster and Brunning 2004: 65-73). Some of these appear to have been under barrows and therefore are not comparable with the structures considered here. In particular, square barrow burials are encountered amongst cemeteries in eastern Scotland and in one 7<sup>th</sup>-8<sup>th</sup> century cemetery within the study area of this thesis, at Garton Station, although here the barrows are Iron Age constructions (Alcock 1992; Stead 1991: 24). Distinguishing between the archaeological trace of a square building and a ditched barrow, in poor excavation conditions, has the potential to be problematic. Indeed, this was the case

at Stonage Barton (So), where several mid-7<sup>th</sup> century enclosures containing burials with entrances to the east were excavated (Webster and Brunning 2004). The excavators noted the confusing evidence for their function; there was no evidence of mounds and little silting in ditches that would indicate a barrow had once stood over them and the flat bottoms of the ditch suggested that they were foundation trenches rather than an open ditch. That the ditches changed level when crossing another ditched feature, suggested to the excavators that there was probably no building (Webster and Brunning 2004: 62). The discussion of pagan shrines by John Blair (1995) appears to side-step the issue of differentiating between barrow ditches and building foundations by considering all forms of square enclosure together, however, this decision risks glossing over the very different above-ground character of a barrow from a building and the implications this has for their functions. Whilst it appears that the majority of evidence for structures located in cemeteries in England and Wales were foundations rather than barrow ditches, sometimes whether these were buildings or less substantial walls or fences remains unclear (Webster and Brunning 2004: 74, 79).

This discussion has highlighted a group of buildings from cemeteries used between c. A.D. 650 and 850 in northern England that present considerable variation in layout, size, form and development. They do, however, share some characteristics: their position in cemeteries and the close proximity of burials, either in clusters around their walls or within their interiors. These structures are not a passive feature of cemetery topography but instrumental in its formation and development. Archaeological excavation rarely permits any insight into the activities that might have been connected with these structures, however a consideration of other forms of structures encountered in cemeteries across Britain and Ireland during the early

medieval period has served to provide some suggestions. Whilst the hypothesis that many of these structures were churches ties in with the increasing numbers of churches constructed from the 7<sup>th</sup> century across England, it must be noted that one of the main reasons for considering them to have been churches is the lack of evidence for any other general explanation and an assumption that buildings in cemeteries would obviously be churches. In fact, not all cemeteries were associated with churches well beyond the 9<sup>th</sup> century (Geake 1992: 86-87; Hadley 2000b: 209), and it must not be assumed that the buildings discussed here must have been churches. The term “mortuary/burial chapel” appears to have been utilised for small structures encountered in northern cemeteries c. A.D 650-850 without critical appraisal of its implications. Evidence for human remains from the interiors of buildings described as mortuary chapels is not universal, yet structures as apparently different in function as the stone chapel with internal chest burials at Whithorn and the wooden structure with a few scattered post holes on the inside at Thwing have been called the same thing. Might they actually have served similar purposes? Even where there is no archaeological evidence of burials within these buildings they may still have housed reliquaries, holy objects or charnel, objects whose importance may have ensured their removal to a different location after the cemetery fell out of use or to a new church if one was constructed nearby. In early medieval Wales, small subsidiary chapels in ecclesiastical complexes, also known as or *capeli y bedd*, are often considered to have housed the graves or remains of saints (Petts and Turner in press: 12). If the buildings from northern English cemeteries discussed here were to have housed similar items, they would have been a significant sacred focus, which would be concurrent with their instrumental role as a cemetery focus for infant burials in particular, and entire communities in general. That several of the examples

noted here were located at either high-status or Minster sites (Whithorn, Thwing, Pontefract) indicates that, of anywhere, these would have been the places most likely to have had access to important holy objects.

The assessment of small rectilinear structures in 7<sup>th</sup>- to 9<sup>th</sup>-century cemeteries here has not provided any firm conclusions as to their function, as the evidence considered here is not sufficient to draw anything but tentative conclusions about their use, but instead a hypothesis linking them to the storage of holy objects, relics or important burials has been presented. This discussion has demonstrated an apparent trend towards the placement of structures in cemeteries during the 7<sup>th</sup> century in England and provided some parallels from other regions and periods that might shed light on its origins and context. These buildings share the function of providing a focus for burial, and although they present a wide variety of forms, it is suggested that their intrinsic relationship with burial indicates a potential common role, which as result of their visibility above ground, would have been as much about communication with the living as marking of the dead.

### 7.5 The process of burial

The actual process by which the dead were buried has received very little attention from archaeologists. This is perhaps understandable, as the palimpsest provided by excavation of a cemetery does not immediately lend itself to the reconstruction of the processes by which it was created. Moreover, during the 7<sup>th</sup>-9<sup>th</sup> centuries, documentary resources are relatively silent on this subject (Bullough 1983: 186), therefore cannot provide insight into the events that took place on the deathbed or at the graveside. However, on closer investigation, some aspects of the process of

burial can be illuminated from the funerary record. In this section, several aspects of interment are considered: the creation of the grave; the administration of burial rites; and the treatment of charnel.

Graves dating to the 7<sup>th</sup>-9<sup>th</sup> centuries from northern England were consistently rectangular earth cuts. This was no different from the majority of inhumation graves of previous centuries, and did not differ from the burials of later Anglo-Saxon populations across England (Lucy 2000: 97-102). A rectangular grave would best contain the human body and provide an ideal socket for inclusions such as coffins, chests or linings. However, the data collated in this study have revealed variations in the form of grave cuts, which permit several further observations to be made about the cutting of a grave. At Adwick and Thwing, grave cuts were very clear and recording was sufficiently detailed to consider the length of the grave cut afforded to individuals of different living stature. Graves containing the smallest individuals – neonates, infants and small children – were generally much shorter than those housing adult remains (Table 7.5). The difference in length between graves occupied by individuals under the age of 18 (1.18m) and over 18 (2.12m) was statistically significant (2 sample t-test  $t=13.253$ ,  $p<0.001$ ). Similar evidence is presented in two studies of slightly earlier cemeteries across England. At both Dover Buckland, and amongst a group of 5<sup>th</sup>-7<sup>th</sup> century cemeteries in East Yorkshire, children were afforded smaller graves than adults (Evison 1987: 16-7; Lucy 1998: 63). Both extended and flexed interments are represented in the corpus of burials from Thwing and Adwick where data regarding stature and grave dimensions are available. At both sites, flexed interments were placed in shorter graves (average 1.98m) than extended burials (2.12m), presumably reflecting the different amount of space each bodily position required. This evidence provides a basis upon which deductions can

be made about whether the size and form of the grave cut was tailored to the individual it was created for.

Age at death	Average grave length (m)	Averages (m)	Significance
0-1 month	0.85	Juvenile average: 1.18	2 sample student's t-test $t=13.253$ $df=122$ $p<0.001$
1 month-1 year	0.89		
1-6	1.13		
7-12	1.41		
13-17	1.72		
18-25	2.12	Adult average: 2.12	
26-35	2.18		
36-45	2.13		
46+	2.20		

Table 7.5. The length of graves of juveniles and adults.

The exploration of the hypothesis that graves were dug to reflect the height of the individual interred within them is hindered by the limited availability of data for stature at some sites and the absence of records of grave cut length at others, and also by the occurrence of both extended and flexed interments amongst the sample. Some general observations can, however, be made concerning the relationship between stature and grave length. At Thwing, there were numerous examples of individuals below average stature interred in above-average length graves. For example, a female from Thwing with a stature of approximately 1.54m (the average for females at Thwing was 1.60m) was buried in one of the longest graves, 2.7m in length. Conversely, there were two individuals from the same site interred in graves barely long enough to accommodate their bodies, including a male who stood 1.73m in a grave 3cm shorter and another male 1.63m in stature in a grave measuring 1.60m. Both of these individuals had their heads removed from their bodies (see chapter 5.4.2.). In the case-study sample considered in this thesis, younger children generally

received smaller graves, but it appears that length was by not always proportional to age. For example at Thwing a neonate was buried in an ample 1.50m grave cut whereas a 10-14 year old, for whom stature was not recorded, but can be assumed to have been much greater than a neonate, was buried in a 1.25m grave. These results from Thwing suggest that grave dimensions were not always tailored to the exact stature of their occupant.

Once the grave had been prepared, the next step in the creation of the grave was the interment of the corpse. The evidence available for reconstructing this process is limited, however some relevant observations might be taken from previous assessments of Anglo-Saxon burial practices. The early Anglo-Saxon grave is widely considered to have served as a tableau, a visual image of corpse and grave goods to be viewed by mourners (Geake 2007: 114; Pader 1982; Malim and Hines 1998: 34-42). It has been argued that the body's disposition, dress and the placement of grave goods around them was laden with symbolic meaning, which remained tangible primarily through memory after the grave was covered in earth (Williams 2004: 267). Throughout the middle Anglo-Saxon period, the frequency of furnished burial decreased and evidence for the enclosure of the body in a container becomes more frequently identifiable. The burial of a fully dressed corpse had been widely abandoned by the later Anglo-Saxon period in favour of various forms of coffin and/or shrouding. Thus a shift appears to occur from the visual tableau of the early Anglo-Saxon burial towards the lowering of a container and the marking of the location above the ground, which was more typical of later Anglo-Saxon practices. Thus, the visibility of the body in the grave appears to decrease, in favour of a more anonymous corpse, but at the same time graves were marked above ground in a more enduring manner (Thompson 2004: 26). In the following discussion two aspects of



the interment of the corpse are considered: the placement of the body and the provision of grave goods.

There is little archaeological evidence to indicate how burials were lowered into graves, however, excavations in conditions of excellent organic preservation at St Drottens churchyard, Lund, Sweden may provide a tentative insight into practices that could have been used in early medieval England. At this site ropes appear to have been used to lower interments into graves, and the remains of one of these ropes was left behind in grave 278 and was preserved until excavation (Mårtensson 1963: 92). Terry Manby has suggested that at Thwing shallow pits at the narrow ends of graves could have permitted the use of ropes to lower a chest or coffin into the grave, with the pits allowing the ropes to be withdrawn from under the container (for a similar argument based upon the early medieval Swedish site at Birka see Gräslund 1981: 20-2). There are, however, several problems with Terry Manby's hypothesis. First, if slots were to have functioned in the removal of ropes they would be expected to occur in conjunction with evidence of burial containers, however several graves with slots have no evidence of containers, and perhaps more significantly, numerous graves with containers have no slots in their cuts. Second, to lower a chest into a grave, at least two ropes would be required (one at each end), yet in the majority of graves at Thwing (53%), slots are only found at one end of the grave. It would not be possible to lower a chest by one rope at one end, so why would the effort be undertaken to dig a slot to aid the removal of only a single rope? A second possible function for the pits is to accommodate the structure of a burial container, for example deep foot blocks. However only one coffin/chest in grave 51 could be identified as having a foot piece, and this was not buried in a grave with a foot slot. Moreover, the presence of a foot piece at only one end of a chest, which is what the

graves with only one slot might be taken to indicate, appears unlikely. Although the role of pits in the grave in the removal of ropes from the grave has been discounted, it does not follow that ropes were not used to lower containers. Ropes could still be withdrawn from under either a container or uncoffined burial without the aid of such pits, but this process may have disturbed the interment within the grave to some extent.

The preponderance of supine and extended skeletons in Anglo-Saxon graves suggests that this was a widely desirable disposition for the corpse. Amongst the case-study sites, the rotation of the head, position of the body and flexure of the legs to the right side was significantly more common than the left. It is, however, unclear why this should be the case. There is no significant correlation between the direction the body faced and any aspect of identity of the individual or the focal points in the cemeteries, nor do interments appear to face each other (see chapter 5.4.2). Perhaps, instead, something that occurred during the process of burial led to the preponderance of right-sided interments? In burials made in containers, the body will have had the chance to move around during the process of burial, and also for a short time before the container decayed and earth back-filled the air space within the grave. It seems unlikely that movement after burial, as the body and container decayed, would result in displacement primarily to one side over the other, and therefore it is perhaps more reasonable to assume that movement to the right occurred as a result of some particular action during the interment of the burial. In plain-earth graves with no container, the pressure of the earth on the body will have held it in its original position. Thus, we might assume that it reflects the original burial rite. It can be deduced, therefore, that if right-sided interment was not the result of some intentional burial rite, that it was brought about *during* burial. It is

conceivable that if a burial ceremony took place that dictated the side from which the body was interred, for example if the body were lowered in from the corpse's left, the removal of any lowering ropes from that side would tip the body/ container over to the right and, displace the body slightly in that direction.

The evidence presented above provides a cautious attempt to reconstruct the process of lowering the body into the grave. The evidence is not conclusive, but appears to hint towards a relatively uniform rite that resulted in a preponderance of right-sided interments. It can be tentatively suggested that interment was made from the north of the grave with the removal of lowering ropes from this side resulting in the movement of the body as described. Thus we might hypothetically reconstruct the event: those who interred the container/body positioned on the northern side of the grave and if the lowering were to be part of a ceremonial event, perhaps mourners and observers may have stood to the south.

#### 7.5.1 Adorning the body

Grave goods become increasingly rare throughout the middle Anglo-Saxon period in northern England, as they do across the rest of England at this time (Geake 1997: 128; Stoodley 1999a: 101). Nevertheless, certain forms of material culture were identified amongst the burials in the sites considered in this study and these can be used to inform our understanding of the process of burial.

The presence of many grave goods related to clothing, such as brooches, buckles, knives and jewellery, in early Anglo-Saxon burials is often explained by reference to the practice of clothed burial (Samson 1999: 132). It is generally accepted that people were buried in their clothes during the early Anglo-Saxon

period, but that the use of shrouds had taken precedence by the 10<sup>th</sup> century (Boddington 1987: 40; Fleming 2007: 152-3, Samson 1999: 132; Thompson 2002: 231). This change has been explained as a consequence of the development of Christian asceticism (Effros 1996; Samson 1999: 124) or related to changing pattern of inheritance for material possessions (Carver 1989: 157; Shephard 1979: 70). Generally, the evidence for clothed burial is provided by grave goods and their positions in respect to the corpse (Lucy 2000: 83-7), therefore as grave goods become less frequent during the middle Anglo-Saxon period, our main source of evidence for burial in clothing disappears. Direct evidence for clothed burial can be found at Milfield South (7<sup>th</sup>-8<sup>th</sup> century), where woollen textiles survived by iron replacement on a strap end and iron buckle buried with the lower individual of a vertical double burial in grave 1977/B3 (Scull and Harding 1990: 21). The buckle and an iron knife were both positioned at the waist of the skeleton, as if attached to a belt (Figure 7.16). In other cases, the position of grave goods indicated that they may have been worn on the body at the time of interment, and therefore hints at clothed burial, for example, small groups of artefacts found at the waist of an individual from Adwick and a burial from Garton-on-the-Wolds suggest items were kept in bags hung from a belt which were buried with the individuals (Harvey 2008; Meaney 1964: 289-90; Geake 1997: 158). Another potential example of clothed burial comes from Wearmouth where several fragments of gold foil thread were found adhered to the left side of the skull of an individual of unrecorded age or sex (Cramp 2005: 229). Gold thread has been associated with female head-wear both in England and on the continent from the 7<sup>th</sup> century, and its presence here suggests the burial of a high-status, clothed individual (Crowfoot and Chadwick Hawkes 1967: 66-72) (Figure 7.17).

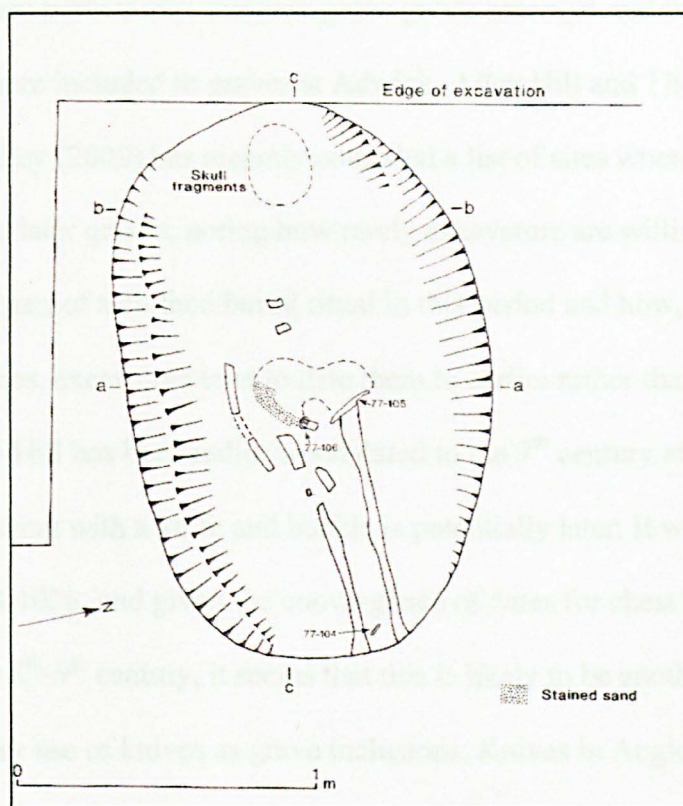


Figure 7.16. Skeleton from lower burial of double grave 177/B3 from Milfield South. A knife and buckle are shown at the waist as if worn on a belt (from Scull and Harding 1990: 16).



Figure 7.17. Gold thread from an Anglo-Saxon burial at Wearmouth (from Cramp 2005: 229).

Knives were particularly common grave goods amongst middle Anglo-Saxon cemeteries, and were included in graves at Adwick, Ailcy Hill and Thwing amongst others. Dawn Hadley (2009) has recently compiled a list of sites where knives appear in 8th-century and later graves, noting how rarely excavators are willing to consider their inclusion as part of a clothed burial ritual in this period and how, in the absence of radiocarbon dates, excavators tend to date them to earlier rather than later. Whilst the grave at Ailcy Hill has been radiocarbon dated to the 7<sup>th</sup> century at the latest, the chest grave at Thwing with a knife and buckle is potentially later. It was radiocarbon dated to A.D. 758-1028, and given the convergence of dates for chest burials in the region around the 8<sup>th</sup>-9<sup>th</sup> century, it seems that this is likely to be another example of the post-7<sup>th</sup> century use of knives as grave inclusions. Knives in Anglo-Saxon graves are generally found at the waist, and were probably suspended from a belt (Lucy 2000: 59). The placement of knives in the burials from the present study might suggest that they continued to be worn at the waist at a later date. At Adwick a whittle-tanged blade was found under the femur of a young male (grave 2) and a blade was encountered at the hip of another young adult (grave 31). At Thwing a knife was recovered from under the tibia of a mature female, however, as this burial was in a chest, there was potential for the knife to have moved during decomposition from its original position, conceivably also at the waist.

Although many of the examples of grave goods for the present study are consistent with clothed burial, this need not imply that they had a role in the burial rite only as dress accessories. It has recently been suggested that assuming that all deposited dress items were simply a result of clothed burial is simplistic and that objects, for example knives, may, through their close personal association with the deceased, have served a mnemonic function in some Christian graves (Crawford

2004: 90; Hadley 2009). In this thesis, the majority of knives do appear to have been worn as dress accessories, but there is no reason to assume that they could not also have served a mnemonic role in addition to a seemingly functional role in the middle Anglo-Saxon burial ritual in northern England. In sum, grave goods provide some evidence for the practice of clothed burial during the 7<sup>th</sup>-9<sup>th</sup> centuries, but where individuals were apparently buried with grave goods worn on the body it should not be assumed that these had no further meaning beyond their relationship to clothing fashions. The rarity of dress items in general in northern England, particularly amongst graves from the 8<sup>th</sup> century and later, appears to indicate that either clothed burial was not a common rite or that significant changes had taken place since the 5<sup>th</sup>-7<sup>th</sup> centuries in the type of clothes the corpse was interred in, to the exclusion of most archaeologically detectable items.

Quartz and coloured stones, fossils, coins and human teeth have been recovered from graves throughout the middle Anglo-Saxon period (see chapter 3.13), and also comprise a significant proportion of the goods encountered at the case-study sites (see chapter 5.4.4). It seems improbable that these items performed any practical function in either life or death. Similar items identified intermittently in burials from the early Anglo-Saxon period through to high medieval contexts have been considered amuletic, to have possessed occult power or to have conferred some sort of spiritual or physical protection upon the bearer (Crawford 1999: 79; Geake 1997: 98-100; Gilchrist 2008; Meaney 1981). For example, quartz has piezoelectric properties that may have imbued it with mystical significance. *Bald's Leechbook* (Cockayne 1961) describes "white stones" with curative and protective properties that would create sparks when struck, which Audrey Meaney (1981: 92) reasonably infers could be quartz. In a Christian context, white stones had continuing relevance



within funerary rites and appear as grave goods in cemeteries across England – for example in 7<sup>th</sup>– to 9<sup>th</sup>-century cemeteries at Whitby and Adwick-le-Street, and late Anglo-Saxon graves at Kellington – and, in particular, western Britain – for example the 7<sup>th</sup>- to 11<sup>th</sup>-century cemetery at Llandough, in pre-12<sup>th</sup>-century grave at Capel Maelog and in 7<sup>th</sup>- to 8<sup>th</sup>-century burials at Whithorn (Britnell 1990; Chadburn and Hill 1997: 472-3; English Heritage 1999; Gilchrist 2008; Hadley and Buckberry 2005: 139; Harvey 2008; Holbrook and Thomas 2005: 36-7; Mytum 1993). Various interpretations have been suggested for the significance of these pebbles. They have been associated with purity and the transformative powers of water, and may have served as lucky charms, tokens for prayers for the dead, or tickets for admission to the afterlife (Fowler 2004: 116; Gilchrist 2008: 20-1; Hadley 2009; Chadburn and Hill 1997: 472-3).

Curated items also appear relatively frequently in both the early and late Anglo-Saxon corpus of grave goods and it has been argued that their antiquity may have created apotropaic value (Eckardt and Williams 2003: 150, 163; Gilchrist and Sloane 2005: 101; Gilchrist 2008: 21-6). Such curated items include fossils and Roman material items such as beads, coins, pottery or jewellery. Fossil crinoids, similar to that recovered from a juvenile's grave at Norton, are linked to St Cuthbert in a legend documented from the 17<sup>th</sup> century, which records the saint stringing them into a rosary (Lane and Ausich 2001: 1). It has not been possible to trace the associations between St Cuthbert and crinoids to before the 13<sup>th</sup> century (Lane and Ausich 2001) and thus it is more appropriate to interpret the example from Norton in more general terms, perhaps in line with Audrey Meaney's (1981: 115) emphasis upon the perceived magical properties of naturally perforated fossils, and other objects.

It can be suggested that some so-called amuletic items performed a function before deposition, and that their burial was an intentional act. At Pontefract, the Roman coin from a grave context was heavily worn suggesting that it had been frequently handled before deposition. The modification of coins into amulets for carrying or wearing is also suggested by examples that are pierced (presumably to be strung onto cord) (Geake 1997: 32; Maguire 1997; White 1988: 101) or found folded, as is often the case in later medieval contexts (Gilchrist 2008: 17). Where such information is available, the placement of amuletic items on or around the body suggests a deliberate process of deposition, and emphasises the intentionality of their presence in the burial rite. For example, at Adwick-le-Street pebbles were positioned between the clavicles of one individual and in a line along the leg of another.

Consideration of the function of amuletic grave goods might further inform our understanding of their role in the creation of a grave. In the early Anglo-Saxon burial ritual, observation of the grave goods by the mourners appears to have been of paramount importance, and related to their overt symbolism of the identity of the deceased as something that was to be constructed through an understanding by others. I have argued here that the middle Anglo-Saxon burial ritual identified at the case-study sites indicates that this process of observing the corpse declines in significance during the 8<sup>th</sup> century, an argument which relates to the suggestion that, by the later Anglo-Saxon period, the deathbed had replaced the grave as the primary focus of mourning and that the body was frequently placed within a container or wrapped in a shroud before burial (Geake 2007: 114; Gilchrist and Sloane 2005: 24; Flemming 2007: 152-3; Thompson 2004: 108). Moreover, it has been suggested that many forms of grave goods became obsolete as funerary offerings during the 7<sup>th</sup> century as a result of developments within society that transformed property

ownership, patterns of inheritance and taxation such that possessions once placed in the grave were now inherited by the living (Carver 1989: 157; Shephard 1979). It appears that amuletic items possessed meanings and functions that transcended this transition and facilitated their continued use during a period when grave goods related to costume or gender generally decline in frequency. We need, thus, to consider which features of amuletic items might have secured their continued relevance in funerary rituals.

Magic has tended to be dismissed as peripheral to Christian beliefs during the 7<sup>th</sup>-9<sup>th</sup> centuries (Dickinson 1993: 45; Meaney 1981: 253), or considered to have been something that was marginalised in everyday Christian practice. For example, Audrey Meaney (1981: 253) has argued that the frequent archaeological evidence for the carrying of amulets in bags at the waist, instead of in a more visible location – worn at the neck for example – might result from a desire to hide “anything which a zealous priest might disapprove of”. However, recently, Roberta Gilchrist (2008) has challenged these assumptions. She emphasised a dynamic linkage between folk magic and Christian practice from the 7<sup>th</sup> century into the later medieval period citing parallels between miraculous events, intercession of the healing properties of saint’s relics and traditional folk magic and medicine (Gilchrist 2008: 2). Indeed, there is no evidence from the cemeteries described here that amulets were covertly deposited in graves as Audrey Meaney envisages for Christian contexts. If amuletic items were intended to serve some magical purpose, their placement in the grave would not necessarily have required justification through the process of observation, as was the case with earlier Anglo-Saxon grave goods, and nor did they necessarily have any monetary value, thus their function may not have been undermined by the processes that rendered other grave goods unnecessary. Moreover, it is conceivable that

physical contact between the body and an amulet might have been essential to the amulet's function. Indeed, the occurrence of amulets on the eyes and in the mouth of individuals at Llandough, St Nicholas Shambles, Fillingham and Raunds Furnells, to name but a few sites, suggests that this may have been the case (Boddington 1996: 42; Buckberry and Hadley 2001: 15-16; Gilchrist 2008: 15; Hadley 2009; Hadley and Buckberry 2005: 140; Holbrook and Thomas 2005: 37; White 1988: 24). Thus, if we are to follow the suggestion that Christianity rendered grave goods unnecessary by providing alternative opportunities to conspicuously display of wealth above ground, for example in the construction and elaboration of church buildings (Hadley 2009; Geake 1992: 91-2), amulets may have retained their relevance in a grave context as emotive deposits – personal possessions of no intrinsic monetary value interred in the grave by mourners (Williams 2006: 41).

In sum, the evidence presented here for the creation of the grave in middle Anglo-Saxon northern England has allowed some tentative conclusions to be drawn about the process of burial. Where archaeological data can be interrogated, a pattern has emerged linking the position of the body in the grave with a burial rite that favoured the north side of the grave as a location for those who lowered the body or container into the ground. It is assumed that ropes were withdrawn from this side, tipping the body over to the right, but it is also acknowledged that further evidence is required to test this hypothesis. The infrequent occurrence of dress items in positions that suggest they were worn on the body suggests that clothed burial may have continued into the middle Anglo-Saxon period, alongside the practice of interring amuletic items on or around the body. Whilst the middle Anglo-Saxon period appears to see a decline in the use of many grave goods, that amuletic items continue into the burial rites of the later Anglo-Saxon and medieval periods appears to

indicate a continued relevance beyond the 7<sup>th</sup>-9<sup>th</sup> centuries that was not shared by other types of grave goods.

#### 7.5.2 The control of burial in middle Anglo-Saxon northern England

The discussion of the process of burial in cemeteries c. A.D. 650-850 in northern England emphasises that a variety of decisions had to be made at every stage in the interment of an individual. Who made these decisions is a question often posed in funerary studies, but rarely examined in any detail. Burial practices throughout the Anglo-Saxon period have elements of homogeneity that suggest that they were actively controlled and managed. Thus it has been suggested that burial specialists must have existed to ensure the apportioning and transmission of meaningful rites over many generations, and that these specialists must have been in communication with each other (Geake 2003: 256, 262).

Helen Geake (2003) has speculated about the control of burial in early Anglo-Saxon cemeteries, linking the role of a putative burial specialist with the enigmatic “cunning women” burials identified by Audrey Meaney and Tania Dickinson (1981: 249-62; 1993). These burials were differentiated from normative 5<sup>th</sup>-7<sup>th</sup> century graves by unusual grave goods of no obvious function – including scraps of metal, broken items and animal bones – laid around the body in non-normative positions and occurring in abnormal combinations. These women have previously been associated with other aspects of ritual control such as healing and fortune telling (Dickinson 1993: 45, 53; Meaney 1981). The evidence linking “cunning women” and burial control is acknowledged by Geake to be extremely equivocal. In her study, support for her argument is limited to an ethnographic parallel for older women

controlling burial in modern rural Greece and a documentary source, the Arab traveller Ibn Fadlan's early 10<sup>th</sup>-century account of a Scandinavian burial, which records the role of a family of women in Viking funerary practices, combined with the suggestion that the unusual burials of "cunning women" were not conducted through normal processes (Geake 2003). Nonetheless, despite the limited evidence, Geake's consideration of the possibility of burial specialists provides a valiant attempt to stimulate discussion of an awkward, yet important question.

It is pertinent here to consider to what extent the control of burial may have changed during the middle Anglo-Saxon period. It is generally acknowledged that the Christian Church had very little to say on the subject of burial, however some insight into its stance can be gained from literary sources. In the 7<sup>th</sup> century, Archbishop Theodore of Canterbury recorded that:

**According to the Roman Church, the custom is the carry the dead monks or religious men to the church, to anoint their breasts with the chrism, there to celebrate masses for them and then with chanting to carry them to their graves. When they have been placed in the tomb a prayer is offered for them; then they are covered with earth and stone (MacNeill and Gamer 1938: 194-5).**

This cursory statement provides little on which to base any understanding of the Christian attitude to burial administration. It probably presents an ideal in referring to the burial of a monk, but need not represent practices as adopted by the wider lay community. Moreover, there is no specific mention of who is performing the act of burial. We cannot be certain that the Church's apparent indifference to burial rites meant that churchmen did not involve themselves in funerary practices (Geake 2003: 266). Indeed, the large lay cemeteries that were established at Minsters such as

Wearmouth from their inception suggest that burial was included to some degree within the pastoral remit of Minsters from the 7<sup>th</sup> century (Thacker 1992: 140).

Bede recounts that ecclesiastics provided vital and definitive instruction in a variety of religious matters including preaching, baptism and visiting the sick. It appears that priests could also be sent out to administer the viaticum (the Eucharist given to the sick or dying) (VSCuth xv, Clograve 1940: 205; Thacker 1992: 142). The degree to which Christian ritual was administered by ecclesiastics is illuminated in a well-known account by Bede, where he describes how the monks of South Shields became imperilled whilst crossing the River Tyne in c. A.D. 650. A group of people in the company of St Cuthbert began to jeer the monks, arguing that they had no need of them as “they have taken the immemorial rituals from men and nobody knows how the new ones are to be observed” (VSCuth iii, Colgrave 1940: 160-64). This situation seems to imply that the control over many religious matters was firmly within the hands of churchmen (Geake 2003: 266). Whether controlled by churchmen or not, the lack of direction for funerary practices found in the ecclesiastical literature of the middle Anglo-Saxon period might fit well with the pattern of varied burial rites observed in this study. In fact a limited range of instructions, such as those written by Theodore, might provide a springboard for multiple rites dictated on a local basis, whether by priests or secular burial specialists.

Helen Geake (2003: 267) has also specifically addressed the relationship between the Church and burial control during the middle Anglo-Saxon period. She links the reduction in furnished burial to a decline in the role of the burial specialist that she envisaged as the “cunning woman”, concluding that the decisions required to make unfurnished burials were less demanding, and that the Church’s usurpation of



the decision of where to bury (in favour of churchyards) may have switched the focus of burial ritual towards ceremony, further diminishing the need for a burial specialist in dictating the archaeologically visible parts of the burial rite (Geake 2003: 267). There are, however, several debatable aspects of this hypothesis.

Contrary to Geake's assumption that burial became less varied, the present study has identified a great variety of different burial rites that were utilised between the 7<sup>th</sup> and 9<sup>th</sup> centuries indicating that the decisions made during the planning and conducting of a burial were not necessarily less demanding. These decisions may have continued to be made by a burial specialist, or alternatively, the variability in burial provision seen in the present study may indicate burial was controlled on a more local level.

The assumption that Christian practices placed burial preparation in the hands of male clerical figures is widespread (Ariès 1981; Binski 1996: 32-3). But in contrast, it has recently been argued that the role of women in burial preparation may have held continued significance throughout the medieval period. Roberta Gilchrist (2008) has recently reviewed the role of women in the preparation of the dead for burial, arguing for a gendered female role as care-giver which extended beyond the death of her wards. The OE term *wrecche wif*, or "wretched wife", recorded in the late 10<sup>th</sup>- to 11<sup>th</sup>-century poem *Soul and Body* from Worcester and an anonymous homily (Assmann XIV) appears to refer to a woman in a similar role, who lays out the body of a dead man in his home (Moffatt 1987: 64; Thompson 2004: 103). Therefore, it can be argued that preparation of the corpse was a domestic activity under the jurisdiction of female kin, but that the burial itself, in contrast, involved churchmen (Gilchrist 2008: 42). Thus we may be able to see a continuation of the role of women in burial rites despite the inroads of Christian practices. Later Anglo-

Saxon documentary sources could be expected to provide a means by which we can speculate on the character of these Christian rites. However, later Anglo-Saxon sources also remain remarkably silent on the subject of graveyard administration. In her assessment of control of Christian burial rites Victoria Thompson (2004: 31-3) quotes Ælfric's Pastoral Letter for Wulfsig (written A.D. 998), in which the bishop of Sherborne refers to the *hostiarius* as the church's doorkeeper and bell-ringer. She speculates about the parallels between the *hostiarius* and the sexton – a role defined after the Reformation as having responsibility over the church doors and bells, but also a responsibility for grave digging (Thompson 2004: 116). The roles and the responsibilities of the two figures described here, the *hostiarus* and the *wrecche wif* seem to complement each other; the latter concerning herself with the preparations of the death prior to burial, and the former dealing with the preparation of the grave. Although very much based in documentary evidence that post-dates the period of interest for this study, this evidence serves to suggest that burial may have been controlled by several individuals, with, perhaps, different agendas.

Following the model of investigations into the control of burial across the entire early medieval period, we might consider in more detail who will have been responsible for control of burial practices in middle Anglo-Saxon northern England. That literary sources are consistently silent on the subject appears to suggest that burial rites were in some way self-evident, or perhaps that they were dictated by an agency removed from central authority (Thompson 2004: 115). The character of the individual/s who determined these rites can begin to be investigated from the ways in which burial practices were articulated. The role of ecclesiastical centres as the main foci, and perhaps departure points, of some new, characteristically middle Anglo-Saxon, burial practices such as chest burial, suggests that the Church was not as

isolated from funerary practices as might be apparent from written sources. Rather, it might have provided a hub from, or through, which ideas could disseminate.

Regionally-specific rites, such as chest burials, which appear for only a short period of time, in a restricted number of graves, but across a relatively wide area of northern England, suggest that communication and acceptance of new burial rites was rapid. That certain forms of burial were afforded to individuals of a certain identity across cemeteries (see above, 7.2), suggests that the rules by which provision of funerary practices were organised were transmitted along with their forms. Nevertheless, the huge variety of practices that comprised the middle Anglo-Saxon burial rite were not always articulated in the same ways and not always afforded to the same kinds of people at different cemeteries. Practices apparently unique to one cemetery are not infrequent: for example, pits and post-holes in the grave cuts at Thwing; or double burials with the individuals aligned in opposite at Norton. This suggests that neither a regional understanding nor a central authority was the only source of inspiration for funerary practices and may indicate, instead, local personalities with significant control over burial. That these individuals were women is not proven by the evidence presented here, however given the apparently female gendered roles as “cunning woman” and in the preparation of the dead suggested from early Anglo-Saxon and later medieval periods, respectively, it might be suggested that, in line with ethnographic parallel (Metcalf and Huntingdon 1991; Gilchrist 2008: 43), women retained a significant role in preparing the dead throughout the medieval period.

Whilst the personalities of those who did control burial between the 7<sup>th</sup> and 9<sup>th</sup> century are not clearly defined by the analysis of the burial rituals presented in this study, the evidence does suggest a mechanism of control by which specialists could articulate and disseminate burial practices across northern England and beyond,

informed by wider influences such as the Church, but ultimately acting on a local basis to make individual interpretations of funerary practices.

### 7.5.3 Encountering the dead: inter-cutting and disturbance

The disturbance of earlier burials by subsequent grave cutting is a characteristic of the majority of cemeteries dated to c. A.D. 650-850 in northern England (see chapter 3.8). The post-burial disturbance of interments has been variously explained as a result of longevity of cemeteries, confinement of burial or the position of earlier graves having been forgotten (e.g. Drinkall and Foreman 1998: 337; Briden 1983: 11). On occasions, it has been assumed that inter-cutting graves indicate “either a low regard for spatial organisation, or a lack of respect for previous burials” (Holbrook and Thomas 2005: 26). More recent research has linked the intercutting of graves to developing Christian ideology that emphasised the importance of a defined consecrated space (Cherryson 2007: 138-9). However, post-burial disturbance in cemeteries dated to c. A.D. 650-850 is not convincingly explained by either duration or physical confinement of burial. Defined cemetery boundaries are rare across the sample considered in this thesis, thus no physical barrier would have prevented burial grounds from growing with their populations. It can be assumed that the duration of burial will have increased the potential for inter-cutting, but a more complex explanation is required to account for dense clusters of burials that frequently cut one another alongside more sparsely occupied areas of burial in the same cemeteries, such at Spofforth and Ailcy Hill. That the position of earlier graves may have been forgotten is difficult to substantiate. Grave markers are rarely recovered archaeologically, even from sites where the regular layout of graves leads to the

assumption that they did, at one time, exist, thus we must be careful not to assume that intensively intercut graveyards utilised no means of marking graves above ground. There is no evidence to determine whether these markers had disappeared long before intercutting took place at any of the sites from the present study.

In earlier Anglo-Saxon cemeteries inter-cutting is scarce, indicating that a conscious effort was made to avoid disturbing the dead (Haughton and Powlesland 1999: 78; Lucy 2000: 102). In contrast, analysis of burial practices in the present study suggests that intercutting of graves from the 7<sup>th</sup>-9<sup>th</sup> centuries was frequent and that it arose as a consequence of the development of a strong hierarchy of cemetery space. During the middle Anglo-Saxon period, it appears that the location of the grave within the cemetery as a whole increased in importance. This is indicated most clearly at Addingham where, during the 8<sup>th</sup>-10<sup>th</sup> centuries, a series of burials were exhumed and reburied as charnel deposits in a densely occupied, apparently much more preferable, area of the cemetery (Adams 1996: 161-3). Additional evidence is provided by the dense groups of graves found in proximity to focal structures such as buildings – which in some cases may have been churches – (Jarrow, Pontefract, Spofforth) and free-standing posts (Thwing) and also around certain graves (Hartlepool Church Walk, Spofforth). Physical space in the cemetery held structured meanings, with some areas reflecting the identity of those buried there. This is evidenced by the clustering of interments utilising particular forms of rite, for example the cluster of chest burials at Spofforth and Pontefract, and burials of specific people, for example infants at Pontefract, Thwing and Hartlepool Church Walk.

At some point during the middle Anglo-Saxon period the preference for certain burial locations appears to have overcome any reluctance to disturb the

remains of earlier burials. If, then, the disturbance of earlier interments was not actively avoided, what strategies were employed when human bones were encountered? The disturbed nature of many middle Anglo-Saxon cemeteries hinders us in answering this question fully. Charnel is common across many sites and rarely is it possible to determine whether this results from modern disturbance or contemporary Anglo-Saxon practices. If the prevailing strategy when faced with exhumed remains was to dispose of them haphazardly into new grave cuts or scatter them randomly, there is little hope of accumulating archaeological evidence of this. Nevertheless, even if remains were often disposed of in this manner, it was clearly not the only strategy for dealing with exhumed bones. The practice of re-interring charnel along the edges of later graves has been encountered across the entire region considered in this research, in particular amongst cemeteries with graves dating to the latter part of the middle Anglo-Saxon period and, in some, cases, into the later Anglo-Saxon period (see chapter 3.8). The re-interment of charnel in a similar manner is also paralleled in cemeteries of a similar date across the country (e.g. Cherryson 2007: 132-3). In many cases the charnel was not simply brushed to the side, but apparently removed and replaced with some care around the new grave cut.

The remarkable similarity in the way in which charnel was treated across the sites considered here has not been emphasised in previous studies. Examples where charnel remains were placed around the cut of later graves tend to be dismissed as meaningless. For example, in commenting on the placement of charnel at the Anglo-Saxon sites of Bedhampton (6<sup>th</sup>-10<sup>th</sup> century) (Ha) and Port's Down 1 (7<sup>th</sup>- early 8<sup>th</sup> century) (Ha), Nick Stoodley (2002: 109) has stated that the bones were simply "brushed aside ... with ... little respect being shown to the original occupant". It is difficult to see how bones which would have been either entombed in soil or still

encased in a container could have been merely “brushed aside” – surely they would need to be exhumed. Where the practice of the reinterment of charnel is considered intentional, for example in several of the site reports of 7<sup>th</sup>- to 9<sup>th</sup>-century cemeteries (Hall and Whyman 1996: 70; Johnson 2005: 10; Manby in prep.; NAA 2002: 7; Wilmott in prep.: 8, 32) (see chapter 5.4.2), it seems that the frequency and similarities in the nature of reburial between sites has not been fully comprehended.

Early medieval Christian doctrine emphasised corporeal resurrection; that the dead would rise in their original physical form on Judgement Day (Thompson 2004: 50). The increasing acceptance of disturbance of the dead amongst middle Anglo-Saxon communities taking place at a time when Christian influence was increasing might seem contradictory to this belief, but perhaps instead reflects a genuine lack of consensus over the perception of the body and its role after death. Confusion could have resulted from the Church emphasising a reading of bodily resurrection based upon the work of Augustine of Hippo, that suggested regardless of decay, destruction or loss, the body would miraculously reconstitute itself at the time of resurrection (Augustine xxii, 20-1, Dyson 1998: 1150-2; Bynum 1995: 95, 113, Cherryson 2007: 138). However, alongside this, later Anglo-Saxon literature presents an association between damnation and decay, and purity and incorruptibility, which suggests that bodily decay was to be feared (Thompson 2004: 132). In consequence, a confused picture of what was to occur to the body after death may have been created.

Whilst the Church may have entertained certain views on the subject of corporeal remains, we must not assume that they were shared by everyone, especially during the 7<sup>th</sup>-9<sup>th</sup> centuries, nor that the Church’s views were the primary motivator in the treatment of charnel. It has been noted throughout this thesis that certain areas of the case-study cemeteries, generally in proximity some standing focal structure,



were densely packed with burials. These areas are also the locations of significant numbers of elaborate graves (in this case usually chest burials) and the locations in which the reburial of charnel was frequently identified. For example, at Spofforth, clusters of intercutting chest burials are found to the south of the west-east wall of a ?building with frequent reburial of charnel in this area. It is possible that the identities of the individuals buried in these particular clusters could have resulted in specific treatment of their charnel. It can be tentatively hypothesised that, if these clustered graves were those of high-status individuals (as argued above for chest burial clusters, 7.3), the movement of their charnel demanded particular respect and the the reburial ritual was a manifestation of this esteem.

Ethnographic evidence provides further insight into attitudes that may have directed the treatment charnel by distinguishing between, on the one hand, the decaying body as a profoundly disturbing object and, on the other, skeletal remains as less distressing objects (Hertz 1960). Thus, in Anglo-Saxon society whilst the handling of the dead corpse may have been a stimulant of disgust and fear – as is recorded in the 10<sup>th</sup>-11<sup>th</sup> century poem *Soul and Body* when it describes that “it seems to them that their hands will become very foul if they handle the dead” (Thompson 2004: 102-3<sup>8</sup>) – the handling of bones may have been more acceptable. To suggest that bones did not inspire the same feelings and treatment as the fleshed corpse is not to say that they were regarded as being free from agency. For many societies, the social, symbolic and mnemonic significance of the individual does not cease at death (Hallam and Hockey 2001; Hertz 1960; Williams 2004: 265). The remains may, therefore, have taken on the complex and dual role of person and

---

<sup>8</sup> The original text comes from the fragments of the *Soul's Address to the Body* from Worcester fragment A lines 39-40 and reads “heom punchep p(et) hore honden swupe beop ifuled zif heo hondlep pe[ne] deade” (Moffat 1987: 64). The translation used in the text is from Thompson (2004: 102-3).

object (Geary 1986; Hallam and Hockey 2001: 134) and have provided a tangible link between past and present (Eckardt and Williams 2003: 144). A similar distinction between fleshed and skeletonised remains can be proposed amongst the communities who utilised the cemeteries that comprise the case-studies presented in this thesis. It is notable that the only example of redeposited charnel in a state of apparent articulation is afforded a very different treatment than the majority of redeposited bones, suggesting that its fleshed appearance stimulated a different reaction from those encountering it. A group of lower limb bones at Pontefract were recovered in a still-articulated position, indicating their articulation at the time of reinterment. These bones were recovered from a chest (Wilmott in prep.: 9), buried more like a fleshed body than charnel, which at this site is normally placed along the edges of a later grave cut.

There are elements of the treatment of charnel that serve to emphasise further the possible dual meaning of bones as both person and thing. Certain skeletal elements, most frequently the long bones and skulls, appear to have been selected for redeposition, as additions to another burial. Perhaps their size made them more difficult to ignore, but it is also possible that the skull and long bones were the most readily identified as parts of people. We cannot be sure how much those involved in grave digging were familiar with the human skeleton, although we can assume that they encountered charnel on a regular basis, and support this assumption with documents such as the anonymous late-10<sup>th</sup>-11<sup>th</sup> century Old English homily Assmann XIV, which reads “we can see, when a grave is dug in a Minster and bones turn up, what sort of thing we are going to be” (Assman XIV quoted in Thompson 2004: 102). It may have been the larger bones, most notably the skull, that stood out as being identifiably human.

The archaeologically visible reactions of grave diggers to encounters with human remains provide an insight into the changing attitudes of society to death, decay and the afterlife during the 7<sup>th</sup> to 9<sup>th</sup> centuries in northern England. Rather than indicating a loose spatial hierarchy within the cemetery or a lack of concern for the dead, the reburial of disturbed charnel along the edges of the graves that unearthed it appears more strongly to indicate a desire for the bones of the dead to remain buried and to be treated with some respect. It is suggested here that the desire to bury certain individuals in what seem to have been higher-status areas of particular cemeteries in northern England overcame any distaste that may have previously prevented the disturbance of graves in early Anglo-Saxon cemeteries in the same region, but that this need not imply an apathy or disregard towards skeletal remains or that they were not conceptualised as the physical remains of people.

## 7.6 Summary

In this chapter, several aspects of funerary rites from cemeteries dating to c. A.D. 650-850 in northern England have been considered in their wider context. The role of identity has been considered to be instrumental in dictating the burial practices afforded to certain individuals and groups, and it has been argued that the kinds of identities emphasised in funerary rites change dramatically throughout the Anglo-Saxon period. The chest burial rite has been highlighted as characteristic of middle Anglo-Saxon cemeteries in northern England and its relationship to high-status individuals demonstrated utilising a variety of evidence. The role of small buildings in cemeteries of this period has also been discussed. Although no firm conclusions have been offered for their function, parallels between the examples from the region

of this study and a variety of buildings and structures encountered in cemeteries across Britain and Ireland, in combination with their significance as spatial foci, has demonstrated their importance as an above-ground feature of cemeteries from the 7<sup>th</sup> century in northern England and elsewhere. Finally, the consideration of grave construction and its administration has been demonstrated to be approachable from an archaeological perspective, revealing a complex variety of both local and national influences upon the development of burial rites in northern England.

## CONCLUSIONS

In this final chapter, some ideas for further work that would complement and extend the present study are presented. This is followed by a summary of this thesis, that draws together the key themes and results.

### 8.1 Further work

The geographical scope of this study was limited to northern England as a result of time pressures, however there remains great potential to extend similar bio-cultural research into other areas of Britain. In particular, a more detailed consideration of south-eastern Scotland which did, for a time, hold political allegiance to Northumbria, would greatly compliment the present study. Despite the large amount of research that has been undertaken into the middle Anglo-Saxon cemeteries of south-eastern England, they have yet to be interrogated at the level of detail of this study, and therefore would also repay further analysis. A bio-cultural analysis of funerary practices across early medieval Britain would permit the study of regional differences in the provision of funerary rites that would shed light on the expression of regional identities. On a smaller scale, the value of investigation of successive cemeteries that belonged to the same community is another means by which the changing expression of identity in funerary practices throughout the Anglo-Saxon period might be approached.

There are further strands of evidence that provide a valuable addition to a bio-cultural analysis but have not been considered in the present thesis. The greatest potential is perhaps shown by stable isotopic analysis. Isotope analysis of human bone and teeth provides evidence of residence (both childhood and adult) and diet, both of which have the potential to relate to aspects of both individual and group identity (e.g. for a similar use of isotopic analysis at early Anglo-Saxon Berinsfield see Privat *et al.* 2002). At present, isotopic analysis has not been undertaken on any of the six cemeteries considered in detail in this thesis, however dietary isotope analysis has been undertaken on material from the late 7<sup>th</sup>- to early 8<sup>th</sup>-century cemetery at Lamel Hill, York (Müldner 2005) which contributed to a diachronic study of diet in York.

Having highlighted areas for which further work could be undertaken, it is pertinent to consider additional directions in which this research could be taken in the future. There are several questions highlighted in this research for which supporting evidence was found to be insufficient to draw valid conclusions. The relationship between cemeteries and settlements has received much attention as part of the “final phase” model, however it was judged that settlement evidence from the region of this study was not plentiful enough to provide a valuable contribution to this discussion. It is hoped that the development of a more detailed understanding of the middle Anglo-Saxon northern settlement landscape in the future will permit questions regarding the proximity of settlement and burial foci in northern England to be answered. The development of a detailed understanding of the topography of cemeteries was hindered by the prevalence of incomplete cemetery excavations amongst the dataset. The present study has indicated that space within the cemetery held important meanings that directly influenced the location of the graves of

individuals with certain identities. Boundaries, standing structures and certain graves could all act as focal points for burials, dictating clustering of interments that shared a common focus and, often, individuals who shared a common identity. It must be emphasised that the incomplete excavation of cemeteries has a huge impact on the degree to which the use of space in a cemetery can be reconstructed and, therefore, if studies such as this are to be successful, must be avoided.

## 8.2 Summary

The present research has investigated middle Anglo-Saxon burial rites in northern England. The site survey in chapter 1 demonstrated that there is now a large corpus of cemeteries from across the former kingdom of Northumbria that can be confidently dated to the period A.D. 650-850. The discovery of several significant sites in the last ten years as a result of commercial archaeology, suggests that the corpus is likely to continue to grow, providing researchers with increasingly plentiful material with which to further our understanding of 7<sup>th</sup>- to 9<sup>th</sup>-century funerary rites. The survey of burial practices across the region presented in chapter 3 has revealed an exceptional degree of variability on all levels, from the relationship between cemeteries and churches and ancient monuments to variations in the forms of grave goods placed with the dead in the grave. Despite the variability, several key trends could be identified in the development of funerary rites from A. D. 650-850: an increase in the numbers of cemeteries associated with churches at Minster sites, and later at sites with no monastic links; increasing segregation of certain burials from the normal community burial focus, either by placement beyond boundaries or burial in separate cemeteries; the development of an emphasis upon the location of the



grave within the cemetery in relation to standing monuments or buildings; a greater frequency of intercutting between burials; and a tendency for cemeteries associated with Minster sites to be longer-lived and larger than those not associated with religious houses. Other characteristics of middle Anglo-Saxon rites include a small number of graves orientated on non-normative alignments; the predominance of right-sided burials over left-sided; burial in a wooden chest, which was found at many middle Anglo-Saxon northern cemeteries, but was apparently only characteristic of a short period from the 8<sup>th</sup>-9<sup>th</sup> centuries; the infrequent use of stone to mark the grave plot or elaborate the grave cut (including cist burials); and the occasional provision of a limited range of grave goods, mainly dress items such as knives and buckles or amuletic items such as fossils, Roman coins or coloured stones.

In chapter 4, it was emphasised that neither the “final phase” model, nor any of the other, more recent, attempts to define middle Anglo-Saxon funerary practices, best represent the true variation identified in funerary practices from c. A.D. 650-850 cemeteries in northern England. In particular, the “final phase” model has neglected the many Minster associated cemeteries that result from the vibrant monastic culture established in northern England during the 7<sup>th</sup> century. The assumption that the changes in burial that characterised the 7<sup>th</sup> century at a series of cemeteries in southern England affected the entire country in the same way and to the same extent was found to be false, and as such the basis upon which the “final phase” model was considered a valid proxy for northern funerary rites was fundamentally undermined.

In chapters 5 and 6 a detailed investigation of the provision of funerary practices at six sites was presented. This case-study utilised a bio-cultural method by

which aspects of identity, drawn from osteological and palaeopathological analysis of skeletal remains from the six sites, were statistically correlated with evidence for funerary provision in order to investigate who received which forms of burial. The spatial location of both individuals of different identities and different forms of grave was also investigated. The present study has demonstrated the value of such an approach. In inter-correlating three different strands of funerary data – skeletal remains, funerary rites and grave locations – it was possible to consider provision of burial in great depth, revealing patterns that would not have otherwise been identified in more restricted correlations. For example, had the spatial location of graves not been considered, there would have been no evidence for the differential treatment of infants, who were not afforded significantly different forms of burial form or elaboration, but were often interred in proximity to standing structures.

The analysis undertaken in chapter 5 identified that the majority of burials at all six case-study sites were earth cut features, aligned on a normative orientation roughly west to east. Interments were largely extended and supine with the arms lain along the sides or on the lower torso and contained no evidence of elaborations of grave goods. In contrast, some interments were distinguished from the majority by the provision a wide range of funerary rites, which included alternative grave forms, bodily positions, multiple burial, grave elaborations and grave goods. Often, those individuals who were provided with one non-normative burial practice were also afforded other more unusual forms of burial.

The bio-cultural analysis presented in chapter six investigated the identities of individuals afforded different funerary rites, and highlighted several key patterns that were further contextualised in chapter 7. The detailed discussion of the aspects of identity that were expressed in burial, the meaning and provision of the chest burial

rite, the role of standing buildings in cemetery topography and the process and control of burial emphasised that the expression of identity in funerary rites had undergone significant change from the early Anglo-Saxon period. Gender and age identity continued to be expressed only amongst restricted groups: male and female ecclesiastics could be segregated in burial whereas the lay community were not; “deviant” burial was more common amongst males; and a small number of females were occasionally buried amongst clusters of infants. Infant burial clusters were the only significant way in which age identity was expressed in funerary rites amongst the case-study cemeteries, and it was found that the spatial relationship between the infant clusters and a standing monument, whether a building or free-standing post, was instrumental to this practice. Gender and age were much less clearly expressed than in the early Anglo-Saxon period, and where they were, it was by the location of the burial rather than grave form or inclusions. The importance of cemetery space in the expression of the identity of the deceased was further emphasised in discussion of buildings within middle Anglo-Saxon cemeteries, where it was hypothesised that the housing of holy objects in small buildings, conventionally termed “mortuary chapels”, may have dictated their importance as focal points in cemeteries.

The complexity of the expression of identity in funerary rites was emphasised in discussion of the “deviant” burial rite. This appears to have held multiple meanings as a marker of criminal behaviour and judicial punishment but also, perhaps, as a statement of humility. The high level of variability in middle Anglo-Saxon burial rites, in combination with this complexity in the ways in which it was provided to individuals of different identities, permitted some tentative conclusions to be drawn about the control of burial practices. Funerary practices that are occur for the first time in the middle Anglo-Saxon period in northern England were commonly

found first in Minster cemeteries or potentially high status sites, but also appear later in other cemeteries without such connections. It was suggested that this pattern reflected a national influence upon funerary rites that stemmed from Church communities (although not necessarily directly from any specific Christian doctrine), but that the adoption and provision of these rites was also dictated on a local level in a manner that resulted in the variability seen in the middle Anglo-Saxon funerary rite in northern England.

Overall the present study has shown that many aspects of the deceased's identity were considered when choosing funerary practices. The location of the grave was as important in this decision as the provision of grave forms, bodily positions, elaborations or grave goods. A transition can be identified between the provision of burial practices characteristic of earlier and later Anglo-Saxon rite, however change appears to have been neither uniform nor unidirectional and dictated at a local as well as national level.

## REFERENCES

### Primary Sources

- Attenborough FL. 1922. *The laws of the earliest English kings*. Cambridge: Cambridge University Press.
- Assmann B. 1889. *Angelsächsische Homilien und Heiligenleben, Bibliothek der Angelsächsischen Prosa*. Kassel: Wigand.
- Colgrave B. 1940. *Two lives of Saint Cuthbert: a life by an anonymous monk of Lindisfarne and Bede's prose life*. Cambridge: Cambridge University Press.
- Colgrave B. 1927. *The life of Bishop Wilfred by Eddius Stephanus*. Cambridge: Cambridge University Press.
- Colgrave B, and Mynors RAB. 1969. *Bede's Ecclesiastical history of the English people*. Oxford: Oxford University Press.
- Dyson RW. 1998. *Augustine's De civitate Dei*. Cambridge: Cambridge University Press.
- Fowler R. 1972. *Wulfstan's Canons of Edgar*. Oxford: Oxford University Press.
- Hood ABE. 1978. *St Patrick: his writings and Muirchu's Life*. London: Phillimore.
- Johnson South T. 2002. *Historia de Sancto Cuthberto: A history of Saint Cuthbert and a record of his patrimony*. Cambridge: D.S. Brewer.
- MacNeill T, and Gamer HM. 1938. *Medieval handbooks of penance*. New York: Columbia University Press.
- Moffatt D. Editor. *The Soul's address to the body: the Worcester fragments*. East Lansing, MI: Colleagues Press.
- Noble TFX, and Head T. 1995. *The hodoeporicon of Saint Wilibald by Hunberc of Heidenheim*, trans C. H. Talbot. *Soldiers of Christ: Saints and saints' lives from late antiquity and the early Middle Ages*. London: Sheed and Ward.
- Plummer C. 1896. *Venerabilis Bedae, opera historica* 2 vols. Oxford: Clarendon Press. p. 364-87.
- Skeat W. 1881. *Ælfric's lives of saints*, Vol I. London: Trübner and Co.
- Whitelock D. 1930. *Anglo-Saxon wills*. Cambridge: Cambridge University Press.
- Whitelock D. 1955. *English Historical Documents c. 500-1042*. Cambridge.

## Secondary sources

- Åberg N. 1926. *The Anglo-Saxons in England during the early centuries after the invasions*. Cambridge: W Heffer.
- Adams K. 1990. Monastery and village at Crayke, North Yorkshire. *Yorkshire Archaeological Journal* 62:29-50.
- Adams M. 1996. Excavations of a pre-conquest cemetery at Addingham, West Yorkshire. *Medieval Archaeology* 40:151-191.
- Adamson C, and Abramson P. 1997. *Thornton Steward to Sowden Beck water pipeline archaeological excavation and watching brief*. Unpublished report for Northern Archaeological Associates.
- Adamson C, and Abramson P. 1998. *Excavations of a cemetery at Seaham Hall Lodge*, County Durham. Unpublished report for Durham County Council by Northern Archaeological Associates.
- Addyman PVA, and Leigh D. 1973. The Anglo-Saxon village at Chalton, Hants. *Medieval Archaeology* 17:1-25.
- Alcock L. 1981. Quantity or quality: the Anglian graves of Bernicia. In: Evison V, editor. *Angles, Saxons and Jutes: Essays presented to J N L Myres*. Oxford: Oxford University Press. p 168-186.
- Alcock E. 1992. Burials and cemeteries in Scotland. In: Edwards N, and Lane A, editors. *The Church in Wales and the West*. Oxbow Monograph 16. Oxford: Oxbow Books. p 125-129.
- Anderson S. 1993. The Human remains from Caister-on-Sea. In: Darling M, and Gurney D, editors. *Caister-on-Sea excavations by Charles Green 1951-1955*. Unpublished East Anglian Archaeology Report 99/90.
- Anderson S. 2007. The human population. In: Daniels R, and Loveluck C, editors. *Anglo-Saxon Hartlepool and the foundations of English Christianity*. Hartlepool: Tees Archaeology/ English Heritage. p 97-107.
- Ariès P. 1981. *The hour of our death*. New York: Oxford University Press. Trans, H Weaver.
- Arnold CJ. 1980. Wealth and social structure: A matter of life and death. In: Rahtz P, Dickinson B, and Watts L, editors. *Anglo-Saxon Cemeteries 1979* The 4th Anglo-Saxon Symposium at Oxford BAR British Series Oxford: British Archaeological Reports. p 81-142.

- Arnold CJ. 1988. *An archaeology of the early Anglo-Saxon kingdoms*. London: Routledge.
- Arnold CJ, and Wardle P. 1981. Early medieval settlement patterns in England. *Medieval Archaeology* 25:145-149.
- Arnold JR, and Libby WF. 1949. Age determinations by radiocarbon content: checks with samples of known age. *Science* 110 (2869): 678–680.
- Aspöck E. 2008. What actually is a 'deviant burial'? comparing German-language and Anglophone research on 'deviant burials'. In: Murphy E, editor. *Deviant burial in the archaeological record*. Oxford: Oxbow. p 17-34.
- Aufderheide AF, and Rodriguez Martin C. 1998. *The Cambridge encyclopedia of human palaeopathology*. Cambridge: Cambridge University Press.
- Bailey RN. In press. Metalwork. In: Nolan J and Harbottle B, editor. The cemetery at the Castle, Newcastle-upon-Tyne. *Archaeologia Aeliana*.
- Baldwin Brown G. 1903-15. *The arts in early England - Saxon art and industry in the pagan period*. Vols I-V. London: John Murray.
- Barber P. 1988. *Vampires, burial and death. Folklore and reality*. New haven: Yale University Press.
- Barrett J. 1987. Contextual archaeology. *Antiquity* 61:468-473.
- Barrett J. 1991 Towards an archaeology of ritual. In: Garwood P, Jennings D, Skeates R, and Toms J, editors. *Sacred and profane: proceedings of a conference on archaeology, ritual and religion*. Oxford: OUCA.
- Bass WM. 1995. *Human osteology: a laboratory and field manual*, 3<sup>rd</sup> edition. Columbia, Missouri: Missouri Archaeological Society Inc.
- Bassett S. 1985. A probably Merican royal mausoleum at Winchcombe, Gloucestershire. *Antiquaries Journal* 69: 82-100.
- Bassett S. 1989. *In search of the origins of Anglo-Saxon kingdoms*. In: Bassett S, editor. *The origins of Anglo-Saxon kingdoms*. Leicester: Leicester University Press. p 3-27.
- Bateman T. 1861. *Benty Grange near Monyash*. In: Bateman T, editor. *Ten years' diggings in Celtic and Saxon grave hills in the counties of Derby, Stafford and York*. Buxton, Moorland Publishing. p. 28–33.
- Bell J. 1844. Sepulchral stones found at Hartlepool. *Gentleman's Magazine New Series* 21: 187-8.



- Bell T. 1998. Churches on Roman buildings: Christian associations and Roman masonry in Anglo-Saxon England. *Medieval Archaeology* 43:1-18.
- Biddle M. 1986. Archaeology, architecture, and the cult of saints in Anglo-Saxon England. In: Butler LAS, and Morris RK, *The Anglo-Saxon church*. CBA Research Report 60. p. 1-31.
- Binford L, 1972. *An archaeological perspective*. New York: Seminar Press.
- Binski P. 1996. *Medieval death*. New York: Cornell University Press.
- Blair J. 1984. The Anglo-Saxon period c.440-1066. In: Morgan KO, editor. *The Oxford illustrated history of Britain*. Oxford University Press. Oxford: Oxford University Press.
- Blair J. 1988a. Minster Churches in the landscape. In: Hooke D, editor. *Anglo-Saxon settlements*. Oxford: Basil Blackwell. p 35-58.
- Blair J. 1988b. Introduction: from Minster to parish church. In: Blair J, editor. *Minsters and parish churches: the local church in transition 950-1200*. Oxford University committee for archaeology monograph no 17. Oxford: Oxford University Committee for Archaeology. p 1-20.
- Blair J. 1992. Anglo-Saxon Minsters: a topographical review. In: Blair J, and Sharpe R, editors. *Pastoral care before the parish*. Leicester: Leicester University Press. p. 226-266.
- Blair J. 1994. *Anglo-Saxon Oxfordshire*. Stroud: Sutton.
- Blair J. 1995. Pagan shrines and their prototypes. In: Griffiths D. editor. *Anglo-Saxon studies in archaeology and history* 8. Oxford: Oxbow. p 1-28.
- Blair J. 1996. Palaces or Minsters? Northampton and Cheddar reconsidered. *Anglo-Saxon England* 25: 97-121.
- Blair J. 2005. *The Church in Anglo-Saxon society*. Cambridge: Cambridge University Press.
- Blair J, and McKay B. 1985. Investigations at Tackley church, Oxfordshire 1981-4: the Anglo-Saxon and romanesque phases. *Oxoniensis* 50:25-45.
- Boddington A. 1987. Chaos, disturbance and decay in an Anglo-Saxon cemetery. In: Boddington A, Garland AN, and Janaway RC, editors. *Death, decay and reconstruction: approaches to archaeology and forensic science*. Manchester: Manchester University Press. p 27-42.

- Boddington A. 1990. Models of burial, settlement and worship: the final phase reviewed. In: Southworth E, editor. *Anglo-Saxon cemeteries: a reappraisal*. Gloucester: Sutton. p 177-200.
- Boddington A. 1996. *Raunds Furnells: The Anglo-Saxon church and churchyard*. London: English Heritage.
- Bourdieu P. 1986. The forms of capital. In: Richardson J, editor. *Handbook of theory and research for the sociology of education*. New York: Greenwood. p 241-258.
- Boyle A, and Dodd A. 1995. Discussion. In: Boyle A, Dodd A, Miles D, and Mudd A, editors. *Two Oxfordshire Anglo-Saxon cemeteries: Berinsfield and Didcott*. Oxford: Oxford University Committee for Archaeology. p 133-7.
- Bradley R. 1987. Time regained: the creation of continuity. *Journal of the British Archaeological Association* 140:1-17.
- Bradley R. 1993. *Altering the earth: the origins of monuments in Britain and continental Europe*. Edinburgh: Society of Antiquaries of Scotland.
- Brickley M, and McKinley J. 2004. *Guidelines to the standards for recording human remains*. IFA paper no. 7. Southampton and Reading: BABA0 and the IFA.
- Briden C. 1983. Belle Vue House. *York Archaeological Trust Interim* 9(3):11-13.
- Briden C. 1984. Belle Vue House. *York Archaeological Trust Interim* 9(4):5-8.
- Britnell WJ. 1990. Capel Maelog, Llandrindod Wells, Powys: excavations 1984-87. *Medieval Archaeology* 34: 27-97.
- Bronk Ramsay C. 2009. Bayesian analysis of radiocarbon dates. *Radiocarbon* 51(1): 337-60.
- Brookes S. 2007. Walking with Anglo-Saxons: landscapes of the dead in early Anglo-Saxon Kent. In: Semple S, and Williams H, editors. *Anglo-Saxon studies in archaeology and history* 14. Oxford: Oxbow. p 143-153.
- Brooks N. 2000. *Anglo-Saxon myths: state and church 400-1066*. London: The Hambledon Press.
- Brown MA. 1983. Orientation, a further view. *Archaeological Journal* 140:322-328.
- Brush K. 1993. *Adorning the dead: the social significance of early Anglo-Saxon funerary dress in England (5<sup>th</sup>-7<sup>th</sup> centuries A.D.)*. University of Cambridge, PhD thesis.
- Buckberry JL. 2000. Missing, presumed buried? Bone diagenesis and the under-representation of Anglo-Saxon children. *Assemblage* 5. Available at <http://www.assemblage.group.shef.ac.uk/5/tableofc.html>.

- Buckberry JL. 2004. *A social and anthropological analysis of conversion period and later Anglo-Saxon cemeteries in Lincolnshire and Yorkshire*. University of Sheffield, PhD thesis.
- Buckberry JL. 2007. On sacred ground: social identity and churchyard burial in Lincolnshire and Yorkshire. C. 700-1100 A.D. In: Williams H, and Semple S, editors. *Anglo-Saxon studies in archaeology and history 14*. p 119-129.
- Buckberry JL. 2008. Off with their heads: the Anglo-Saxon execution cemetery at Walkington Wold, East Yorkshire. In: Murphy E, editor. *Deviant burial in the archaeological record*. Oxford: Oxbow. p 148-68.
- Buckberry JL, and Hadley DM. 2007. An Anglo-Saxon execution cemetery at Walkington Wold, Yorkshire. *Oxford Journal of Archaeology* 26(3):303-329.
- Budd P. 2004. Combined O- and SR-isotope analysis of dental tissues. In: Speed G, and Walton Rogers P, editors. A burial of a Viking woman at Adwick-le-Street, South Yorkshire. *Medieval Archaeology* 48: 61-3.
- Buikstra JE, and Ubelaker DH. 1994. *Standards for data collection from human skeletal remains*. Fayetteville, Arkansas: Archaeological Survey Research Series No. 44.
- Bullough D. 1983. Burial, community and belief in the early medieval West. In: Wormald P, Bullough D, and Collins R, editors. *Ideal and reality in Frankish and Anglo-Saxon society*. Oxford: Oxford University Press. p 177-201.
- Bush H, and Zvelebil M. 1991. *Health in past societies: biocultural interpretations of human skeletal remains in archaeological contexts*. BAR International Series 567. Oxford: Tempus Reparatum.
- Butler LAS, Rahtz PA, and Taylor HM. 1975. Deerhurst 1971-74: the society's research project on the archaeology of the English Church. *Antiquaries Journal* 55:346-365.
- Bynum CW. 1995. *The resurrection of the body in western Christianity 200-1336*. New York: Columbia Press.
- Cambridge E, and Rollason D. 1995. The pastoral organisation of the Anglo-Saxon Church: a review of the 'Minster Hypothesis'. *Early Medieval Europe* 4(1):87-104.
- Campbell J. 1992. *The Anglo-Saxons*. London: Penguin Books.
- Cardy A. 1997. The human bones. In: Hill P, editor. *Whithorn and St Ninian: the excavation of a monastic town 1984-91*. Gloucestershire: Sutton. p 519-592.

- Carver MOH. 1989. Kingship and material culture in early Anglo-Saxon East Anglia. In: Bassett S, editor. *The origins of Anglo-Saxon kingdoms*. Leicester: Leicester University Press. p 141-58.
- Carver MOH. 1992. The Anglo Saxon cemetery at Sutton Hoo. In: Carver MOH, editor. *The age of Sutton Hoo: the 7<sup>th</sup> century in Western Europe*. Woodbridge: Boydell. p 343-373.
- Carver MOH. 1993. *Arguments in stone: archaeological research and the European town in the first millennium AD*. Oxford: Oxbow.
- Carver MOH. 1995. Roman to Norman at York Minster. In: Phillips B, and Heywood B, editors. *Excavations at York Minster from Roman fortress to Norman cathedral*. London: HMSO. p 177-222.
- Carver MOH. 1998. *Sutton Hoo: burial ground of kings?* London: British Museum Press.
- Carver MOH. 1999. Cemetery and society at Sutton Hoo: five awkward questions and four contradictory answers. In: Karkov C, Wickham-Crowley K, and Young B, editors. *Spaces of the living and the dead: an archaeological dialogue*. Oxford: Oxbow Books. p 1-14.
- Carver MOH. 2001. Why that, why there, why then? The politics of early medieval monumentality. In: MacGregor A, and Hamerow H, editors. *Image and power in the archaeology of early medieval British archaeology. Essays in honour of Rosemary Cramp*. Oxford: Oxbow. p 1-22.
- Carver MOH. 2002. Reflections on the meanings of monumental barrows in Anglo-Saxon England. In: Lucy S, and Reynolds A, editors. *Burial in early medieval England and Wales*. London: Society for Medieval Archaeology. p 132-143.
- Carver MOH. 2005. Sutton Hoo. A seventh-century princely burial ground and its context. London: British Museum Press.
- Cessford C. 1999. Relations between the Britons of southern Scotland and Anglo-Saxon Northumbria. In: Hawkes J, and Mills S, editors. *Northumbria's Golden Age*. Stroud: Sutton Publishing. p. 150-60.
- Chadburn R, and Hill P. 1997. Exotic, imported and transformed stones. In Hill P, editor. *Whithorn and St Ninian: The excavation of a monastic town 1984-91*. Stroud: Sutton. p 468-74

- Chapman, A. 2000-1. Excavation of an Iron Age Settlement and a Middle Saxon Cemetery at Great Houghton, Northampton, 1996. *Northamptonshire Archaeology* 29: 1-41.
- Charles-Edwards TM. 2000. *Early Christian Ireland*. Cambridge: Cambridge University Press.
- Cherry B. 1976. Ecclesiastical architecture. In: Wilson DM, editor. *The archaeology of Anglo-Saxon England*. London: Methuen and Co. p 151-200.
- Cherryson AK. 2007. Disturbing the dead: urbanisation, the Church and the post-burial treatment of human remains in early medieval Wessex. In: Semple S, and Williams H, editors. *Anglo-Saxon studies in archaeological and history* 14. Oxford: Oxbow. p 130-142.
- Cherryson AK. 2008. Normal, deviant and atypical: burial in late Saxon Wessex c. A.D 700-1100. In: Murphy E, editor. *Deviant burial in the archaeological record*. Oxford: Oxbow. p 115-130.
- Clogg P. 2005. Iron coffin fittings from Wearmouth. In: Cramp R, editor. *Wearmouth and Jarrow monastic sites*. Volume 2. Swindon: English Heritage. p 291-303.
- Cockayne TO. 1961. *Lechdoms, wortcunning and starcraft of early England*. Revised ed. 3 vols. London: Holland.
- Coggins D. 2004. Simy Folds: twenty years on. In: Hines J, Lane A, and Redknap M, editors. *Land, sea and home*. Leeds: Maney. p 325-334.
- Coggins D, Fairless KJ, and Batey CE. 1983. Simy Folds: an early medieval settlement site in Upper Teesdale, County Durham. *Medieval Archaeology* 27:1-26.
- Collingwood WG. 1940. Anglian and Anglo-Danish sculpture in the West Riding. *Yorkshire Archaeological Journal* 23:240.
- Conkey MW, and Spector J. 1984. Archaeology and the study of gender. *Advances in Archaeological Method and Theory* 7:1-38.
- Cook A. 1978. Catalogue of the Anglo-Saxon material. In: Jackson, DA, and Ambrose T, editors. Excavations at Wakerley, Northamptonshire. *Brittania* 11:228-234.
- Cook A, and Dacre MW. 1985. *Excavations at Portway, Andover 1973-1975*. Oxford: Oxford University Committee for Archaeology Monograph 4.
- Cook DC. 1984. Subsistence and health in the Lower Illinois Valley: osteological evidence. In: Cohen MN, and Armelagos G, editors. *Palaeopathology at the origins of agriculture*. New York: Academic Press.

- Cowie TG 1977-8. Excavations at the Catstane, Midlothian 1977. *Proceedings of the Society for Antiquaries of Scotland* 109: 166-203.
- Cox M. 2000. Aging adults from the skeleton. In: Cox M, and Mays S, editors. *Human osteology in archaeology and forensic science*. Cambridge: Cambridge University Press. p 61-82.
- Cox M, and Scott A. 1992. Evaluation of the obstetric significance of some pelvis characters in an 18<sup>th</sup> century British sample of known parity status. *American Journal of Physical Anthropology* 89: 431-40.
- Craig D. 1997a. The sculptured stones. In: Hill P, editor. *Whithorn and St Ninian: The excavation of a monastic town 1984-91*. Stroud: Sutton. p 433-41.
- Craig D. 1997b. The provenance of the early Christian inscriptions of Galloway. In: Hill P, editor. *Whithorn and St Ninian: The excavation of a monastic town 1984-91*. Stroud: Sutton. p 614-20.
- Craig E. 2006. *An osteological and palaeopathological assessment of stress indicators and social status at Raunds Furnells, Northamptonshire*. Masters thesis, University of Bradford.
- Craig E. 2009. *Osteological report for Village Farm Spofforth*. Unpublished report for Northern Archaeological Associates.
- Craig E, and Buckberry J. In press. Investigating social status using evidence of biological status: a case study from Raunds Furnells. In: Buckberry J, and Cherryson A, editors. *Burial in later Anglo-Saxon England, c650 to 1100AD*. Oxford: Oxbow.
- Craig E, and Craig G. In Prep. *A case of monostotic fibrous dysplasia from an Anglo-Saxon cemetery in North Yorkshire*.
- Cramp R. 1983. Anglo-Saxon settlement. In: Chapman JC, and Mytum HC, editors. *Settlement in northern Britain 1000 BC- AD1000*. BAR British Series 118. London: British Archaeological Reports. p 263-297.
- Cramp R. 1984. *The British Academy corpus of Anglo-Saxon stone sculpture in England. County Durham and Northumberland*. Oxford: Oxford University Press.
- Cramp R. 1988. Northumbria: the archaeological evidence. In: Driscoll ST, and Niekke MR, editors. *Power and politics in early medieval Britain and Ireland*. Edinburgh: Edinburgh University Press. p 69-78.

- Cramp R. 1994. The sculpture. In: Potter TW, and Andrews RD, editors. *Excavation and survey at St Patrick's Chapel and St Peter's Church, Heysham, Lancashire, 1977-8. Antiquaries Journal* 74:106-111.
- Cramp R. 2005. *Wearmouth and Jarrow monastic sites*. Swindon: English Heritage.
- Cramp R, and Lowther P. 2005. The Wearmouth Anglo-Saxon cemetery. In: Cramp R, editor. *Wearmouth and Jarrow monastic sites*. Swindon: English Heritage. p 77-90.
- Crawford S. 1991. When do Anglo-Saxon children count? *Journal for Theoretical Archaeology* 2: 17-24.
- Crawford S. 1993. Children, death and the afterlife in Anglo-Saxon England. In Filmer-Sankey W, editor. *Anglo-Saxon studies in archaeology and history* 6:83-91.
- Crawford S. 1999. *Childhood in Anglo-Saxon England*. Stroud: Sutton.
- Crawford S. 2004. Votive deposition, religion and the Anglo-Saxon furnished burial rite. *World Archaeology* 36(1):87-102.
- Crawford S. 2007. Companions, co-incidences or chattels? Children and their role in early Anglo-Saxon multiple burials. In: Crawford S, and Shepherd G, editors. *Children, childhood and society*. BAR International Series 1696. Oxford: Archaeopress. p 83-92.
- Crawford S. In press a. Differentiation in the later Anglo-Saxon burial ritual on the basis of mental or physical impairment: a documentary perspective. In: Buckberry J, and Cherryson A, editors. *Death in later Anglo-Saxon England*. Oxford: Oxbow.
- Crawford S. In press b. Baptism and infant burial in Anglo-Saxon England. In: Cochelin I, and Smith K, editors. *Debating the medieval lifecycle*. Turnhout: Brepols.
- Crawford S, and Lewis C. 2008. Childhood studies and the society for the study of childhood in the past. *Childhood in the Past* 1: 5-16.
- Crockett A, and Roberts I. 1988. Tanner's Row Pontefract. In: Abramson P, editor. *CBA Forum, The annual newsletter of the CBA group* 4. p 24-5.
- Cross M. 2007. Accessing the inaccessible: disability and archaeology. In: Insoll T, editor. *The archaeology of identities: a reader*. Oxford: Routledge.
- Crowfoot E, and Hawkes SC. 1967. Early Anglo-Saxon gold braids. *Medieval Archaeology* 11:42-85.
- Daniell C. 1997. *Death and burial in medieval England 1066-1550*. London Routledge.

- Daniels CR. 1983. The medieval village of Norton. In: Section CCA, editor. *Recent excavations in Cleveland*. Middlesborough: Cleveland County Council. p 27-36.
- Daniels R. 1988. The Anglo-Saxon monastery at Church Close, Hartlepool, Cleveland. *Archaeological Journal* 145: 158-210.
- Daniels R. 1999. The Anglo-Saxon monastery at Hartlepool, England. In: Hawkes J, and Mills S, editors. *Northumbria's golden age*. Stroud: Alan Sutton. p105-112.
- Daniels R, and Loveluck C. 2007. *Anglo-Saxon Hartlepool and the foundations of English Christianity*. Hartlepool: Tees Archaeology/ English Heritage.
- Davies W. 1982. *Wales in the early Middle Ages*. Leicester: Leicester University Press.
- Dawes J. No date. Human bone: Anglo-Saxon cemetery. In: Manby T, editor. *Thwing: the cemetery*. Unpublished report from Thwing archive.
- Dawes JD. and Magilton JR. 1980. *The Cemetery of St Helen-on-the-Walls, Aldwark*. The Archaeology of York 12/1. York Archaeological Trust. York: CBA.
- Dettwyler KA. 1991. Can palaeopathology provide evidence for "compassion"? *American Journal of Physical Anthropology* 84: 375-384.
- Dickinson TM. 1990. Annular brooch. In: Wrathmell S, and Nicholson A. *Dalton Parlours: Iron Age settlement and Roman villa*. Leeds, West Yorkshire Archaeological Services. p 286-7.
- Dickinson TM. 1993. An Anglo-Saxon "cunning woman" from Bidford-on Avon. In: Carver MOH, editor. *In search of cult: archaeological investigations in honour of Philip Rahtz*. Woodbridge: Boydell. p 45-54.
- Douglas J. 1793. *Nenia Britannica, or a sepulchral history of Great Britain*. London.
- Down A, and Welch M. 1990. *Apple Down and the Mardens*. Chichester excavations 7. Chichester: Chichester District Council.
- Drinkall G, and Foreman M. 1998. *The Anglo-Saxon cemetery at Castledyke South, Barton-on Humber*. Sheffield: Sheffield Academic Press.
- Dugdale DS. 1998. *Manx church origins*. Felinfach: Llanerch Publishers.
- Dumville D. 1977. Sub-Roman Britain: history and legend. *History* 62:173-192.
- Dumville D. 1989. The origins of Northumbria: some aspects of the British background. In: Bassett S, editor. *The origins of Anglo-Saxon kingdoms*. Leicester: Leicester University Press. p 212-222.
- Eagles B. 1979. *The Anglo-Saxon settlement of Humberside, part 2*. BAR British series 68 (ii). Oxford: British Archaeological Reports.



- Eckardt H, and Williams H. 2003. Objects without a past? The use of Roman objects in early Anglo-Saxon graves. In Williams H, editor. *Archaeologies of remembrance. Death and memory in past societies*. New York: Plenum. p 141-70.
- Edwards B.J.N. 1973. A canoe burial near Lancaster. *Antiquity* 47:298-301.
- Edwards N. 2002. Celtic saints and early medieval archaeology. In: Thacker A, and Sharpe R, editors. *Local saints and local churches in the early medieval west*. Oxford: Oxford University Press. p 225-66.
- Effros B. 1996. Symbolic expressions of sanctity: Gertrude of Nivelles in the context of Merovingian mortuary custom. *Viator* 27: 1-10.
- Elgee F, and Elgee H.W. 1933. *The archaeology of Yorkshire*. London: Methuen.
- English Heritage. 1999. *Whitby Abbey headland project - southern Anglian enclosure*. Update 3: End of excavation (August 1999). Online report available at <http://www.eng-h.gov.uk/projects/whitby/wahpsae/update03/update03htm>. Last accessed 3/6/09.
- Evans A. 2005. Seventh-century assemblages. In: Carver M.O.H., editor. *Sutton Hoo. A seventh-century princely burial ground and its context*. London: British Museum Press. p 201-282/
- Everson P. 1993. Pre-Viking settlement in Lindsey. In: Vince A, editor. *Pre-Viking Lindsey*. Lincoln: City of Lincoln Archaeology Unit. p. 91-100.
- Evison V.I. 1956. An Anglo-Saxon cemetery at Holborough, Kent. *Archaeologia Cantiana* 70:84-141.
- Evison V.I. 1987. *Dover: the Buckland Anglo-Saxon cemetery*. Historic buildings and monuments commission for England, archaeological report 3. London: Historic Buildings and Monuments Commission for England.
- Faull M.L. 1976. The location and relationship of the Sancton Anglo-Saxon cemeteries. *Antiquaries Journal* 56: 227-233.
- Faull M.L. 1977. *British survival in Anglo Saxon Northumbria*. In: Laing, editor. *Studies in Celtic survival*. BAR British Series 37. Oxford: British Archaeological Reports. p 1-56.
- Faussett B, edited by Smith, C. R. 1859. *Inventorium sepulchrale: an account of some antiquities dug up at Gilton, Kingston, Sibertswold, Barfriston, Beakesbourne, Chartham and Crundale, in the county of Kent, from A. D. 1757 to A. D. 1773*. London: Printed for the subscribers.

- Ferguson C. In press. Re-evaluating early medieval Northumbrian contacts and the 'coastal highway'. In: Petts D, and Turner S, editors. *Early medieval Northumbria*. Turhnout: Brepols.
- Fern C. 2007. Early Anglo-Saxon horse burial of the fifth to seventh centuries AD. In: Semple S, and Williams H, editors. *Anglo-Saxon studies in archaeology and history 14*. Oxford: Oxbow. p 143-153.
- Fleming R. 2007. Acquiring, displaying, and destroying silk in late Anglo-Saxon England. *Early Medieval Europe* 15:127-158.
- Foot S. 1992. Anglo-Saxon minsters: a review of terminology. In: Blair J, and Sharpe R, editors. *Pastoral care before the parish*. Leicester: Leicester University Press. p 212-225.
- Foot S. 2006. *Monastic life in Anglo-Saxon England, c.600-900*. Cambridge: Cambridge University Press.
- Foreman M. In prep. *Excavations at St Chad's, Barrow-on-Humber, 1977-78*. Unpublished report.
- Fowler C. 2004. *The archaeology of personhood. An anthropological approach*. London: Routledge.
- Freke D. 1988. Peel Castle. *Current Archaeology* 110:92-97.
- Freke D, and Thacker A. 1990. The inhumation cemetery at Southworth Hall Farm, Winwick. *Journal of the Chester Archaeological Society* 70:31-38.
- Frend WHC. 1996. *The archaeology of early Christianity*. London: Geoffrey Chapman.
- Frend WHC. 2003. *The early Church. From the beginnings to 461*. London: SCM Press.
- Gage J. 1836. Sepulchral stones found in Hartlepool in 1833. *Archaeologia* 26: 476-82.
- Gaimster DRM, Margeson S, and Hurley M. 1990. Medieval Britain and Ireland in 1989. *Medieval Archaeology* 34:162-252.
- Garland AN. No date. Report on the pathological examination of human skeletons from Thwing. Unpublished report included in Thwing archive.
- Garn SM, Silverman FN, Hertzog KP, and Rohmann VM. 1968. Lines and bands of increased density: their implication to growth and development. *Medical Radiography and Photography* 44:58-89.
- Geake H. 1992. Burial practice in seventh and eighth century England. In: Carver MOH, editor. *The age of Sutton Hoo: the seventh century in north west Europe*. Woodbridge: Boydell. p 83-94.

- Geake H. 1997. *The use of grave-goods in conversion-period England c. 600-c. 850*. BAR British Series 261. Oxford: British Archaeological Reports.
- Geake H. 1999. Invisible kingdoms: The use of grave-goods in seventh-century England. In: Dickinson T, and Griffiths D, editors. *Anglo-Saxon studies in archaeology and history 10*. Oxford: Oxford University school of archaeology. p 203-215.
- Geake H. 2002. Persistent problems in the study of conversion period burials in England In: Lucy S, and Reynolds A, editors. *Burial in early medieval England and Wales*. London: The Society for Medieval Archaeology. p 144-156.
- Geake H. 2003. The control of burial in Middle Anglo-Saxon England. In: Carver MOH, editor. *The cross goes north*. Suffolk: The Boydell Press. p 259-270.
- Geake H, Mays S, and Ottaway P. 2007. The inhabitants. In: Loveluck C, and Atkinson D, editors. *The early medieval settlement remains from Flixborough, Lincolnshire*. Volume 1: the occupation sequence, c. A.D. 600-1000. p 113-124.
- Geary P. 1986. Sacred commodities: the circulation of medieval relics. In: Appadurai A, editor. *The social life of things: commodities in cultural perspective*. Cambridge: Cambridge University Press. p 169-191.
- Gelling M. 1984. *Place-names in the landscape: the geographical roots of England's place-names*. London: J. M. Dent.
- Giddens A. 1979. *Central problems in social theory*. California: University of California Press.
- Gilchrist R. 1994. *Gender and material culture: the archaeology of religious women*. London: Routledge.
- Gilchrist R. 2008. Magic for the dead? The archaeology of magic in later medieval burials. *Medieval Archaeology* 52:119-160.
- Gilchrist R, and Sloane B. 2005. *Requiem: the medieval monastic cemetery in Britain*. London: Museum of London Archaeological Services.
- Gilmour BJJ, and Stocker DA. 1986. *St Mark's Church and cemetery*. The archaeology of Lincoln xiii-i. London: Council for British Archaeology.
- Ginn J, and Arber S. 1995. "Only connect": gender relations and aging. In: Arber S, editor. *Connecting gender and aging: a sociological approach*. Buckingham: Open University Press. p 1-14.

- Gittos H. 2002. Creating the sacred: Anglo-Saxon rites for consecrating cemeteries. In: Lucy S, and Reynolds A, editors. *Burial in early medieval England and Wales*. London: The Society for Medieval Archaeology. p 195-208.
- Goodall IH. 1980. Objects of copper alloy. In: Wade-Martins P, editor. *Excavations in North Elmham Park 1967-1972*. East Anglian archaeology report no 9. Norfolk: Norfolk Archaeological Unit. p 499-505.
- Goodman AH, Lallo J, Armelagos GJ, and Rose JC. 1984. Health changes at Dickinson Mounds, Illinois (AD950-1300). In: Cohen MN, and Armelagos GJ, editors. *Palaeopathology at the origins of agriculture*. London: Academic Press. p 271-306.
- Goodman AH, and Rose JC. 1991. Dental enamel hypoplasias as indicators of nutritional status. In: Kelley MA, and Larsen CS, editors. *Advances in dental anthropology*. New York: Wiley-Liss. p 279-293.
- Gordon CG, and Buikstra JE. 1981. Soil pH, bone preservation, and sampling bias at mortuary sites. *American Antiquity* 46: 566-71.
- Gowland R. 2006. Ageing the past: examining age identity from funerary archaeology. In: Knüsel C, and Gowland R, editors. *Social archaeology of funerary remains*. Oxford: Oxbow. p 143-154.
- Gräslund AS. 1981. *Birka IV: The burial customs. A study of the graves on Björkö*. The Swedish council for research in the humanities and the social sciences. Stockholm: Almqvist and Wiksell International.
- Greenwell W and, Rollaston G. 1877. *British barrows*. Oxford: Clarendon Press.
- Groves S. 2003. Bodies in the Bowl Hole: an early medieval inhumation cemetery at Bamburgh, Northumberland. *The School of Historical Studies Postgraduate Forum E-Journal* 2. Available at [http://www.ncl.ac.uk/historical/postgrad\\_forum/ed\\_2.htm](http://www.ncl.ac.uk/historical/postgrad_forum/ed_2.htm). Last accessed 2/5/09.
- Groves S. 2006. *Spears or ploughshares: multiple indicators of activity related stress and social status in four early medieval populations from the north east of England*. University of Durham, PhD thesis.
- Groves S. In press a. The Bowl Hole burial ground: a late Anglian cemetery in Northumberland. In: Buckberry J, and Cherryson A, editors. *Later Anglo-Saxon burial, c 650 to 1100 AD*. Oxford: Oxbow.

- Groves S. In press b. Social and biological status in the Bowl Hole early medieval burial ground, Bamburgh, Northumberland. In: Petts D, and Turner S, editors. *Early medieval Northumbria*. Turhnout: Brepols.
- Hadley DM. 2000a. Equality, humility and non-materialism?: Christianity and Anglo-Saxon burial practices. *Archaeological Review from Cambridge* 17(2):149-178.
- Hadley DM. 2000b. Burial practices in the northern Danelaw: c.650-1100. *Northern History* 36:199-216.
- Hadley DM. 2002. Burial practices in northern England in the late Anglo-Saxon period. In: Lucy S, and Reynolds A, editors. *Burial in early medieval England and Wales*. London: The Society for Medieval Archaeology. p 209-228.
- Hadley DM. 2004a. Negotiating gender: family and status in Anglo-Saxon burial practices, C. 600-950. In: Brubaker L, and Smith JMH, editors. *Gender in the Early Medieval world east and west, 300-900*. Cambridge: Cambridge University Press. p 301-324.
- Hadley DM. 2004b. *Excavations at Whitton, Lincolnshire*. *Church Archaeology* 5-6:110-111.
- Hadley DM. 2005. *Analysis of skeletal remains excavated at the Island, Barrow-upon-Humber, Lincolnshire*. Unpublished report available at North Lincolnshire HER.
- Hadley DM. 2007. The Garden gives up its secrets: the developing relationship between rural settlements and cemeteries c. 800-1100. In: Semple S, editor. *Anglo-Saxon studies in archaeology and history* 14. Oxford: Oxbow. p 194-203.
- Hadley DM. 2009. Burial, belief and identity in later Anglo-Saxon England. In: Gilchrist R, and Reynolds A, editors. *Fifty years of medieval archaeology*. London: Society for Medieval Archaeology.
- Hadley DM. In press a. Burying the socially and physically distinctive in later Anglo-Saxon England. In: Buckberry J, and Cherryson A, editors. *Burial in later Anglo-Saxon England, c650 to 1100AD*. Oxford: Oxbow.
- Hadley DM. In prep. *Dying for the common good: the burials of infants and young children in the early parish churchyard*.
- Hadley DM, and Buckberry J. 2005. Caring for the dead in late Anglo-Saxon England. In: Tinti F, editor. *Pastoral care in late Anglo-Saxon England*. Woodbridge: Boydell. p 121-147.

- Halcrow SE, and Tayles N. 2008. The bioarchaeological investigation of childhood and social age: problems and prospects. *Journal of Archaeological Method and Theory* 15:190-215.
- Hallam E. and Hockey J. 2001. *Death, memory and material culture*. Oxford: Berg.
- Hall RA, Buckberry J, Storm R, Budd P, Hamilton WD, and McCormac G. 2008. The medieval cemetery at Riccall Landing: a reappraisal. *Yorkshire Archaeological Journal* 80: 55-92.
- Hall RA, and Whyman M. 1996. Settlement and monasticism at Ripon, North Yorkshire, from the 7<sup>th</sup> to 11<sup>th</sup> centuries AD. *Medieval Archaeology* 40:62-150.
- Halsall G. 1995a. *Settlement and social organisation: the Merovingian region of Metz*. Cambridge: Cambridge University Press.
- Halsall G. 1995b. *Early Medieval cemeteries: an introduction to burial archaeology of the Post Roman West*. Glasgow: Cruithne Press.
- Halsall G. 1998. Burial, ritual and Merovingian society. In: Hill J, and Swan M. *The community, the family and the saint: patterns of power in early medieval Europe*. Brepols: Belgium. p 325-338
- Hamerow H. 1991. Settlement mobility and the "middle Saxon shift": rural settlements and settlement patterns in Anglo-Saxon England. *Anglo-Saxon Archaeology* 20:1-18.
- Hamerow H. 1993. *Mucking: the Anglo-Saxon settlement*. English Heritage report 21. London: English Heritage
- Hamerow H. 2002. *Early medieval settlements: the archaeology of rural communities in north-west Europe 400-900*. Oxford: Oxford University Press.
- Hamerow H. 2006. Special deposits in Anglo-Saxon settlements. *Medieval Archaeology* 50: 1-30.
- Hamond FW. 1980. The interpretation of archaeological distribution maps: biases inherent in archaeological fieldwork. *Archaeo-physika* 7:193-216.
- Harding AF, and Lee GE. 1987. *Henge monuments and related sites of Great Britain*. BAR British Series 175. Oxford: BAR.
- Harding C, and Wrathmell S. 2007. Discussion. In: Mays S, Harding C, and Heighway C, editors. *Wharram, XI The churchyard*. York: English Heritage. p 327-336.
- Härke H. 1989. Early Saxon weapons burials: frequencies, distributions and weapons combinations. In: Hawkes SC, editor. *Weapons and warfare in Anglo-Saxon*

- England*. Oxford: Oxford University Committee for Archaeology Monograph 21. p 49-61.
- Härke H. 1990. Warrior graves? The background of the Anglo-Saxon burial rite. *Past and Present* 126:22-43.
- Härke H. 1992. Changing symbols in a changing society: the Anglo-Saxon weapon burial rite in the seventh century. In: Carver MOH, editor. *The age of Sutton Hoo*. Woodbridge: Boydell. p 149-165.
- Härke H. 1997a. Early Anglo-Saxon social structure. In: Hines J, editor. *The Anglo-Saxons from the migration period to the eighth century: an ethnographic perspective*. Woodbridge: Boydell. p 125-170.
- Härke H. 1997b. The nature of burial data. In: Jensen CK, and Nielsen KH, editors. *Burial and society: the chronological and social analysis of archaeological burial data*. Aarhus: Aarhus University Press. p 19-2.
- Härke H. 2002. Interdisciplinarity and the archaeological study of death. *Mortality* 7(3): 340-341.
- Harman M, Molleson TI, and Price JL. 1981. Burials, bodies and beheadings in Romano-British and Anglo-Saxon cemeteries. *Bulletin of the British Museum of Natural History (Geology section)* 35 (3): 145-188.
- Harris HA. 1926. The growth of long bones in children, with special reference to certain bony striations of the metaphysis and the role of the vitamins. *Archives of Internal Medicine* 38:785-806.
- Harris HA. 1931. Lines of arrested growth in the long bones in childhood: the correlation of histological and radiographic appearances in clinical and experimental conditions. *British Journal of Radiology* 4: 561-588.
- Harris HA. 1933. *Bone growth in health and disease: the biological principles underlying the clinical, histological and radiological diagnosis of perversions of growth and disease in the skeleton*. Oxford: Oxford University Press.
- Harvey L. 2008. *Assessment of the skeletal material from Adwick le Street, Doncaster*. Unpublished report for ARCUS, Sheffield.
- Haughton C, and Powlesland D. 1999. *West Heslerton Anglian cemetery*. Landscape research centre archaeology monograph series 1. Nottingham: Landscape research centre.
- Hawkes J, and Mills S, editors. *Northumbria's golden age*. Gloucestershire: Sutton.

- Hawkes SC. 1973. The dating and social significance of the burials in the Polhill cemetery. In: Philp B, editor. *Excavations in West Kent 1960-70*. Dover research reports in the Kent series 2. Kent: Kent Archaeological Rescue Unit. p 186-201.
- Hawkes SC. 1976. Orientation at Finglesham: Sunrise dating of death and burial in an Anglo-Saxon cemetery in East Kent. *Archaeologia Cantiana* 92: 33-51.
- Hawkes SC. 1979. Eastry in Anglo-Saxon Kent: its importance, and a newly found grave. In: Hawkes SC, Brown D, and Campbell G, editors. *Anglo-Saxon studies in archaeology and history 1*. Oxford: Oxford University Committee for Archaeology. p 48-49.
- Hawkes SC. 1990. Bryan Fausset and the Fausset collection: an assessment. In: Southworth E, editor. *Anglo-Saxon cemeteries: a re-appraisal*. Stroud: Alan Sutton. p 1-24.
- Hawkes SC, Hogarth AC, and Denston CB. 1974. The Anglo-Saxon cemetery at Monkton, Thanet. *Archaeologia Cantiana* 89:49-90.
- Hawkes SC, and Wells C. 1975. Crime and punishment in an Anglo-Saxon cemetery? *Antiquity* 49: 118-122.
- Hawkes SC, and Wells C. 1983. The inhumed skeletal material from an early Anglo-Saxon cemetery in Worthy Park, Kingsworthy, Hampshire, south England. *Paleobios* 1:3-36.
- Hayman G. 1992. Further excavations at the former Goblin Works, Ashted. *Surrey Archaeological Collections* 81: 1-18.
- Hayman G, and Reynolds A. 2005. A Saxon and Saxo-Norman execution cemetery at 42-54 London Road, Staines. *Archaeological Journal* 162:215-255.
- Heighway C. 2007. The attributes of burials. In: Mays S, Harding C, and Heighway C, editors. *Wharram, XI The churchyard*. York: English Heritage. p 216-242.
- Hemer K, and Craig E. In press. Beyond the osteological record: the need for a contextual approach in our understanding of disease and disability in early medieval Britain. *Journal of Early Medicine*.
- Hertz, R. 1960. *Death and the right hand*. London: Cohen and West. Trans. Needham R, and Needham C.
- Higham NJ. 1986. *The northern counties to A.D. 1000*. Harlow: Longman Group Limited.
- Higham NJ. 1992. *Rome, Britain and the Anglo-Saxons*. London: B. A. Seaby.



- Higham NJ. 1993. *The Kingdom of Northumbria AD 350-1100*. Stroud: Sutton.
- Hill D. 1981. *An atlas of Anglo-Saxon England*. Oxford: Blackwell.
- Hill P. 1997a. *Whithorn and St Ninian: The excavation of a monastic town 1984-91*. Stroud: Sutton.
- Hill P. 1997b. Whithorn transformed. In: Hill P, editor. *Whithorn and St Ninian: The excavation of a monastic town*. Stroud: Sutton. p 26-66.
- Hill P, Moran J, and Pollock D. 1997a. Period I: The early centuries c. 500-c. 730 AD. In: Hill P, editor. *Whithorn and St Ninian: The excavation of a monastic town*. Stroud: Sutton. p 67-133.
- Hill P, Moran J, Nicholson A, and Pollock D. 1997b. Period II: The Northumbrian Minster. In: Hill P, editor. *Whithorn and St Ninian: The excavation of a monastic town*. Stroud: Sutton. p134-182.
- Hines J. 2002. Lies, damned lies and the curriculum vitae: reflections on statistics and the populations of early Anglo-Saxon cemeteries. In: Lucy S, and Reynolds A, editors. *Burial in early medieval England and Wales*. London: The Society for Medieval Archaeology. p 88-102.
- Hinton D. 2000. *A smith in Lindsey: the Anglo-Saxon grave at Tattershall Thorpe*. Lincolnshire society for medieval archaeology monograph 16. Leeds: Maney.
- Hirst SM. 1985. *An Anglo-Saxon inhumation cemetery at Sewerby, East Yorkshire*. York: University of York.
- Hodder I. 1980. Social structure and cemeteries: a critical reappraisal. In: Rahtz P, Dickinson T, and Watts L, editors. *Anglo-Saxon cemeteries 1979*. BAR British Series 82. Oxford: British Archaeological Reports. p 161-169.
- Hodson FR. 1977. Quantifying Hallstatt: some initial results. *American Antiquity* 42(3):394-412.
- Hogarth AC. 1973. Structural features in Anglo-Saxon graves. *Archaeological Journal* 130:104-119.
- Hoggett R. 2007. Charting conversion: burial as a barometer of belief? In: Semple S, editor. *Anglo-Saxon studies in archaeology and history 14*. Oxford: Oxbow. p 28-37.
- Holbrook N, and Thomas A. 2005. An early-medieval monastic cemetery at Llandough, Glamorgan: excavations in 1994. *Medieval Archaeology* 49:1-92.
- Hooke D. 1985. *The Anglo-Saxon landscape: the kingdom of the Hwicce*. Manchester: Manchester University Press.

- Hooke D. 1998. *The landscape of Anglo-Saxon England*. London: Leicester University Press.
- Hooton EA. 1930. *Indians of Pecos Pueblo: a study of their skeletal remains*. New Haven: Yale University Press.
- Hope-Taylor B. 1950. Excavations on Farthing Down, Coulsdon, Surrey. *Archaeological News Letter* 2(10):170.
- Hope-Taylor B. 1977. *Yeavinger: An Anglo-British centre of early Northumbria*. Department of the environment archaeological reports 7. London: Her Majesty's Stationary Office.
- Horne E. 1933. Anglo-Saxon cemetery at Camerton, Somerset. Part II. *Somerset Archaeology and Natural History* 79:39-63.
- Houghton P. 1974. The relationship of the preauricular groove of the ilium to pregnancy. *American Journal of Physical Anthropology* 41: 381-90.
- Houghton P. 1975. The bony imprint of pregnancy. *Bulletin of the New York Academy of Medicine* 51: 655-61.
- Houlder CH. 1968. The henge monuments of Llandegai. *Antiquity* 42: 216-21.
- Howe N. 2008. *Writing the map of Anglo-Saxon England: essays in cultural geography*. New Haven and London: Yale University Press.
- Hull P, and Sharpe R. 1985. Peter of Cornwall and Launceston. *Cornish Studies* 13: 5-53.
- Hunter-Blair P. 1984. *Anglo-Saxon Northumbria*. London: Variorum Reprints.
- Hyslop M. 1963. Two Anglo-Saxon cemeteries at Chamberlains Barn, Leighton Buzzard, Bedfordshire. *Archaeological Journal* 139:101-123.
- Jackson DA. 1988. Copper alloy objects. In: Daniels R, editor. The Anglo-Saxon monastery at Cross Close, Hartlepool. *Cleveland Archaeological Journal* 146: 158-210.
- Jakob B. 1994. *Prevalence and patterns of disease in early medieval populations: A comparison of skeletal samples from fifth to eighth century AD Britain and southwestern Germany*. PhD thesis, University of Durham.
- James E. 1989. Burial and status in the early medieval west. *Transactions of the Royal Historical Society* 39: 23-40.
- Jenkins R. 1997. *Rethinking ethnicity: arguments and explorations*. London: Sage Publications.

- Johnson PG. 2005. *Cemetery excavations at Bishopsmill School, Norton: post-excavation assessment and analysis*. Unpublished report for Tees Archaeology.
- Johnson W. 1912. *Byways in British archaeology*. Cambridge: Cambridge University Press.
- Jones N. 1988. Capel Maelog. *Current Archaeology* 108:26-29.
- Judd M, and Roberts CA. 1999. Fracture trauma in a medieval British farming village. *American Journal of Physical Anthropology* 109:229-243.
- Julkunen H, Heinonen HP, and Pyorala K. 1971. Hyperostosis of the spine in an adult population. *Annals of the Rheumatic Diseases* 30: 605-12.
- Kamp KA. 2001. Where have all the children gone? The archaeology of childhood. *Journal of Archaeological Method and Theory* 8(1):1-34.
- Keeney GS. 1939. A pagan Anglian cemetery at Howick Heugh, Northumberland. *Archaeologia Aeliana* 16: 120-8.
- Kendrick TD. 1938. *Anglo-Saxon art to AD 900*. London: Methuen.
- Kjølbye-Biddle B. 1995. Iron-bound coffins and coffin-fittings from the pre-Norman cemetery. In: Phillips B, and Heywood B, editors. *Excavations at York Minster From Roman fortress to Norman cathedral*. London: HMSO. p 489-521.
- Knight J. 1992. The early Christian Latin inscriptions of Britain and Gaul: chronology and context. In: Edwards N, and Lane A, editors. *The Church in Wales and the West*. Oxbow Monograph 16. Oxford: Oxbow Books. p 45-50.
- Knüsel CJ, Janaway RC, and King SE. 1996. Death, decay and ritual reconstruction: archaeological evidence for cadaveric spasm. *Oxford Journal of Archaeology* 15(2):121-128.
- Knüsel CJ, Kemp RL, and Budd P. 1995. Evidence for remedial medical treatment of a severe knee injury from the Fishergate Gilbertine monastery in the City of York. *Journal of Archaeological Science* 22: 369-384.
- Laing L. 1977. *The archaeology of late Celtic Britain and Ireland*. London: Book Club Associates.
- Lang J. 1995. Pre-conquest sculpture. In: Phillips D, and Heywood B, editors. *Excavations at York Minster From Roman fortress to Norman cathedral*. London: HMSO. p 433-67.
- Langston, J. 1988. *Report on the skeletal material from Ailcy Hill Ripon*. Unpublished report held at York Archaeological Trust.

- Lane GN and Ausich WI. 2001. The legend of St Cuthbert's beads: a palaeontological and geological perspective. *Folklore* 112: 65-73.
- Lang JT. 1991. *Corpus of Anglo-Saxon stone sculpture III*. York and Eastern Yorkshire. Oxford: Oxford University Press.
- Larsen CS. 1997. *Bioarchaeology: interpreting behaviour from the human skeleton*. Cambridge: Cambridge University Press..
- Leahy K. 2007. '*Interrupting the pots*': the excavation of Cleatham Anglo-Saxon cemetery, North Lincolnshire. CBA Research Report 155. York: Council for British Archaeology.
- Leahy K, and Williams D. 2001. Sheffield's Hill: two Anglo-Saxon cemeteries. *Current Archaeology* 15:310-313.
- Lee C. 2006. Changing faces: leprosy in Anglo-Saxon England. In: Karkov C, and Howe N, editors. *Conversion and colonisation in Anglo-Saxon England*. Tempe: Arizona Centre for Medieval and Renaissance studies. p 83-103.
- Lee C. 2007. *Feasting the dead: Food and drink in Anglo-Saxon burial rituals*. Woodbridge: Boydell.
- Leeds ET. 1913. *The archaeology of the Anglo-Saxon settlers*. Oxford: Oxford University Press.
- Leeds ET. 1936. *Early Anglo-Saxon art and archaeology*. Oxford: Clarendon Press.
- Leigh Fry S. 1999. *Burial in medieval Ireland, 900-1500*. Dublin: Four Courts Press.
- Lethbridge TC. 1926. The Anglo-Saxon cemetery, Burwell, Cambs. *Proceedings of the Cambridge Antiquarian Society* 27:72-79.
- Lethbridge TC. 1927. The Anglo-Saxon cemetery, Burwell, Cambs. Part II. *Proceedings of the Cambridge Antiquarian Society* 28:116-123.
- Lethbridge TC. 1928. The Anglo-Saxon cemetery, Burwell, Cambs. Part III. *Proceedings of the Cambridge Antiquarian Society* 29:84-94.
- Lethbridge TC. 1929. The Anglo-Saxon cemetery, Burwell. Cambs. Part IV. *Proceedings of the Cambridge Antiquarian Society* 30:97-109.
- Lethbridge TC. 1931. *Recent excavations in Anglo-Saxon cemeteries in Cambridgeshire and Suffolk*. Cambridge: Cambridge Antiquarian Society Quarto Publications New Series 3.
- Lethbridge TC. 1936. *A cemetery at Shudy Camps, Cambridge*. Cambridge Antiquaries Society Quarterly Publications New Series V. Cambridge.

- Lewis C. Forthcoming. *Children in the medieval countryside*. Paper presented at New research on medieval childhood: an interdisciplinary workshop, University of Sheffield, 2009.
- Lewis G. 1980. *Day of shining red: an essay on understanding ritual*. Cambridge: Cambridge University Press.
- Lewis, ME. 2002a. Impact of industrialisation: comparative study of child health in four sites from medieval and post-medieval England (A.D. 850-1859). *American Journal of Physical Anthropology* 119: 211-223.
- Lewis ME. 2002b. *Urbanisation and child health in Medieval and Post-Medieval England. An assessment of the morbidity and mortality of non-adult skeletons from the cemeteries of two urban and two rural sites in England AD 850-1859*. BAR British Series 330. Oxford: Archaeopress.
- Lewis ME. 2007. *The bioarchaeology of children. The analysis of non-adult skeletal remains in biological and forensic anthropology*. Cambridge: Cambridge University Press.
- Lewis ME, Roberts CA, and Manchester K. 1995. Comparative study of the prevalence of maxillary sinusitis in later medieval urban and rural populations from northern England. *American Journal of Physical Anthropology* 98:497-506.
- Loe L. 2003. *Health and socio-economic status in early medieval Wales: an analysis of health indicators and their socio-economic implications in an early medieval skeletal population from the cemetery of Llandough, Glamorgan*. Unpublished PhD thesis, University of Bristol.
- Loscoe-Bradley S. 1974. *The Anglo-Saxon settlement of Catholme, Staffordshire*. Nottingham: University of Nottingham.
- Loscoe-Bradley S, and Kinsley G. 2002. *Catholme: an Anglo-Saxon settlement on the Trent gravels in Staffordshire*. Nottingham: University of Nottingham.
- Loveluck C. 2002. The Romano-British to Anglo-Saxon transition - social transformations from the late Roman to the early medieval period in northern England, A.D. 400-700. In: Brooks C, Daniels R, and Harding A, editors. *Past, present and future: the archaeology of northern England*. Architectural and archaeological society of Durham and Northumberland research report 5. Sussex: Roger Booth Associates. p 127-149.
- Loveluck C. 2007. Anglo-Saxon Hartlepool and the foundation of English Christian identity. In: Daniels R, and Loveluck C, editors. *Anglo-Saxon Hartlepool and*

- the foundations of English Christianity*. Hartlepool: Tees Archaeology/ English Heritage. p186-208.
- Loveluck C, and Atkinson D. 2007. Abstract. In: Loveluck C, and Atkinson D, editors. *The early medieval settlement remains from Flixborough, Lincolnshire. The occupation sequence, c A D 600-1000*. Oxford: Oxbow. p xiii- xv.
- Lowther P. 2005. The Jarrow pre-Norman burial ground. In: Cramp R, editor. *Wearmouth and Jarrow monastic sites* Volume 1. Swindon: English Heritage. p 173-186.
- Loyn, HR. 1974. Kinship in Anglo-Saxon England. *Anglo-Saxon England* 3: 197-209.
- Loyn HR. 1984. *The governance of Anglo-Saxon England 500-1087*. London: Edward Arnold.
- Lucy S. 1992. The significance of mortuary ritual in the political manipulation of the landscape. *Archaeological Review from Cambridge* 11(1):93-105.
- Lucy S. 1994. Children in early medieval cemeteries. *Archaeological Review from Cambridge* 13(2):21-34.
- Lucy S. 1997a. Housewives, warriors and slaves? Sex and gender in Anglo-Saxon burials. In: Moore J, and Scott E, editors. *Invisible people and processes. Writing gender and childhood into European archaeology*. Leicester: Leicester University Press. p 150-68.
- Lucy S. 1997b. Reinterpreting Anglo-Saxon cemeteries. In: DeBoe G, and Verhaege F, editors. *Death and burial in medieval Europe*. Papers of the "Medieval Europe Brugge 1997" conference. Zellick: I.A.P. Rapporten. p 27-32.
- Lucy S. 1998. *Early Anglo-Saxon cemeteries of East Yorkshire*. BAR British Series 272. Oxford: British Archaeological Reports.
- Lucy S. 1999. Changing burial rites in Northumbria A.D. 500-750. In: Hawkes J, and Meaney S, editors. *Northumbria's golden age*. Gloucestershire: Sutton. p 12-44.
- Lucy S. 2000. *The Anglo-Saxon way of death: burial rites in early England*. Gloucestershire: Sutton.
- Lucy S. 2005. Early medieval burial at Yeavinger: a retrospective. In: Frodsham P, and O'Brien C, editors. *Yeavinger: pPeople, power and place*. Gloucestershire: Tempus. p 127-144.
- Lucy S, and Reynolds A. 2002. Burial in early medieval England and Wales: past, present and future. In: Lucy S, and Reynolds A, editors. *Burial in early*

- medieval England and Wales*. London: The Society for Medieval Archaeology. p 1-14.
- MacPherson P, Chenery CA, and Chamberlain AT. 2007. Tracing change. Childhood diet at the Anglo-Saxon Blackgate Cemetery, Newcastle upon Tyne, England. In: Robson Brown KA, and Roberts AM, editors. *BABAO 2004. Proceedings of the 6<sup>th</sup> annual conference of the British Association for Biological Anthropology and Osteoarchaeology*. BAR International Series 1623. Oxford: Archaeopress.
- Maguire H. 1997. Magic and money in the early Middle Ages. *Speculum* 72: 1037-54.
- Malim T, and Hines J. 1998. *The Anglo-Saxon cemetery at Edix Hill (Barrington A), Cambridgeshire*. CBA Research Report 112. London: Council for British Archaeology.
- Manby T. 1980. Settlement in eastern Yorkshire. In: Barrett J, and Bradley R, editors. *The British later Iron Age Part 2*. BAR British Series 83 (ii). Oxford: British Archaeological Reports. p 307-370.
- Manby T. 1988. Excavation and field archaeology in eastern Yorkshire: the Thwing project 1973-1987. *CBA forum: the annual newsletter of CBA group 4*: 16-8.
- Manby T. In prep. *Thwing: The cemetery*. Unpublished report from Thwing archive.
- Manby TG. 1986. Thwing 1985. *Yorkshire archaeological society: prehistory research section bulletin* 23:3-7.
- Marlow M. 1992. The population. In: Sherlock S, and Welch M, editors. *The Anglo-Saxon cemetery at Norton, Cleveland*. CBA Research Reports vol 82. Oxford: CBA. p 107-17.
- Marshall P. 2007. Radiocarbon determinations from Church Walk cemetery. In: Daniels R, and Loveluck C, editors. *Anglo-Saxon Hartlepool and the foundations of English Christianity*. Hartlepool: Tees Archaeology/ English Heritage. p 213-6.
- Mårtenssen AW. 1963. Gravarna kring S:t Drotten. In: Blomqvist R, and Mårtenssen AW, editors. *Thulegrävningen 1961. En berättelse om vad grävningarna för Thulehuset i Lund avslöjade*. Lund. p 89-108.
- Matthews CL. 1962. The Anglo-Saxon cemetery at Marina Drive, Dunstable. *Bedfordshire Archaeological Journal* 1:25-47.
- Mays S. 1998. *The archaeology of human bones*. London: Routledge.
- Mays S. 2007. The human remains. In: Mays S, Harding C, and Heighway C, editors. *Wharram XI The churchyard*. York: English Heritage. p 77-192.

- Mays S, and Cox M. 2000. Sex determination from the skeleton. In: Cox M, and Mays S, editors. *Human osteology in archaeology and forensic science*. Cambridge: Cambridge University Press. p 117-130.
- Meaney AL. 1964. *A gazetteer of early Anglo-Saxon burial sites*. London: George Allen and Unwin.
- Meaney AL. 1981. *Anglo Saxon amulets and curing stones*. BAR British Series 96. Oxford: British Archaeological Reports.
- Meaney AL. 2003. Anglo-Saxon pagan and early Christian attitudes to the dead. In: Carver MOH, editor. *The cross goes north*. York: York Medieval Press. p 229-242.
- Meaney AL, and Hawkes SC. 1970. *Two Anglo-Saxon cemeteries at Winnall, Winchester, Hampshire*. Society for medieval archaeology monograph series no 4. London: The Society for Medieval Archaeology.
- Metcalf P, and Huntington R. 1991. *Celebrations of death, the anthropology of mortuary ritual*. Cambridge: Cambridge University Press.
- Metzler I. 2006. *Disability in medieval Europe: thinking about physical impairment during the high Middle Ages c. 1100-1400*. London: Routledge.
- Miket R. 1980. A restatement of evidence from Bernician Anglo-Saxon burials. In: Rahtz P, Dickinson B, and Watts L, editors. *Anglo-Saxon cemeteries 1979*. The 4th Anglo-Saxon Symposium at Oxford. BAR British Series 82. Oxford: British Archaeological Reports. p 289-305.
- Millett M. 1983. Excavations at Cowdery's Down, Basingstoke, Hants. 1978-1981. *Archaeological Journal* 140:151-178.
- Milne G, and Richards JD. 1992. Wharram. *A study of settlement on the Yorkshire wolds: two Anglo-Saxon buildings and associated finds*. York: York University Archaeological Publications.
- Molleson T, and Cox M. 1993. *The Spitalfields project*. Volume 2: the anthropology. The middling sort. CBA research report 86. York: Council for British Archaeology.
- Moreland J. 2000. Ethnicity, power and the English. In: Frazer B, and Tyrrell A, editors. *Social identity in early medieval Britain and Ireland*. Leicester: Leicester University Press. p 23-51.
- Morris R. 1983. *The Church in British archaeology*. CBA research report No 47. London: Council for British Archaeology.



- Morris R. 1989. *Churches in the landscape*. London: Dent and Sons.
- Morris R. 1991. Baptismal places: 600-800. In: Wood I, and Lund N, editors. *People and places in Northern Europe 500-1600: essays in honour of Peter Hayes Sawyer*. Woodbridge: Boydell. p 15-24.
- Mortimer JR. 1905. Forty years researches in British and Anglo-Saxon burial mounds of East Yorkshire. London: A. Brown and Sons.
- Morton AD. 1992. *Excavations at Hamwic*. Vol 1. CBA research report 84. London: Council for British Archaeology.
- Müldner G. 2005. *Eboracum - Jorvik - York : a diachronic study of human diet in York by stable isotope analysis*. University of Bradford, PhD thesis.
- Mytum HC. 1993. Kellington Church. *Current Archaeology* 133: 15-17.
- Newman RM. 1989. Dacre. *Current Archaeology* 114: 233-5.
- Newman RM. 2002. Anglo-Saxon Christianity. In: Brooks C, Daniels R, and Harding A, editors. *Past, present and future: The archaeology of northern England*. Sussex: Roger Booth Associates. p 149-154.
- Nicholson A. 1997. The iron. In: Hill P. (editor). *Whithorn and St Ninian: The excavation of a monastic town 1984-91*. Stroud: Sutton. p.404-32
- Nolan J, and Harbottle B. In press. The cemetery at the Castle, Newcastle-upon-Tyne. *Archaeologia Aeliana*.
- Norton S, and Boylston A. 1997. *Binchester Roman fort, County Durham: report on the human skeletal remains*. Unpublished report, Bradford University.
- Nordbladh J, and Yates T. 1990. This perfect body, this virgin text: between sex and gender in archaeology. In: Bapty I, and Yates T, editors. *Archaeology after structuralism: post-structuralism and the practice of archaeology*. London: Routledge. p 222-237.
- Northern Archaeological Associates. 2001. *Excavation of a cemetery site at Flower Field, Seaham, County Durham*. Unpublished report for Durham County Council and NAA.
- Northern Archaeological Associates. 2002. *Cemetery excavations at Village Farm, Spofforth, North Yorkshire*. Archaeological post-excavation assessment. NAA.
- Northern Archaeological Associates. 2005. *Ainderby Steeple to Bullamoor water pipeline, Viewly Bridge Anglo-Saxon cemetery. Post-excavation assessment report*. Unpublished report for Laing Utilities and NAA.

- O'Brien C. In press. Yeavinger: thirty years on. In: Petts D, and Turner S, editors. *Early medieval Northumbria*. Turnhout: Brepols
- O'Brien C, and Miket R. 1991. The early Medieval settlement of Thirlings, Northumberland. *Durham Archaeological Journal* 7:57-91.
- O'Brien E. 1999. *Late Roman Britain to Anglo-Saxon England: Burial practices reviewed*. BAR British Series 289. Oxford: British Archaeological Reports.
- O'Shea JM. 1981. Social configurations and the archaeological study of mortuary practices: a case study. In: Chapman JC, Kinnes I, and Randsborg K, editors. *The archaeology of death*. Cambridge: Cambridge University Press. p 39-52.
- Okasha E. 1999. The inscribed stones from Hartlepool. In: Hawkes J, and Mills S, editors. *Northumbria's golden age*. Stroud: Alan Sutton. p 113-125.
- Ottaway P. 1996. The ironwork. In: Hall RA, and Whyman M, editors. Settlement and monasticism at Ripon, North Yorkshire, from the 7<sup>th</sup> to 11<sup>th</sup> centuries AD. *Medieval Archaeology* 40: 99-113.
- Ottaway P. 2001. Metalwork. In: Northern Archaeological Associates, editors. *Excavation of a cemetery site at Flower Field, Seaham, County Durham*. Unpublished report for Durham County Council and NAA. p 14-16.
- Ottaway P. 2002. Iron objects. In: Northern Archaeological Associates, editors. *Cemetery excavations at Village Farm, Spofforth, North Yorkshire. Archaeological post-excavation assessment*. NAA. p 57-62.
- Ottaway P. 2007. The coffin fittings. In: Loveluck C, and Atkinson D, editors. *The early medieval settlement remains from Flixborough, Lincolnshire*. Volume 1. The occupation sequence, c. A.D. 600-1000. p 122-4.
- Ottaway P. In prep. The iron objects. In: Manby T, editor. *Thwing: The cemetery*. Unpublished report from the Thwing archive.
- Ottaway P, and Rogers N. 2002. *Craft, industry and everyday life: finds from medieval York*. The Archaeology of York 17/15. York.
- Owen-Crocker G. 1986. *Dress in Anglo-Saxon England*. Manchester: Manchester University Press.
- Pader E-J. 1980. Material symbolism and social relations in mortuary studies. In: Rahtz P, Dickinson T, and Watts L, editors. *Anglo-Saxon cemeteries 1979*. BAR British Series 82. Oxford: British Archaeological Reports. p 143-159.
- Pader E-J. 1982. *Symbolism, social relations and the interpretation of mortuary remains*. BAR British Series 130. Oxford: British Archaeological Reports.

- Page W. 1907. *The Victoria history of the county of York*. Volume 1.: Archibald Constable and company limited.
- Page W. 1913. *The Victoria history of the county of York*. Volume 3.: Archibald Constable and company limited.
- Page W. 1974. *The Victoria history of the county of York*. Volume 2. (reprint of 1912 volume). Folkestone, Kent: Dawsons of Pall Mall.
- Painter I. 1995. Well-travelled coffins. *Archaeology in York: Bulletin of the York Archaeological Trust* 19: 26-33.
- Pallant J. 2001. *SPSS survival manual*. Maidenhead: Open university press.
- Palliser DM. 1996. The "minster hypothesis": a case study. *Early Medieval Europe* 5:207-214.
- Pantos A. 2004. The location and form of Anglo-Saxon assembly places: some "moot points". In: Semple S, and Pantos A, editors. *Assembly places and practices in medieval Europe*. Dublin: Four Courts Press. p 155-180.
- Parker Pearson M. 1982. Mortuary practices, society and ideology: an ethnoarchaeological study. In: Hodder I, editor. *Symbolic and structural archaeology*. Cambridge: Cambridge University Press. p 99-113.
- Parker-Pearson M. 1993. The powerful dead: Archaeological relationships between the living and the dead. *Cambridge Archaeological Journal* 3:205-229.
- Parker-Pearson M. 1999. *The archaeology of death and burial*. Stroud: Sutton.
- Peers C, and Radford CAR. 1943. The Saxon monastery at Whitby. *Archaeologia* 89:27-88.
- Perry MA. 2005. Refining childhood through bioarchaeology. Towards and archaeological and biological understanding of children in antiquity. In: Baxter JE, editor. *Children in action: perspectives on the archaeology of childhood*. Berkeley: University of California Press. p 89-111.
- Petts D. 2002. Cemeteries and boundaries in western Britain. In: Lucy S, and Reynolds A, editors. *Burial in early medieval England and Wales*. Leeds: Society for Medieval Archaeology. p 24-46.
- Petts D. 2003. *Christianity in Roman Britain*. Stroud: Tempus.
- Petts D, and Gerrard CM. 2006. *Shared visions: the north-east regional research framework for the historic environment*. Durham: Durham County Council.
- Petts D, and Turner S. In press a. *Early medieval Northumbria*. Turnhout: Brepols.

- Petts D, and Turner S. In press b. Early medieval church groups in Wales and western Britain. In: Petts D, and Turner S, editors. *Early medieval Northumbria*. Turnhout: Brepols.
- Pevsner N, and Williamson E. 1990. *The buildings on England: County Durham*. London: Penguin.
- Phillips D. 1995. The pre-Norman cemetery. In: Phillips D, and Heywood B, editors. *Excavations at York Minster From Roman fortress to Norman cathedral*. London: HMSO. p 75-92.
- Phillips D, and Heywood B, editors. *Excavations at York Minster From Roman fortress to Norman cathedral*. London: HMSO.
- Philp B. 1973. *Excavations in West Kent 1960-1970*. Research reports in the Kent series 2. Dover: Kent archaeological Rescue Unit.
- Platell A. 1999. A late Roman and sub-Roman site at Newton Bewley, Hartlepool. *Yorkshire Archaeology Society: Roman Antiquities Section*. Bulletin 16: 13-18.
- Potter TW, and Andrews RD. 1994. Excavation and survey at St Patrick's Chapel, and St Peter's Church, Heysham, Lancashire, 1977-8. *Antiquaries Journal* 74:55-134.
- Poulton R. 1989. Rescue excavations at an early Anglo-Saxon cemetery site and a later (probably late Saxon) execution site at the former Goblin Works. Ashtead, near Leatherhead. *Surrey Archaeological Collections* 79: 67-97.
- Powesland D. 2000. West Heselton settlement mobility: a case of static development. In: Geake H, and Kenny J, editors. *Early Deira. Archaeological studies of the East Riding in the fourth to ninth centuries AD*. Oxford: Oxbow.
- Privat K, O'Connell T, and Richards MP. 2002. Stable isotope analysis of human and faunal remains from the Anglo-Saxon cemetery at Berinsfield, Oxfordshire: dietary and social implications. *Journal of Archaeological Science* 29:779-790.
- Proudfoot E. 1996. Excavations at the long cist cemetery at the Hallow Hill, St Andrews, Fife 1975-1977. *Proceedings of the Society of Antiquaries of Scotland* 126: 387-454.
- Proudfoot E. 1998. The Hallow Hill and the origins of Christianity in Scotland. In: Crawford BE, editor. *Conversion and Christianity in the North Sea world*. St Andrews: Committee for Dark Age Studies, University of St Andrews. p 57-73.
- Rahtz P. 1978. Grave orientation. *Archaeology Journal*: 1-14.

- Rahtz P, Hirst S, and Wright S. 2000. *Cannington cemetery*. London: Britannia Monograph Series 17.
- Rathje WL. 1973. Models for mobile Maya: a variety of constraints. In: Renfrew C, editor. *The explanation of cultural change: models in prehistory*. Pittsburgh: University of Pittsburgh Press. p 731-757.
- Rega E. 1997. Age, gender and biological reality in the early Bronze Age cemetery at Mokrin. In: Moore J, and Scott E, editors. *Invisible people and processes. Writing gender and childhood into European archaeology*. Leicester: Leicester University Press. p 229-247.
- Reimer PJ, Baillie MGL, Bard E, Bayliss A, Beck JW, and Bertrand CJH. 2004. IntCal04 terrestrial radiocarbon age calibration, 0-26cal kyr BP. *Radiocarbon* 46(3): 1029-58.
- Reynolds A. 1997. The definition and ideology of Anglo-Saxon execution sites and cemeteries. In: De Boe G, and Verhaeghe F, editors. *Death and burial in medieval Europe*. Papers of the "Medieval Europe Brugge 1997" conference Volume 2. Zellick: I.A.P. Rapporten. p 33-41.
- Reynolds A. 1998. Executions and hard Anglo-Saxon justice. *British Archaeology* feb: 8-9.
- Reynolds A. 1999. *Later Anglo-Saxon life and landscape*. Gloucestershire: Tempus.
- Reynolds A. 2002. Burials, boundaries and charters in Anglo-Saxon England: a reassessment. In: Lucy S, and Reynolds A, editors. *Burial in early medieval England and Wales*. London: The Society for Medieval Archaeology. p 171-195.
- Reynolds A. 2003. Boundaries and settlements in later sixth to eleventh-century England. In: Griffiths D, Reynolds A, and Semple S, editors. *Boundaries in early medieval Britain. Anglo-Saxon studies in archaeology and history* 12.
- Reynolds A. 2008. *The emergence of Anglo-Saxon judicial practice: the message of the gallows*. The Agnes Jane Robertson memorial lectures on Anglo-Saxon studies 1. Aberdeen: University of Aberdeen.
- Reynolds A. 2009. *Anglo-Saxon deviant burial customs*. Oxford: Oxford University Press.
- Reynolds N. 1988. The rape of the Anglo-Saxon women. *Antiquity* 62: 715-8.
- Richards JD. 1987. *The significance of form and decoration of Anglo-Saxon cremation urns*. BAR British Series 166. Oxford: British Archaeological Reports.
- Richards JD. 1992. Anglo-Saxon Symbolism. In: Carver MOH, editor. *The Age of Sutton Hoo*. Woodbridge: Boydell.

- Richards JD. 1999. Cottam: An Anglian and Anglo-Scandinavian settlement of the Yorkshire Wolds. *Archaeological Journal* 156:1-110.
- Richards JD. 2000. Anglo-Saxon settlements and archaeological visibility in the Yorkshire Wolds. In: Geake H, and Kenny J, editors. *Early Deira: archaeological studies of the East Riding in the 4<sup>th</sup>- 9<sup>th</sup> centuries AD*, Oxford: Oxbow. p 27-39.
- Robb J, Bigazzi R, Lazzarini L, Scaraini C, and Sonogo F. 2001. "Social" status and "biological" status: a comparison of grave goods and skeletal indicators from Pontecagnano. *American Journal of Physical Anthropology* 115:213-222.
- Roberts BK, and Wrathmell S. 2002. *Region and place: a study of English rural settlement*. London: English Heritage.
- Roberts C, and Cox M. 2003. *In sickness and in health: disease in Britain from prehistory to the present*. Stroud: Sutton.
- Roberts C, and Manchester K. 2005. *The archaeology of disease*. 3rd edition. Stroud: Sutton.
- Roberts CA, Lewis ME, and Boocock P. 1998. Infectious disease, sex, and gender. The complexity of it all In: Grauer A, and Stuart-Macadam P, editors. *Sex and gender in paleopathological perspective*. Cambridge: Cambridge University Press. p 93-113.
- Roberts I. 1990. *Pontefract Castle*. Rotherham: The King's England Press.
- Roberts I. 2002. *Pontefract Castle: Archaeological excavations 1982-86*. Yorkshire archaeology 8. Leeds: West Yorkshire Archaeology Service.
- Rodwell W. 1989. *English Heritage book of church archaeology*. London: Batsford/English Heritage.
- Rodwell W. 2001. *The archaeology of Wells cathedral: excavations and structural studies, 1978-93*. 2 vols. English Heritage.
- Rodwell W. 2007. Burial Archaeology. In: Waldron T, editor. *St Peter's, Barton-upon-Humber, Lincolnshire: A parish church and its community*. Volume 2, The human remains. Oxford: Oxbow. p 15-32.
- Rodwell W, and Rodwell K. 1982. St Peter's Church, Barton-on Humber: excavation and structural study, 1978-81. *Antiquaries Journal* 62:283-315.
- Rogers NSH. 1993. *Anglian and other finds from 46-54 Fishergate*. The Archaeology of York 17/9. London.

- Rollason D. 1999. Monasteries and society in early medieval Northumbria. In: Thompson B, editor. *Monasteries and society in medieval Britain*. Stamford: Paul Watkins. p 59-74.
- Rollason DW. 2003. *Northumbria 500-1100*. Cambridge: Cambridge University Press.
- Rowntree D. 1981. *Statistics without tears: a primer for non-mathematicians*. Penguin Books, Harmondsworth: Middlesex.
- Rubin G. 1975. The traffic in women: notes on the "political economy" of sex. In: Reiter RR, editor. *Toward an anthropology of women*. New York: Monthly review press. p 157-210.
- Rutherford A, and Ritchie G. 1972-4. The Catstane. *Proceedings of the Society for Antiquaries of Scotland* 105: 183-88.
- Ryder P. 1993. *Medieval churches of West Yorkshire*. Morley: West Yorkshire Archaeological Service.
- Samson R. 1999. The Church lends a hand. In: Downes J, and Pollard T, editors. *The loved body's corruption*. Glasgow: Cruithne. p 120-144.
- Sarnat BG, and Schour I. 1941. Enamel hypoplasias (chronic enamel apalsia) in relationship to systemic diseases: a chronological, morphological and etiological classifictaion. *Journal of the American Dental Association* 28:1989-2000.
- Saxe A. 1970. *Social dimensions of mortuary practices*. Unpublished PhD thesis. University Michigan.
- Scott FS. 1956. The Hildithryth stone and other Hartlepool namestones. *Archaeologia Aeliana 4<sup>th</sup> series* 34: 196-212.
- Scott J . 2006. *Class and stratification*. Basingstoke: Plagrave Macmillan. p 25-64.
- Scull C, and Bayliss A. 1999. Dating burials of the seventh and eighth centuries: a case study from Ipswich, Suffolk. In: Hines J, Høilund Neilsen K, and Siegmund F, editors. *The pace of change: studies in early medieval chronology*. Oxford: Oxbow. p 80-88.
- Scull CF, and Harding AF. 1990. Two early medieval cemeteries at Milfield, Northumberland. *Durham Archaeological Journal* 6:1-29.
- Selye H. 1973. The evolution of the stress concept. *American Scientist* 61:692-699.
- Semple S. 1998. A fear of the past: the place of the prehistoric burial mound in the ideology of middle and later Anglo-Saxon England. *World Archaeology* 30:90-126.

- Semple S, editor. 2003. *Burials and political boundaries in the Avebury region, North Wiltshire*. Oxford: Oxbow.
- Semple S. 2004. Locations of assembly in early Anglo-Saxon England. In: Pantos A, and Semple S, editors. *Assembly places and practices in medieval Europe*. Dublin: Four Courts Press. p 135-154.
- Shanks M, and Tilley C, editors. 1982. *Ideology, symbolic power and ritual communication: a reinterpretation of Neolithic mortuary practices*. Cambridge: Cambridge University Press. p 129-154.
- Shanks M, and Tilley C. 1987. *Reconstructing archaeology: theory and practice*. Cambridge: Cambridge University Press.
- Sharp C [pseud. XY]. 1833. Runic gravestones at Hartlepool. *Gentleman's Magazine* 103 (2).
- Sharpe R. 2002. Martyrs and local saints in Late Antique Britain. In: Thacker A, and Sharpe R, editors. *Local saints and local churches in the early medieval west*. Oxford: Oxford University Press. p 75-154.
- Shepherd JF. 1979. The social identity of the individual in isolated barrows and barrow cemeteries in Anglo-Saxon England. In: Burnham B, and Kingsbury J, editors. *Space hierarchy and society: interdisciplinary studies in social area analysis*. BAR International Series 59. Oxford: British Archaeological Reports. p 47-79.
- Sherlock S. 2008. The lost royal cult of Street House, Yorkshire. *British Archaeology* 100:30-37.
- Sherlock S, and Welch M. 1992. *The Anglo-Saxon cemetery at Norton, Cleveland*. CBA Research Report 82. Oxford: Council for British Archaeology.
- Shoesmith R. 1980. *Hereford City excavations*. Volume 1. CBA Research Report 38. London: Council for British Archaeology.
- Simms-Williams P. 1998. Genetics, linguistics and prehistory: thinking big and thinking straight. *Antiquity* 72:505-527.
- Smith IM. 1991. Sprouston, Roxburghshire: an early Anglian centre of the eastern Tweed Basin. *Proceedings of the Society of Antiquaries of Scotland* 121:261-294.
- Sofaer JA. 1997. Engendering children, engendering archaeology. In: Moore J, and Scott E, editors. *Invisible people and processes. Writing gender and childhood into European archaeology*. Leicester: Leicester University Press. p 192-202.



- Sofaer JA. 1998. *Gender archaeology as contextual archaeology: A critical examination of the tension between method and theory in the archaeology of gender*. PhD thesis, University of Cambridge.
- Sofaer JA. 2000. Sex differences in activity-related osseous change in the spine and the gendered division of labour at Ensay and Wharram Percy. *American Journal of Physical Anthropology* 111(3): 333-354.
- Sofaer JA. 2006a. *The body as material culture: a theoretical osteoarchaeology*. Cambridge: Cambridge University Press.
- Sofaer JA. 2006b. Gender, bioarchaeology and human ontogeny. In: Knüsel C, and Gowland R, editors. *Social archaeology of funerary remains*. Oxford: Oxbow. p 155-167.
- Sokal RR, and Rohlf FJ. 1995. *Biometry. The principles and practice of statistics in biological research*. 3rd edition. New York: W. H. Freeman and Company.
- Sørensen MLS. 1991. Gender construction through appearance. In: Walde D, and Willows ND, editors. *The archaeology of gender*. Proceedings of the 22<sup>nd</sup> Chacmool conference. Calgary: University of Calgary. p 121-129.
- Sørensen MLS. 1992. Gender archaeology and Danish Bronze Age studies. *Norwegian Archaeological Review* 25:31-50.
- Sørensen MLS. 2000. *Gender archaeology*. Cambridge: Polity Press.
- Speake G. 1989. *A Saxon bed burial on Swallowcliffe Down*. English Heritage Archaeological Report 10. London: English Heritage.
- Speed G, and Walton Rogers P. 2004. A burial of a Viking woman at Adwick-le-Street, South Yorkshire. *Medieval Archaeology* 48: 51-90.
- Spring DB, Lovejoy CO, Bender GN, and Duerr M. 1989. The radiographic preauricular groove: its non-relationship to past parity. *American Journal of Physical Anthropology* 79: 247-52.
- Stalleybrass B. 1914. Recent discoveries at Clynnogfawr. *Archaeologica Cambriensis 6<sup>th</sup> series* 14: 271-308.
- Stead I. 1987. Garton Station. *Current Archaeology* 103:234-237.
- Steuer H. 1989. Archaeology and history: proposals on the social structure of the Merovingian kingdom. In: Randsborg K, editor. *The birth of Europe: archaeology and social development in the first millennium*. Rome: L'Erma di Bretschneider. p 100-122.

- Stevens J. 1884. On the Remains Found in an Anglo-Saxon Tumulus at Taplow, Bucks. *The Journal of the British Archaeological Association* 39: 61-71.
- Stoodley N. 1999a. *The spindle and the spear: a critical enquiry into the construction and meaning of gender in the early Anglo-Saxon burial rite*. BAR British Series 288. Oxford: British Archaeological Reports.
- Stoodley N. 1999b. Burial rites, gender and the creation of kingdoms: The evidence from seventh-century Wessex. *Anglo-Saxon studies in archaeology and history* 10: 99-107.
- Stoodley N. 2000. From the cradle to the grave: age organisation and the early Anglo-Saxon burial rite. *World Archaeology* 31(3):456-472.
- Stoodley N. 2002. Multiple burials, multiple meanings? Interpreting the early Anglo-Saxon multiple interment. In: Lucy S, and Reynolds A, editors. *Burial in early medieval England and Wales*. London: The Society for Medieval Archaeology. p 103-121.
- Stoodley N. 2007. New perspectives on cemetery relocation in the seventh century AD: The example of Portway, Andover. In: Semple S, editor. *Anglo-Saxon studies in archaeology and history* 14. Oxford: Oxbow. p 154-162.
- Stroud G, and Kemp RL. 1993. *Cemeteries of the Church and priory of St Andrew's, Fishergate, York*. The Archaeology of York, 12/2. The Medieval Cemeteries. York.
- Stuart-Macadam P. 1985. Porotic hyperostosis: representative of a childhood condition. *American Journal of Physical Anthropology* 66:391-398.
- Stuart-Macadam P. 1989. Porotic hyperostosis: relationship between orbital and vault lesions. *American Journal of Physical Anthropology* 80:187-193.
- Stuart-Macadam P. 1992. Porotic hyperostosis: a new perspective. *American Journal of Physical Anthropology* 87:39-47.
- Stuiver M, and Ploach HA. 1977. Discussion: reporting of 14C data. *Radiocarbon* 19(3): 355-63.
- Tague RF. 1988. Bone resorption of the pubic and preauricular area in humans and non-human mammals. *American Journal of Physical Anthropology* 76: 251-67
- Tainter J. 1975. Social inference and mortuary practices: an experiment in numerical classification. *World Archaeology* 7:1-15.
- Tanner JM. 1981. Catch-up growth in man. *British Medical Bulletin* 37:233-238.
- Taylor C. 1983. *Village and farmstead: a history of rural settlement in England*. London: George Philip.

- Taylor HM. 1979. *The Anglo-Saxon Crypt and Church* Vol. 2. Repton Studies. Cambridge.
- Thacker A. 1992. Monks, preaching and pastoral care in early Anglo-Saxon England. In: Blair J, and Sharpe R, editors. *Pastoral care before the parish*. Leicester: Leicester University Press
- Thomas AC. 1971. *The early Christian archaeology of north Britain*. Oxford: Oxford University Press.
- Thompson V. 2002. Constructing salvation: a homiletic and penitential context for late Anglo-Saxon burial practice. In: Lucy S, and Reynolds A, editors. *Burial in early medieval England and Wales*. London: The Society for Medieval Archaeology. p 229-240.
- Thompson V. 2004. *Death and dying in later Anglo-Saxon England*. Woodbridge: Boydell.
- Thomson WAR. 1984. *Black's medical dictionary*. London: Adam and Charles Black.
- Thurnham J. 1849. Description of an ancient tumular cemetery, probably of the Anglo-Saxon period, at Lamel Hill, near York. *Archaeological Journal* 6:26-139.
- Tilley C. 1989. Interpreting material culture. In: Hodder I, editor. *The meanings of things*. London: Unwin Hyman. p 185-194.
- Tilley C. 1993. *Interpretative archaeology*. Oxford: Berg.
- Tilley C. 1994. *A phenomenology of landscape*. Oxford: Berg.
- Tyler S. 1992. Anglo-Saxon settlement in the Darent valley and environs. *Archaeologia Cantiana* 110:71-81.
- Tyrrell A. 1999. *Human skeletal variation and the assessment of population diversity: an analysis of the relationships and dynamics among early medieval populations from the southern British Isles*. University of Sheffield, PhD thesis.
- Tyrrell A. 2000a. Corpus saxonum: early medieval bodies and corporeal identity. In: Frazer B, and Tyrrell A, editors. *Social identity in early medieval Britain and Ireland*. Leicester: Leicester University Press. p 137-156.
- Tyrrell A. 2000b. Skeletal non-metric traits and the assessment of inter- and intra-population diversity: past problems and future potential. In Cox M, and Mays S, editors. *Human osteology in archaeology and forensic science*. Cambridge: Cambridge University Press. p. 289-306.
- Ucko P. 1969. Ethnography and archaeological interpretation of funerary remains. *World archaeology* 1(2):262-280.

- Ullrich H. 1975. Estimation of fertility by means of pregnancy and childbirth alterations at the pubis, the ilium and the sacrum. *Ossa* 2: 23-39.
- Union of the Physically Impaired Against Segregation. 1976. *Fundamental principles of disability*. London: UPIAS.
- Van de Noort R. 1993. The context of early medieval barrows in western Europe. *Antiquity* 67:66-73.
- Van Gennep A. 1960. *The rites of passage*. Chicago: University of Chicago Press.
- Wade-Martins P. 1980. *Excavations in North Elmham Park 1967-1972*. East Anglian Archaeology Report No. 9. Norfolk: Norfolk Archaeological Unit.
- Waldron T. 2000. Hidden or overlooked? Where are the disadvantaged in the skeletal record? In: Hubert J, editor. *Madness, disability and social exclusion. The archaeology and anthropology of 'difference'*. London: Routledge. p 29-45.
- Waldron T. 2007. *St Peter's, Barton-upon-Humber, Lincolnshire: A parish church and its community*. Volume 2. The human remains. Oxford: Oxbow.
- Wareham A. 2001. The transformation of kinship and the family in later Anglo-Saxon England. *Early Medieval Europe* 10 (3): 375-399.
- Wardle P. 1992. *Earlier prehistoric pottery production and ceramic petrology in Britain*. BAR British Series 225. Oxford: Tempus Reparatum.
- Watson J. 1996. The construction of the chests/coffins. In: Hall RA, and Whyman M. editors. *Settlement and monasticism at Ripon, North Yorkshire, from the 7<sup>th</sup> to 11<sup>th</sup> centuries AD*. *Medieval Archaeology* 40: 113-4.
- Watson J. In prep. *Carpentry details of mineral preserved wood on iron coffin fittings from Thwing*. Unpublished report from Thwing archive,
- Webster CJ, and Brunning RA. 2004. A seventh-century AD cemetery at Stonage Barton Farm, Bishop's Lydeard, Somerset and square-ditched burials on post-Roman Britain. *Archaeological Journal* 161: 54-81.
- Weiss KM. 1973. Demographic models for anthropology. *American Antiquity* 38(2): 1-186.
- Welch MG. 1978. Early Anglo-Saxon Sussex: From civitas to shire. In: Brandon P, editor. *The South Saxons*. London: Phillimore. p 13-35.
- Welch MG. 1980. The Saxon cemeteries of Sussex. In: Rahtz P, Dickinson T, and Watts L, editors. *Anglo-Saxon cemeteries 1979*. BAR British Series 82. Oxford: British Archaeological Reports. p 255-283.
- Wells CA. 1964. The Study of ancient disease. *Surgo* 32: 743-772.

- Wells, C. 1988. Appendix 3: an early medieval case of death in childbirth. In: White W, editor. *The cemetery of St Nicholas Shambles*, London. London: London and Middlesex Archaeological Society. p 71-3.
- Wells C, and Green C. 1973. Sunrise dating of death and burial. *Norfolk Archaeology* 35:435-442.
- West SE. 1985. *West Stow. The Anglo-Saxon village*. East Anglian archaeology report 24. Ipswich: Suffolk County Planning Department.
- West SE. 1988. *The Anglo-Saxon cemetery at Westgarth Gardens, Bury St Edmunds, Suffolk*. Norwich: East Anglian Archaeology.
- Weston D. 2008. Investigating the specificity of periosteal reactions in pathology museum specimens. *American Journal of Physical Anthropology* 137(1):48-59.
- White AJ. 2001. *The Quernmore burial mystery*. Pamphlet produced for Lancaster City Museums. Lancaster: Lancaster City.
- White TD, and Folkens PA. 2005. *The human bone manual*. London: Elsevier Academic Press.
- White W. 1988 *The cemetery of St Nicholas Shambles, London*. London: London and Middlesex Archaeological Society.
- Williams H. 1997. Ancient landscapes and the dead: the reuse of prehistoric and Roman monuments as early Anglo-Saxon burial sites. *Medieval Archaeology* 41:1-32.
- Williams H. 1998. Monuments and the past in early Anglo-Saxon England. *World Archaeology* 30:90-108.
- Williams H. 1999. Placing the dead: investigating the location of wealthy barrow burials in seventh century England. In: Rundkvist M, editor. *Grave matters: Eight studies of burial data from the first millennium AD from Crimea, Scandinavia and England*. BAR International Series 781. Oxford: British Archaeological Reports. p 57-86.
- Williams H. 2002. Cemeteries as central places: landscape and identity in early Anglo-Saxon England. In: Hardh B, and Larsson L, editors. *Central places in the migration and Merovingian periods*. Papers from the 52nd Sachsensymposium. Lund: Almqvist. p 341-362.
- Williams H. 2004. Death warmed up. The agency of bodies in Early Anglo-Saxon cremation rites. *Journal of Material Culture* 9(3):263-291.

- Williams H. 2006. *Death and memory in early medieval Britain*. Cambridge: Cambridge University Press.
- Williamson T. 1993. *The origins of Norfolk*. Manchester: Manchester University Press.
- Wilmott T. 1987. Pontefract. *Current Archaeology* 106: 431-44.
- Wilmott T. In prep. *An Anglo-Saxon church and its cemetery: excavations in The Booths, 1985-86*. West Yorkshire Archaeological Services.
- Wilson DM. 1976. *The archaeology of Anglo-Saxon England*. London: Methuen and Co.
- Wilson DM. 2008. *The Vikings in the Isle of Man*. Aarhus: Aarhus University Press.
- Wilson PR, Cardwell P, Cramp R, Evans J, Taylor-Wilson RH, Thompson A, and Wachter JS. 1996. Early Anglo-Saxon Catterick and Catraeth. *Medieval Archaeology* 40:1-61.
- Wilson S. 2000. *The magical universe: everyday ritual and magic in pre-modern Europe*. London: Hambledon Press.
- Wood ES. 1946. *The ancient buildings of the Harrogate district*. Harrogate: Yorkshire Archaeological Society.
- Wood JW, Milner GR, Harpending HC, and Weiss KM. 1992. The osteological paradox: problems of inferring prehistoric health from skeletal samples. *Current Anthropology* 33(4):343-370.
- Wormald P. 1997. Giving God and king their due: conflict and its regulation in the early English state. *Settimane Di Studio Del Centro Italiano Di Studi Suli Alto Medioevo* 44: 549-590.
- Yorke B. 1990. *Kings and kingdoms of early Anglo-Saxon England*. London: Routledge.
- Yorke B. 2008. *The conversion of Britain: religion, politics and society in Britain c. 600-800*. Harlow: Longman.
- Young R. 1994. "Destruction is only one facet"... A study of formation processes and the generation of distribution patterns for later prehistory in northern England. *Landscape History* 16:5-16.
- Zadora-Rio E. 2003. The making of churchyards and parish territories in the Early-medieval landscape of France and England in the 7<sup>th</sup>-12<sup>th</sup> centuries: a reconsideration. *Medieval Archaeology* 47:1-19.

APPENDIX 1

KEY FOR COUNTY NAMES

These tables include the abbreviations used for English, Welsh and Scottish county names used in the main text. These abbreviations are based on those used by the English Place Name Society<sup>1</sup> and modified to relate to ceremonial counties in use from 1997.

County name	Abbreviation
England (all counties)	
Bedfordshire	Bd
Berkshire	Brk
Bristol	B
Buckinghamshire	Bk
Cambridgeshire	C
Cheshire	Ch
Cornwall	Co
County Durham	CD
Cumbria	Cu
Derbyshire	Db
Devon	D
Dorset	Do
Essex	E
Gloucestershire	Gl
Greater London	GL
Greater Manchester	GM
Hampshire	Ha
Herefordshire	He
Hertfordshire	Hrt
Kent	K
Lancashire	La
Leicestershire	Lei
Lincolnshire	L
Merseyside	M
West Midlands	WM
County name contd.	Abbreviation contd.
Norfolk	Nf

<sup>1</sup> <http://www.nottingham.ac.uk/english/ins/kepnl/>

Northamptonshire	Nh
Northumbria	Nb
Nottinghamshire	Nt
Oxfordshire	O
Rutland	Ru
Shropshire	Sh
Somerset	So
Staffordshire	St
Suffolk	Sf
Surrey	Sr
Sussex	Sx
Tyne and Wear	TW
Warwickshire	Wa
Wiltshire	Wi
Worcestershire	Wo
North Yorkshire	NY
East Yorkshire	EY
South Yorkshire	SY
West Yorkshire	WY
Scotland (counties mentioned in text)	
Dumfries and Galloway	DG
Fife	Fi
Midlothian	ML
Wales (counties mentioned in text)	
Anglesey	An
Glamorgan	Gm
Gwynedd	GW
Powys	Po