The Investigation of Social Identity in Later Anglo-Saxon Cemeteries

the application of bio-cultural analysis

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The integration of archaeological and osteological data in a bio-cultural analysis is a valuable means by which the expression of identity can be investigated in funerary practices. In this paper, a review of the application of bio-cultural methods to investigate gender, age thresholds, social status and lifestyle in later Anglo-Saxon funerary contexts is presented in order to highlight the variety and potential of such approaches

Introduction

It is now widely recognised that later Anglo-Saxon mortuary practices include a significant degree of variation in terms of cemetery size, topography, monumentality, grave inclusions and the provision of grave goods. A range of different types of cemetery were utilised during the 8th -12th centuries, including minster cemeteries, churchyard cemeteries, smaller field cemeteries, sites associated with extant monuments such as barrows, and execution cemeteries (Buckberry and Hadley 2007; Hadley 2000a, 209; 2004, 306–7; Reynolds 1997; Semple 1998; Williams 1998; 2006, 155–178). A great variety of above-ground features are found within these cemeteries, including sculptures, churches, chapels and tombs. Diverse forms of coffin and linings of stone, charcoal and clay were used and, in addition, grave goods can still be found, albeit less frequently and in a much more restricted range of forms than during the early Anglo-Saxon period (Geake et al 2007, 114; Gilchrist

and Sloane 2005, 160–179; Hadley in press c). The range of burial forms, inclusions and locations identified in the Christian burial rites from the 8th - 12th centuries has recently stimulated the investigation of the relationships between these and the identities of the individuals that were afforded them (eg Buckberry 2004; Craig and Buckberry in press, Loe 2003). The intention of this paper is not to provide an exhaustive review of recent approaches to identity in later Anglo-Saxon burial practices but rather to present selective examples to illustrate the important new insights of recent research, highlight successful investigation strategies and permit the identification of the potential for future approaches to these data. The paper utilises examples collated during the author's Masters and ongoing doctoral research into 8th -12th-century northern English cemeteries, to focus on the theme of bio-cultural approaches to identity in funerary contexts. It focuses on four strands of investigation into biological sex, age at death, social status and lifestyle.

Identity

Current archaeological theory provides a framework for the investigation of aspects of identity in later Anglo-Saxon burial contexts. In line with anthropological approaches (eg Barnard and Spencer 1996, 292), identity can be divided into **individual** – the characteristics by which a person is identified – and **group** – an individual's identification with others, based on socially sanctioned differences. Identities are actively created through social interactions and can be multiple, fluid or manipulated (Díaz-Andreu 2005, 1). The relationship between burial practice and identity is complex, as what is represented in the burial record is an actively constructed representation of society, not an unambiguous reflection of everyday life (Binford 1972; Goldstein 1976; Hodder and Hutson 1986, 2; Lucy 2000; Parker Pearson 1982; Saxe 1970; Tainter 1978). This relationship prompts several questions relevant to the investigation of identity, most notably to what degree can the archaeological record be deemed to reflect social relations (Härke 1997, 125)? This issue has been tackled in greater detail elsewhere (for example, Barrett (1991), Parker Pearson (1982) and Shanks and Tilley (1982) consider the role of ideology and the creation of 'false' realities), and it is not appropriate to go into extensive detail here; but for the purpose of this study, it is acknowledged that the relationship between burial practice and identity is neither simple nor fully understood.

Approaches to the investigation of identity have been widely adopted in the study of the funerary record of the early Anglo-Saxon period (ie 5th to 7th centuries), where the abundance of variation in assemblages of grave goods and burial forms, such as orientation and position of the body, has permitted the detailed investigation of relationships between these variables and social concepts such as wealth, status, ethnicity, gender and age thresholds (Alcock 1981; Arnold 1980; Härke 1990; Hawkes 1973, 186–7; Sheppard 1979; Stoodley 1999a; 1999b). Such approaches have, in contrast, only recently begun to be adopted in the study of later Anglo-Saxon cemeteries. During the later Anglo-Saxon period there is the potential for the effects of Christianisation to have fundamentally altered the ways in which aspects of identity were expressed. The Church placed emphasis on the afterlife and therefore on the importance of the fate of the soul and the importance of a 'good death' (Sampson 1999; Thacker 1992, 148).

In this way Christian ideology may have challenged the very need to express identity in burial practices, instead transferring focus to post-mortem ceremony, prayer and a desire to protect the body from decomposition to rise again. Alternatively, Victoria Thompson (2002) has emphasised the role of the burial in expressing penance and humility and the possibility of 'ostentatiously humble' burial. Such ideas should serve to emphasise the need for caution in the interpretation of identity in Christian contexts, but need not prevent us from pursuing it.

For several decades it has been common practice within early Anglo-Saxon studies to apply bio-cultural methods to correlate age at death and biological sex with assemblages of grave goods (Brush 1988; Crawford 1993; Härke 1992; 1997; Lucy 1994; Stoodley 1999a; 1999b; 2000). The use of grave goods has been found to relate to the sex, age and social status of the deceased in early Anglo-Saxon cemeteries (Lucy 2000, 87–95). Similar analysis has only recently begun to be incorporated into the study of Christian cemeteries, revealing a different relationship between age, biological sex and burial treatment. Thus it can be argued that, despite the growing awareness of the potential of funerary practices of the 8th century onwards as an arena for the display of personal and social identity (Buckberry 2007, 117; Hadley 2000a; 2000b; 2004; in press a; Loe 2003), bio-cultural approaches to funerary archaeology continue to hold great potential for creating a more in-depth and complete understanding of social and cultural processes in later Anglo-Saxon society.

Biological sex and gender

The majority of burial forms were afforded to both sexes at many later Anglo-Saxon sites (Boulter and Rega 1993; Buckberry 2007, 121; Craig 2006, 68–9; Hadley 2004, 213; in press a; Rodwell and Rodwell 1982; Shoesmith 1980, 24–30). However, where differentiation does occur, it appears that males were more likely to receive certain forms of burials, in particular certain burial locations or more elaborate grave inclusions or forms (Hadley in press b). For example, at St Mark's, Lincoln, a greater number of males were buried to the north of the probable church during the 10th century (Buckberry 2007, 122), while at Raunds Furnells (Northants) the only example of an elaborately carved grave cover was over the grave of an adult male (Boddington 1996, 51).

Indeed, males at Raunds Furnells also appear to form the majority of individuals buried in a zone characterised by frequent use of grave elaborations, including stone coffins, carved stone grave-markers and wooden coffins (Boddington 1996, 36–7). In addition, the combined analysis of several other later Anglo-Saxon cemeteries from Yorkshire and Lincolnshire by Buckberry (2004) suggested a tendency for more males to be buried in more prestigious manners or locations, but revealed that this was by no means a privilege exclusively accorded to males.

One specific example of the apparent relationship between males and certain forms of burial expression is the segregation of males at sites associated with ecclesiastical foundations. The *in-situ* population buried at Ailcy Hill, Ripon (Yorks) from the mid-7th century onwards were all osteologically identified as male (Hall and Whyman 1996, 120–2). However, female remains from the charnel suggest the earlier burials were of a mixed community. Thus, during the 7th century, it appears that the site was appropriated for the burial of a monastic group, possibly associated with the Minster recorded in Eddius' *Vita sancti Wilfrithi* and Bede's *Ecclesiastical History*, and gifted to St Wilfred in the 7th century (*HE*, III, 25; *Eddius*, 8, 16–17; Hall and Whyman 1996, 65). In other cases, for example at Wearmouth (County Durham), it appears that a sector of the cemetery was allocated for monks and novices; this was indicated by the dominance of males and juveniles in the north-eastern corner of the cemetery (McNeil and Cramp 2005, 88). Indeed, the majority of examples of distinctive burial treatments afforded to individuals seemingly based on their sex can be associated with ecclesiastical contexts. At St Oswald's, Gloucester eight out of nine burials interred in iron coffins, in prominent positions close to the church were males (Heighway and Bryant 1999, 208–15) and at Winchester Old Minster males were preferentially buried around the supposed grave of St Swithun and in graves lined with charcoal (Kjølbye-Biddle 1992, 228, 231–3; Hadley in press a). Given the monastic associations at the majority of sites where burial appears dependant on sex, it is possible that many of the individuals in these elaborate and segregated burials were afforded them based upon their monastic roles and residence at ecclesiastical centres. This pattern could be tied into gender identity roles that developed alongside monastic identity in the later Anglo-Saxon period. During the 11th century it

appears that the clergy began to be identified as a distinct social group through their burials, which included grave goods such as chalices, patens, Christian emblems and ecclesiastical clothing, with burial forms not deemed appropriate for the laity. This form of identity was intrinsically linked to masculinity (Gilchrist and Sloane 2005, 225–6).

The expression of gender identity in burial practice cannot be strictly equated with biological sex, or with modern stereotypes of male and female activities (Conkey and Spector 1984, 3–14; Sørensen 1992, 32). Therefore it is important to emphasise that bio-cultural studies which link sex and burial practice cannot expect this to reflect gender identity directly. However, certain bio-cultural approaches may provide a more fruitful way of addressing the place of gender in burial practice. Gender can be seen as '*not just a mental construction but … a materially expressed social practice*' (Sofaer-Derevenski 2006a, 113). So the importance 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-Derevenski 2000, 106; 2006b, 160–1). For example, in her study of health and socio-economic status at the 4th -12th century cemetery at Llandough, South Glamorgan, Loe (2003) identified differences in activity between males and females. Males had higher prevalences of a range of activity-related conditions than females, including more muscular insertion sites affected by enthesophytes and cortical defects, Schmorl's nodes, osteoarthritis and fractures (Loe 2003, 358), which may indicate that they were more active than females. Furthermore, the distribution of activity-related changes across the skeleton suggested that more repetitive fine motor tasks were undertaken by males (Loe 2003, 361). These results may be explained by gendered differences in activity patterns, although it must be noted that these results do not reveal invariable contrasts between the activity-related skeletal markers of males and females and we should, thus, be alert to the fact that contrasting gendered identities and experiences were not absolute.

Age at death and age thresholds

Differential treatment of adults and juveniles (ie those under the biological age of 18 years) is found in some later Anglo-Saxon cemeteries, with the most notable pattern of age-determined burial practice being

accorded to some infant burials. In many cases, the very young were buried in greater numbers in specific locations within the cemetery. At Raunds Furnells, St Peter's, Barton-upon-Humber (Lincs) and St Andrew's Fishergate, York, infants are preferentially buried close to structures within the cemetery, such as church walls (Boddington 1996, 55; Buckberry 2007, 124). In addition, 56 perinatal and infant burials were identified in a cluster of 8th-century graves directly to the east of a possible mortuary chapel at Whithorn (Dumfries and Galloway) (Hill 1997, 170–72,187–9, 557) and 21 neonates and infants were buried directly west of a possible church structure of the 10th century at Pontefract (Yorkshire); Wilmott no date, 27; Fig 1.

The practice of burying infants close to church walls has been termed 'eaves-drip' burial. This practice is commonly thought to relate to baptismal ritual and may reflect uncertainty within early Christian communities over its efficacy for those who died very young (Boddington 1996, 55; Crawford 1999, 85–9; Hadley in press b). This interpretation mirrors the practice in a story recounted by Wilson, whereby at a village in Alcace (France) in 1880, the parents of a still-born child buried it clandestinely under the eaves of the sanctuary roof of the church, hoping that the water running off the roof would bestow some kind of posthumous baptism (Wilson 2000, 216). Whilst this practice may be relevant to the Anglo-Saxon 'eaves-drip' burials, this and alternative explanations can be reconsidered.

The interment of infants up to one year of age but generally not older children, close to the church walls has understandably been linked to baptism. The ecclesiastical laws of Ine of Wessex, dated to the

Fig 1

Plan of phase 3 and 4 of burial (late 10th-mid 11th century) at Pontefract showing infant 'eaves–drip' burials along the western wall of a single-celled structure identified as a church or mortuary chapel. (Dashed lines delineate the foundations of a second cell added to the structure during phase 4). Reproduced with the permission of Archaeological Services WYAS.

7th century, indicate that an infant must be baptised within 30 days of birth or a fine was imposed (Whitelock 1955, 364). Whilst we do not know how strictly this law was adhered to, or whether it was applied across England throughout the later Anglo-Saxon period, it does support the conclusion that only infants were likely to die unbaptised and therefore be considered for 'eaves-drip' burial. Alternatively, there appears to be 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). This belief may have stimulated the differential burial of the very young, particularly in a location considered especially holy. A more pragmatic explanation for 'eaves-drip' burial may relate to the need to bury large numbers of infants as a result of sudden epidemic illness or famine. However the intercutting of 'eaves-drip' burials, seen, for example, at Pontefract, makes it unlikely that clusters of infant burials represent a single burial event. In the recent publication of Wharram (Yorkshire) churchyard, Mays (2007, 94) has presented a different hypothesis, suggesting that the ages of breast feeding and weaning may coincide with the ages at which infants were buried close to the church walls; thus, burial location was related to whether a child had been weaned. Unfortunately, the data from Wharram, based on stable isotope evidence, did not confirm this pattern, but it remains a viable hypothesis to be tested elsewhere. In sum, in whatever way clusters of juvenile burials are interpreted, it appears that it was considered widely appropriate to afford them differential burial treatment based upon their age.

The very young were also often excluded from more elaborate burial forms. For example, individuals under the age of about nine years were rarely buried in wooden chests, a burial rite which appears to span the 8th–9th centuries in northern England at a group of both well-known sites, such as Ailcy Hill and York Minster, and also at more recently excavated, and as yet unpublished sites, such as the Yorkshire sites of Thwing and Spofforth, and Norton Bishopsmill School (County Durham) (Hall and Whyman 1996; Johnson 2005, Manby pers comm; NAA 2002; Phillips 1995). Moreover, at St Andrew's Fishergate and St Mark's, Lincoln no infants were buried in coffins (Buckberry 2007, 123).

These conclusions must be contextualised through a consideration of socially constructed age thresholds. Like gender, age thresholds are linked to,

but not necessarily synonymous with, biological ages (Gowland 2006, 143; Halcrow and Tyles 2008, 192; Lewis 2007, 2; Sofaer-Derevenski 2006a, 119). The written record provides evidence for a series of age thresholds during the Anglo-Saxon period, including an age of majority between 10 and 12 years (Crawford 1999, 53; Härke 1997, 126–9), thus the inclusion or exclusion of infants but not older children in certain practices, as the data presented here indicate, may relate to social concepts of adulthood that are not obvious from osteological data alone. Osteological methods tend to categorise both juveniles and adults into pre-determined age groups, though, as the age thresholds apparent in contemporary Anglo-Saxon written sources are not necessarily linked to biological thresholds, nor uniform in length, it is possible that the treatment of the osteological data is masking real patterns in age-related burial practices (Gowland 2006; Kamp 2001; Sofaer-Derevenski 2006a, 126).

Further evidence for age thresholds has been identified through the application of analysis of stable isotopes (for a summary of the methodology employed see Ambrose 1990; DeNiro and Epstein 1978; DeNiro 1981). Children at the Castle cemetery, Newcastle-upon-Tyne (more commonly known as the Black Gate cemetery) experienced a transition in diet at around the age of one year at which time nitrogen isotope ratios indicate weaning (MacPherson et al 2007). A similar pattern is apparent at a later date at Wharram, where a rapid alteration in nitrogen isotopic composition occurred between one and two years. The uniformity amongst this population led to the conclusion that cessation of breast-feeding was a community-wide, culturally determined threshold (Mays 2007, 93). At Black Gate a further threshold was identified between nine and twelve years, when it appeared that the animal protein component of the diet increased from reduced juvenile levels to normal adult levels (MacPherson et al 2007). This latter threshold complements the documentary evidence for the age of majority.

Social status

One aspect of identity that may be reflected in the varied provisioning of burial forms during the 8th–12th centuries is social status. Social status can be defined as 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 by others. In addition, social status can be manipulated by behaving in accordance with, or in exception to, social norms and by utilising markers of social identity (Scott 2006, 29–30).

One way in which social status can be approached from a bio-cultural perspective is to consider burial elaborations as indicators of wealth. The investigation of social status and burial wealth has been considered for many years, especially in the analysis of grave goods (eg Alcock 1981; Arnold 1980; O'Shea 1981). Nevertheless, these studies can be criticised in two ways: firstly, they are often uncritical of the subjectivity of 'value' (Stoodley 1999b, 6), neglecting the fact that grave goods cannot supply a straightforward index of either wealth or the social standing of the deceased; secondly, they often show limited consideration of the theoretical construction of social status, which can be understood to be composed of several elements, including political, kinship and gender entitlements, lifestyle and economic status (Bourdieu 1986; Loe 2003, 2). As a result, economic inequalities or wealth can reflect only one aspect of social status.

Nonetheless, the variations apparent in later 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 inclusions would only have been appropriate for higher-status individuals, due to the expense required in their manufacture, 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, plus 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 (Buckberry 2007, 119; Phillips 1995, 75–92). The variety of burial forms at high-status sites may reflect a desire for individuality

and an element of social competitiveness amongst the elite (see Hadley 2000b, 165), and certainly at York Minster it appears that individuals of high social status were utilising their burials to express their elevated positions (Buckberry 2007, 119).

In order to address criticism of the functionalist approaches which equated burial wealth and social status, bio-cultural studies have also considered the relationship between the elaboration of graves and the osteological and palaeopathological evidence for the health status of those interred in them. Recently, the relationship was considered between the prevalences of three pathological conditions traditionally associated with biological stress and deprivation: cribra orbitalia, linear enamel hypoplasia and tibial periostitis (Goodman et al 1984; Lewis 2002; Robb et al 2001), and the various forms of burial at Raunds Furnells (Craig 2006). Individuals with cribra orbitalia (a porous pathology of the orbits that may be linked to anaemia) were found to be statistically less likely to be buried with a grave cover or marker than the remainder of the population. Individuals with linear enamel hypoplasia (horizontal bands in the teeth enamel commonly related to periods of childhood illness) and tibial periostitis (an inflammatory condition of the bone surface related to systemic infections) were also less likely to have their graves marked above ground by a stone marker or cover (Craig and Buckberry in press).

The permanent marking of graves above ground with stone monuments can be seen to reflect a more permanent and regional audience for burial practice, in contrast to within-grave elaborations which could only have been intended for a short-term and local audience (Effros 2002, 79; Hadley 2000b, 209; 2004, 307; Halsall 1992, 269–70). At Raunds, those who suffered biologically stressful lives were seemingly excluded from more enduring, regional expressions of burial identity, suggesting that they were held in lower prestige than others, and were of a comparatively lower social status.

There is growing evidence to suggest that space within early Christian cemeteries was actively utilised to express the social and cultural identities of those buried therein, and thus may reflect aspects of social status. Past research has emphasised the importance of burial both *ad sanctos* and within consecrated ground in early medieval Christian cemeteries both in Britain and on the continent, and as a consequence, highlighted the importance of cemetery topography in

conveying the identity and status of the deceased (Effros 1997; Gittos 2002, 201). Whilst a selection of examples of the segregation of individuals based on their sex and age have been mentioned above, there is further evidence for a spatial hierarchy within cemeteries that reflects more complex concepts of identity. The available data suggest two main ways in which identity was articulated through physical location of the burial that may relate to social status: a hierarchy of space within the cemetery in relation to a desired focus, and the complete exclusion of certain groups from the cemetery.

At Raunds Furnells a strong spatial hierarchy is apparent in the burials within the churchyard (Boddington 1996, 11–14; Craig and Buckberry in press). Individuals buried closest to the church, especially just south of the walls, were afforded the most elaborate graves. These include a male interred in a carved stone coffin, all other examples of stone coffins, all but one example of carved stone grave-markers, and the majority of wooden coffins. In addition, these individuals had the lowest prevalences of cribra orbitalia, enamel hypoplasia and tibial periostitis, all conditions that can be related to biological stress, further emphasising their high social status by indicating that they led a more comfortable lifestyle than the remainder of the population. The hypothesis that the area immediately south of the church was reserved for higher status individuals has been presented for early Christian cemeteries elsewhere (Buckberry 2007, 124–5; Richards 2000, 160; Stocker 2000, 180; 2007, 284–7; Stocker and Everson 2001, 224–5). Conversely, the south-east corner of the cemetery at Raunds Furnells contained a group of more stressed individuals whose graves were less elaborate than the rest of the population (Craig and Buckberry in press).

The recently published data from Wharram indicate an alternative relationship between aspects of social status and the use of space within later Anglo-Saxon Christian cemeteries. Previously it has been assumed that the church provided a strong and singular focal point and that groups of juveniles, higher-status individuals and many of the earliest burials (for example of the founders and higher-status patrons) were located closest to the church as this area was more sacred or prestigious than elsewhere (Buckberry 2007, 124–5). Yet at Wharram, an intensive programme of radiocarbon dating has suggested that the earliest phases of the cemetery,

that of the 10th century, were multi-focal and utilised the entire extent of the graveyard (Harding and Wrathmell 2007, 327). Multifocal cemeteries are known from the 5th – 7th centuries, for example at Cannington (Somerset) (Rahtz, Hirst and Wright 2000, 420–2; Williams 2006, 213) and Castledyke South (Lincolnshire), where certain high-status burials appear to have formed focal points for later graves during the 7th century (Drinkall and Foreman 1998, 347). On the other hand, at the later site of Wharram, it appears that different groups sought to distinguish themselves within the burial ground, possibly to represent their distinct kinship or community (Harding and Wrathmell 2007, 329).

It can be hypothesised that certain groups of individuals may have been more likely to receive burials that excluded or marginalised them from the rest of society. One such group is individuals with physical impairments that may have caused disability. The effects of disability are both physical and social. Physical impairment can prevent the inclusion of an individual in normal activities within the community and thus single them out from others; for example limb paralysis would have curtailed the ability to engage in physical work such as farming. Aside from the inability to participate in many aspects of daily life, historical evidence from the Anglo-Saxon period confirms that physical impairment had the potential to prevent involvement in wider society. Using written sources, Sally Crawford (in press) has recently identified a series of social groups, including those who suffered from madness and dumbness, whose disabilities prevented them from holding important positions within Anglo-Saxon society or taking part in religious ceremonies. Alternatively a disease that creates disfigurement has the potential to create fear, suspicion and isolation.

Despite the potential for the exclusion of the disabled, studies that combine investigation of osteological data, burial practices and site topography suggest that many of those who suffered disease and physical impairment were, in fact, frequently included in later Anglo-Saxon cemeteries. An adult male, aged between 20 and 30 at death from Black Gate, Newcastle suffered from a range of osteologically identifiable conditions that suggest nerve damage and paralysis of the limbs (Boulter and Rega 1993, 46–50; Fig 2). Several possible causes of these pathologies have been suggested including cerebral palsy, muscular dystrophy or traumatically-induced post-paralytic

scoliosis (Boulter and Rega 1993, 49–50). Specific diagnosis of this condition is not necessary to discuss the impairments experienced by this individual: pathological lesions suggest the man was paralysed to some extent and thus the degree to which he was able to participate in normal society was almost certainly limited. This individual, despite his obvious physical impairments, was buried in the same manner and location as the remainder of the population (Mahoney-Swales pers comm). Furthermore, the severity of this individual's condition suggests that care and support must have been available throughout his life. This indication of support from others, combined with the undistinguished nature of his burial, suggests that his condition did not result in social exclusion, nor was he in any way a less valued member of the community.

Two further examples of the inclusion of individuals with obvious physical abnormality are a well-documented case from Jarrow (County Durham) and an individual from the newly excavated mid-later Anglo-Saxon cemetery at Village Farm, Spofforth. A female from Jarrow (sk 67/29), aged 24 – 27, had a stature of only 1.32m (4' 4") (Anderson, Wells and Birkett 2006, 500; Wells 1979); despite this, she was noted as having well-defined muscle markings indicating that her size did not restrict her daily activities, nor was her height reason enough to exclude her from the rest of the burial population. Recent excavations of an 8th-12th century cemetery at Village Farm, Spofforth have revealed a burial ground characteristic of early Christian cemeteries in this region (NAA 2002). Amongst the population was a juvenile who was aged six to seven years at death and had a severe cranial deformity. This individual had gross expansion to the bone of the left side of the face and mandible (Fig 3). The pattern of calculus on the teeth suggested that they were avoiding mastication on the side of the deformity, either due to excessive tissue expansion, or inflammation, which would make chewing awkward but could also be physically disfiguring (Craig in prep). The juvenile was buried in a plain earth grave, the most common form of burial among the Spofforth population, in a central position in the cemetery.

Whilst the majority of physically impaired individuals that have been identified in later Anglo-Saxon cemeteries appear to have been buried in the same manner as the rest of the community, some such individuals were, in contrast, treated differently in death. An adolescent with a severe spinal deformity

Fig 2
Black Gate 442 (20-30 years, male) in situ, showing abnormal curvature to the spine thought to relate to paralysis. Reproduced with the permission of John Nolan and courtesy of Newcastle City Council.

Fig 3
Mandible from Spofforth 177 (6-7 years) showing extensive bone expansion on the left side. The right side is normal in appearance. Photo: author.

was identified at Ailcy Hill, Ripon (Hall and Whyman 1996). The collapse and destruction of his vertebral bodies may have been a result of spinal tuberculosis; regardless of the cause, the person would have had a hunched lower back, with their spine twisted to the right. These visible symptoms may have set this individual apart from the rest of the population in life, and archaeological evidence suggests that this individual was also set apart in death. The phase in which this individual was buried was unusual: it included the only example of a multiple burial at this site and had a notably disordered layout. The excavators considered this phase (dated to AD 780–990) to represent a separate, final episode in the use of the cemetery, used as a burial place for 'outsiders' whose status excluded them from churchyard burial elsewhere (Hall and Whyman 1996, 124). The individual with the spinal deformity was further set apart by his burial rite, as his grave was oriented east-west rather than the predominant west-east orientation of the other burials. At North Elmham, Norfolk, only one burial was located outside the cemetery boundary; this grave contained an individual who had suffered from an infection or septic arthritis of the left knee which had resulted in a considerable deformity of the joint (Wells and Clayton 1980, 274). As at Ailcy Hill, this person was not only marginalised from the community by burial location, but also by bodily position. The North Elmham individual was also buried east-west as opposed to the prevailing west-east orientation of other graves (Wade-Martins 1980, 191). Despite the segregation of physically distinct individuals on the outskirts of Anglo-Saxon cemeteries at several sites (Hadley 2004, 9; Hall and Whyman 1996; Wade-Martins 1980), it is notable that none of the examples considered here were buried completely separate from the community's normal burial focus.

Whilst early Christian attitudes to the burial of physically impaired and disfigured individuals appear to have been largely inclusive, not everyone was afforded burial in a Christian burial ground. There are over 30 burial grounds dating from the later Anglo-Saxon period into the post-Conquest period, which are suggested to have served deviants for whom burial in consecrated ground was considered inappropriate (Geake 1992, 87–88; Reynolds 1997; 1999). Archaeological, osteological and documentary evidence is being productively combined to investigate the character of these cemeteries and who was buried

in them. The majority of excluded individuals are young adult males (Hayman and Reynolds 2005, 239). A small number have produced osteological evidence of decapitation, which is considered to have been judicially motivated (Buckberry and Hadley 2007; Hayman and Reynolds 2005, 244). Yet an unknown proportion of the others may have died as a result of hanging, which is rarely osteologically identifiable. Further evidence from abnormal burial treatment is provided by the archaeological data, which indicates individuals from 'deviant' cemeteries were often buried carelessly, in disorganised groups or unusual positions, multiple graves or pits and with their hands and feet positioned as if bound (Buckberry and Hadley 2007; Geake 1992, 87; Harman, Molleson and Price 1981, 168; Hawkes and Wells 1975, 118–22; Hayman and Reynolds 2005, 219, 239; Hirst 1985, 36–37; Meaney 1964, 287–8; Reynolds 1998). 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 and that males were more likely to be punished for unacceptable behaviour than women (Hadley 2004, 311; in press a; Reynolds 1999, 105–10).

Lifestyle

The study of human remains has the potential to contribute much more to the understanding of burial provision and social identity during the 8th–12th centuries. Osteological and palaeopathological assessment can reconstruct activity patterns, diet (especially if isotopic analysis in included) and lifestyle as well as patterns of health and disease, all of which can be correlated with burial forms or locations to provide a more in-depth picture of which individuals were afforded certain forms of burial.

Lewis (2002) has utilised osteological evidence of mortality, growth and health of children to investigate the differences in health and lifestyle between rural and urban populations during the early medieval to post-medieval period. Post-medieval industrial environments, such as those experienced by the population from Christ Church Spittalfields in London, were found to have the greatest detrimental effects on childhood health. In contrast, at both the early and later medieval rural and urban sites of Raunds Furnells, Wharram Percy and St Helen-on-the-Walls, similar patterns of child health indicated that, contrary to common assumption, environmental

factors were probably similar in these two environments and that the lifestyles of children in urban and rural areas did not significantly differ during the later Anglo-Saxon period.

Isotopic studies of diet and population movement have recently begun to contribute to the growing understanding of lifestyle in later Anglo-Saxon populations (Mays 1997; Montgomery and Evans 2006; Müldner and Richards 2007; Richards et al 2002). The study of dietary isotopes is based upon the principle that different ratios of isotopes of carbon and nitrogen are present in certain forms of foodstuff and that these ratios are maintained, albeit with slight alterations, in the tissues of those who consumed them. Thus carbon isotopic analysis can differentiate between certain cereal-based diets and certain forms of terrestrial and marine resources, while nitrogen isotopic analysis can determine the source of protein in the diet. One recently published diachronic study of diet in York (Müldner and Richards 2007) revealed increasing consumption of marine fish in the diet during the 11th and 12th centuries. During this period of transition only certain individuals from the cemetery at Fishergate, York appeared to have access to significant enough amounts of marine fish to be indicated in their nitrogen isotope signatures (Müldner and Richards 2007, 691). These data were contextualised using archaeological and documentary evidence for diet, and two explanations were postulated. Müldner and Richards emphasised the conclusion that increasing and widespread emphasis on fasting regulations within the Church could be responsible for this shift, tying this into a general trend towards changes in fish bone assemblages throughout England during the 11th century (Barrett et al 2004; Müldner and Richards 2007, 695). An alternative explanation, not as strongly emphasised in this paper, relates to limitations in the economic infrastructure around York which may have prevented the large-scale transport of foods inland from the Humber Estuary or North Sea during the 7th–8th centuries (Müldner and Richards 2007, 690).

Diet has been considered in the context of social difference and identity. Data from later Anglo-Saxon and medieval England suggest that the consumption of marine resources is more apparent at monastic sites (Mays 1997; Müldner and Richards 2005), but conversely evidence from Wharram Percy indicates little access to marine foods at this rural settlement. Ecclesiastics presumably had both better access to

these resources and greater desire to consume them, perhaps through their stricter adherence to fasting laws than rural communities, which documentary resources suggest had to replace fish with dairy products during fasting periods (Dyer 1998, 157–8; Müldner and Richards 2006, 235).

In their recent review of isotopic evidence from diet in England, Müldner and Richards (2006, 235) note that there is as yet no convincing example of dietary variation within one site in relation to sex, age or status. Given the occurrence of variations in diet in relation to lifestyle and residence, and the differential burial treatment accorded to some men and women, this is perhaps an area for which further investigation can be expected to provide valuable results.

Future potential

Recent bio-cultural approaches to later Anglo-Saxon burial data have highlighted a range of patterns in the relationships between funerary provision and biological sex, age at death, social status and lifestyle. Throughout this review, several considerations and directions for future inquiry have become apparent. We are only beginning to capitalise upon the true wealth of variation present in later Anglo-Saxon cemeteries. Patterns that have so far been identified in the later Anglo-Saxon funerary record are based on a limited, but growing, number of studies and therefore require continued critical evaluation, especially in light of new evidence, methods and theory.

It is vital that bio-cultural studies seek to incorporate all available sources of data – osteological, archaeological and documentary. For example, the documentary record provides increasing evidence throughout the later Anglo-Saxon period for the importance of burial *ad sanctos* (Blair 2005, 60; Effros 1997) and, by the 10th century, in consecrated ground (Gittos 2002). Spatial patterns within the funerary record in the form of osteological evidence for sex, age and lifestyles of those who received burial in certain locations and clusters of different forms of graves can only be adequately understood with reference to these concepts of sacred space.

It has previously been emphasised that a multi-indicator approach should be undertaken in osteological analysis intended to contribute to bio-cultural research (Loe 2003, 373). A similar method is advised in the interpretation of the archaeological data, supported by the examples selected here which

highlight the complexities of interpreting both osteological evidence and burial practices in terms of social and cultural processes. Consideration of the provision of funerary practices is one approach by which their possibly varied meanings can be investigated.

It is clear that recent theoretical advances in the understanding of the social expression of identity have the potential to both direct and inform bio-cultural studies. The integration of theories of gender, age thresholds and status is not a simple task, yet provides a much needed framework in which to contextualise osteological and archaeological data.

There is great potential to extend bio-cultural studies to address regional, national and diachronic trends in the expression of identity in Anglo-Saxon England. Regional studies and comparisons between earlier and later Anglo-Saxon material have the potential to shed light on social and cultural changes that accompanied the conversion to Christianity. Although the availability of data is sometimes limiting in studies of this sort, continued archaeological activity can only increase our dataset. Indeed, at Norton, Cleveland a late 7th–10th century cemetery has been recently excavated at Bishopsmill School (Johnson 2005). This site, which is yet to be published, appears to be the successor to the earlier Anglo-Saxon cemetery at Mill Lane, 250m to the east. Given the probability that these cemeteries served the same community there is great potential for bio-cultural methods to investigate trends in the expression of identity in burial over five centuries.

The application of new methods has been highlighted as one of the main areas of potential for bio-cultural analyses of identity (eg Effros 2000); nevertheless it is vital that both the potential and limitations of methods such as DNA analysis and isotopic studies are acknowledged – they are not a solution to all of our problems. In the case of DNA analysis, the methodological limitations have been comprehensively summarised elsewhere (Brown and Brown 1992; Brown 2000). Moreover the use of DNA analysis in the investigation of gender identity cannot remove the necessity for adequate theorisation of the relationship between biological sex and gender. An accurate genetic profile of an individual's sex is no more reconcilable to a social construction of gender than an osteological reading of biological sex. Yet DNA analysis has the potential to compliment traditional osteological assessment by determining the biological sex of immature individuals, for whom studies of gender identity have previously remained problematic.

In conclusion, bio-cultural approaches to the later Anglo-Saxon funerary record are growing in popularity. Studies which seek to combine contemporary theory, varied and modern methods and documentary context continue to show great potential for illuminating the complex expression of social identity in burial contexts and shed light on the variability and provision of early Christian burial practices.

Acknowledgements

Elizabeth Craig is currently researching funerary practices in middle Anglo-Saxon northern England through an investigation of osteological and archaeological evidence for a PhD at the University of Sheffield

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