'Most precious ornaments': Necklaces in seventh-century England

KATIE DANIELLE HAWORTH

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NECKLACES IN SEVENTH-CENTURY ENGLAND

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ABSTRACT

This thesis examines the necklaces buried in the graves of high-status women in seventh-century Anglo-Saxon England. Building on the insights of new chronological frameworks, this study explores what it meant to own, wear and be buried with a necklace during this formative period. The foundation of the study is a new database of material from across Anglo-Saxon England, including over 500 graves and in excess of 5,000 individual objects. Structured by the metaphor of object biographies, the analysis progresses thematically, exploring questions of materials, manufacture, use, assemblage, costume, the lifecourse and the wider societal context. By combining the results of detailed, object-focused analysis and innovative interdisciplinary research, this study provides the first detailed examination of the social roles of women during the seventh-century Conversion Period.

It reveals the centrality of necklaces in the expression of high-status female identity during this period. As layered, complex assemblages, necklaces provide a window onto the lived experiences of the wearer: her capacity to control, deploy and display moveable wealth; her ideological beliefs; her social roles and connections to networks of specifically female communication; her family ties and the importance during the period of close female kin relationships; and her individuality, personhood and personal taste. Understanding what necklaces meant and did allows for a reconsideration of broader changes to the furnished burial rite, as fundamentally shaped by the biographical entanglements of people and things. This study offers novel and exciting insights into gender, power and female agency in early medieval England and provides a new framework for re-examining the sweeping societal transformations of the seventh century.

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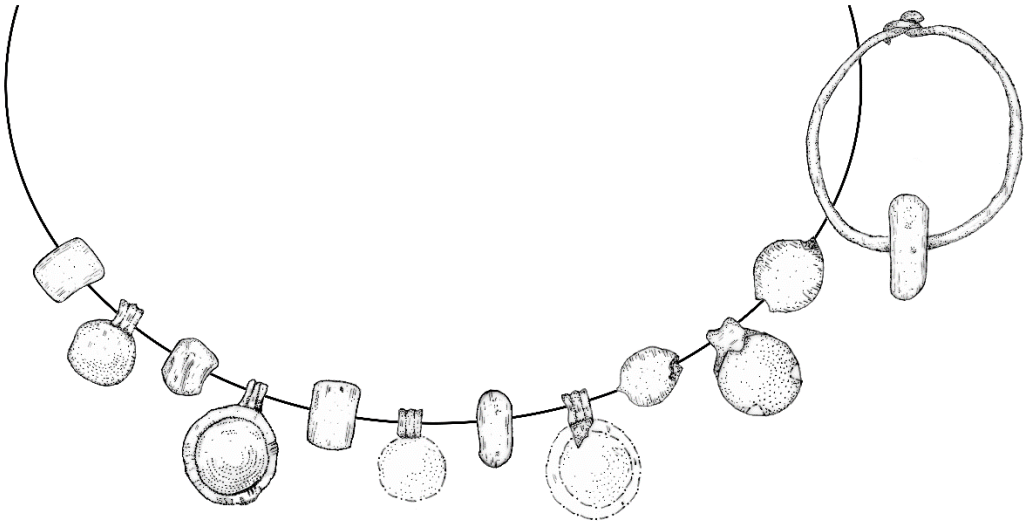

Reconstruction of a seventh-century necklace of beads, pendants and wire rings from Hardingstone (Northants.).

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CHAPTER ONE: INTRODUCTION

1.1: INTRODUCTION

Grave 8 is one of twenty graves excavated in the small cemetery at Burwell Road, Exning (Suff.) in 2014 (Newton 2020). The preservation of skeletal material was relatively poor but suggested the deceased was around ten to twelve years old (ibid: 37). The presence of two elements of a small necklet beneath the crushed remains of the skull – gold pendant set with a garnet cabochon and a biconical bead also made from gold and decorated with beaded wire – suggest the burial was that of a female child. The pendant and bead also indicate a date for the grave in the latter part of the seventh century AD. Other grave-goods found near the region of the waist are consistent with this date. These include, *inter alia*, an iron knife, a small pair of iron shears, a glass palm cup, other fragments of glass, a lump of quartz, two pin beaters, a cowrie shell, an iron woolcomb, a small iron buckle and a Roman coin (ibid: 35–6).

Grave 8 at Exning represents one of the more recent additions to a group that have come to be known by the convenient shorthand of 'well-furnished female burials', all datable – on the basis of their grave-goods – to the middle decades of the seventh century AD (for an overview, see Hamerow 2016; Petts 2011: 106–9; Hines and Bayliss 2013: 538–9). Such burials are characteristic of the last distinctive phase of the furnished burial tradition in early Anglo-Saxon England, before the practice of depositing grave-goods was abandoned, apparently relatively swiftly and suddenly in the final decades of the seventh century (Scull 2015; Hines and Bayliss 2013: 464–73). Recent refinements to the chronology of the seventh century have clarified the sheer scale of the investment in these female burials across England, with a distinctive and homogenous suite of material culture (Hines and Bayliss 2013: 520; Hamerow 2016: 427; see also Geake 1999). These results have placed questions of gender and power at the centre of broader debates surrounding the seventh century, a period of remarkable change in early medieval England, marked by the emergence of the first kingdoms and the gradual process of Christianisation.

Providing a window into these well-furnished female graves and their wider societal context are the objects that were deliberately selected for inclusion as grave-goods. No class of objects is as well represented within this distinct group of burials as necklaces of beads, pendants and rings (Geake 1997: tab. 4.18), of the kind represented by the gold pendant and bead at Exning. Indeed, by the seventh century, short necklaces have become the primary form of jewellery worn by women, replacing the elaborate brooches and buckles so characteristic of the fifth and sixth centuries (Walton Rogers 2007: 187–8; Hines and Bayliss 2013: 529–30; Hamerow 2016: 428).

The salient features of this seventh-century necklace fashion have been usefully summarised by Sonia Chadwick Hawkes:

> 'the earlier fashion for great strings of amber and multi-coloured glass beads gave way… to necklets composed of comparatively small numbers of mainly monochrome glass beads, often threaded together with silver or bronze wire rings and, in richer graves, with pendants' (1973: 191).

Both the relative frequency of necklace assemblages in seventh-century female graves and the wealth of contextual information provided by their funerary contexts make these objects an exceptionally valuable source of evidence for exploring the social and cultural transitions of the seventh century.

Although, as the subsequent literature review will demonstrate, there has been almost a century's worth of scholarship concerning the distinctive seventh-century 'Final Phase', much of the research has focused on issues of chronology, periodisation and the broad macro-scale transitions from Migration Period to Conversion Period, furnished to unfurnished burial traditions and paganism to Christianity (see below, section 1.2). While objects have been foundational to this previous research, such studies have previously been largely typo-chronological in their approach and methodology (see primarily Geake 1997; Hines and Bayliss 2013). There is therefore a need to place the distinctive material culture of the seventh century at the centre of the kind of object-focused, theoretically sensitive studies that have proved so fruitful in examining fifth- and sixth-century objects (for example Martin 2015; Brunning 2019).

This thesis therefore provides the first detailed and contextually-grounded study of the necklaces worn during the seventh century in early medieval England, setting them within their broader social, political and religious contexts and exploring their role in the expression of high-status female identity. The following key research questions are addressed:

- What is the context of production of necklaces and their component elements? What were they made from and how did their materiality shape their meaning?
- What were the life-histories of necklaces? How were they assembled, how were they worn and how does their distinctive seventh-century form develop?
- Who were the wearers of these necklaces, and what was their wider role within seventh-century society?
- What did necklaces mean to their owners and wearers? How were necklaces shaped by the wider societal changes underway during the seventh century?

As the results of series of actions and decisions by their wearers and makers, these objects are both shaped by and in turn help to shape seventh-century society. By addressing these various contexts of production, use and deposition of these objects, this study explores what it meant to wear and be buried with a necklace, and thus sheds light on the prominent role of women during this formative period.

1.2: THE CHRONOLOGY OF THE SEVENTH CENTURY: A REVIEW

A reconsideration of the chronology of the seventh century is not one the of the aims of this thesis. This is not to say, however, that this thesis is not concerned with chronology; the opposite is true, in intentionally situating the project within a defined and relatively narrow timespan. Instead, this project builds on foundations laid by a series of important existing chronological frameworks, which allow the evidence under consideration to be fully and meaningfully contextualised. At this point, therefore, it is necessary to summarise both the histography of research into seventh-century burial practices, especially those concerned explicitly with chronology and periodisation, as well as the more recent developments of the robust chronological frameworks that underpin the present study.

Funerary evidence has always held a central position within the field of early Anglo-Saxon archaeology, not least because the furnished burial tradition of the fifth to seventh centuries provided such a rich and plentiful body of material for study (Dickinson 2011; Lucy 2000). It was not until the beginning of the twentieth century, however, that attempts were made to synthesise the vast corpus of material uncovered during antiquarian excavations of the eighteenth and nineteenth centuries, and to place it within a broad chronological framework (e.g. Baldwin Brown 1915). The first and most influential discussion of the burial practices of the seventh century was by E. T. Leeds, in his *Early Anglo-Saxon Art and Archaeology* (1936). Through a series of case studies, Leeds traced the salient features of this latest phase of burial: a homogenous suite of material culture, deposited in a relatively small proportion of generally sparsely furnished graves distributed widely across different regional zones. Elements of necklaces are frequently cited as examples of this distinctive material culture, including small monochrome biconical or barrel-shaped glass beads, amethyst beads and gold and silver pendants, especially those set with cabochon garnets (ibid: *passim*). These same objects are still considered leading types of the seventh century.

Leeds used the term 'Final Phase' to describe this distinctive group of cemeteries and their shared burial practices, and this term has come to be used as something of a shorthand, although it is not without its problems (Welch 2011: 267–9, 280; Hines and Bayliss 2013: 29). Leeds' (1936)

model was primarily defined in relation to the regional burial sequences for Kent, where shifting jewellery fashions were related to a series of cultural phases, labelled 'Jutish', 'Frankish' and 'Kentish'. The former two cover the fifth and earlier sixth centuries respectively, while the latter saw the development of a distinctively Kentish jewellery fashion, marked particularly by the adoption of zoomorphic Salin's Style II. Leeds dated this Kentish phase to the later sixth century. The Final Phase therefore takes its name directly from this sequential (and specifically Kentish) model. It is only during the Final Phase, however, that Leeds drew his examples of Final Phase jewellery styles from cemeteries outside Kent, including those in Yorkshire (Uncleby and Garton Slack: Smith 1912; Mortimer 1905), Cambridgeshire (Burwell and Shudy Camps: Lethbridge 1931; 1936) and Somerset (Camerton: Horne 1928; 1933). The implication was that this style diffused outward from Kent during the early seventh century, which Leeds (1936: 93) connected to the hegemony of Æthelberht. A fundamental problem with Leeds' model of the apparently homogenous Final Phase was therefore one of regionality and chronology. These issues persist to this day: with the exception of Kent, the transition towards the burial practices of the Final Phase is difficult to relate to preceding traditions, and the chronology remains muddy (Hines and Bayliss 2013: 29; discussed in detail below, see chapter 7.2).

Early interpretations of the seventh-century Final Phase itself sought to situate the archaeological evidence within broader historical narratives.[1] Primarily this was a narrative of Christianisation, the key transition of the seventh century that – naturally – was the focus of Bede's *Ecclesiastical History*. Initially there was disagreement over how to interpret the furnished burial rite itself. The traditional view, espoused primarily by Leeds (1936; see also Baldwin Brown 1915: 120) was that burial with grave-goods was incompatible with Christian beliefs, and so the furnished graves of the seventh century were those of pagans reluctant to abandon traditional burial rites. The alternative was first proposed by T. C. Lethbridge (1936), based on his excavations at Burwell and Shudy Camps. Lethbridge pointed out that there is little evidence to suggest the early medieval church specifically condemned burial with grave-goods and argued instead that the Final Phase marked a transitional period in a longer-term shift towards unaccompanied Christian burial in churchyard cemeteries.

Following Leeds and Lethbridge, much of the discussion concerning the Final Phase is found in the excavation reports of newly uncovered seventh-century cemeteries, including those at Holborough (Kent; Evison 1956), Winnall (Hants.; Meaney and Hawkes 1970), Polhill (Kent;

[1] Of course, in a general sense, this kind of culture historical approach is typical of the period. It is worth emphasising, however, the specific appeal of an interpretive framework drawn from the historical sources for the seventh century, compared to the preceding Migration Period, given that the former is the first period since the end of Roman Britain for which it is possible to construct a relatively detailed and coherent narrative using the surviving documentary sources.

Hawkes 1973) and Wakerley (Northants.; Cook 1978). Debates surrounding the Conversion shaped much of the interpretation of these sites and objects. Of particular importance among these studies was Miranda Hyslop's (1963) publication of two cemeteries at Chamberlain's Barn (Beds.) first excavated in the 1930s. Hyslop (1963) offered a much more thorough description of typical seventh-century cemeteries, addressing the introduction of new and distinctive types of material culture (primarily necklaces and pendants, plus linked pins, small buckles, wooden caskets and workboxes), the general scarcity of previously common object types (including brooches and weapons other than the seax), the absence of cremation as a rite, regular orientation of burials and the high proportion of unfurnished graves, as well as providing a short list of Final Phase type-sites.[2] The influence of the Christianisation narrative on Hyslop's interpretation of these seventh-century cemeteries is particularly marked. As well as the transition towards unfurnished burial in newly founded cemeteries, Hyslop connected the distinctive material culture of the seventh century with the arrival of Christian missionaries, emphasising especially parallels with objects from cemeteries in southern Germany, Switzerland and northern Italy. Necklaces and their component elements are one of the object types for which particularly strong continental comparisons are identified (ibid.: 192).

During this early phase of scholarship chronological models were loosely defined, based on fairly broad typological date ranges for particular objects and anchored by the numismatic evidence from a handful of important coin-dated graves. More precise dating was suggested, not based on increasingly refined typological studies of objects, but instead on the historical frameworks. Hence Leeds' (1936) account, although generally offering few absolute dates, seemed to imply a chronological range for his Final Phase cemeteries earlier in the seventh century, as would be consistent with his interpretation of these burials as those of unconverted pagans, therefore avoiding overlap with the point at which the historical sources suggest that various kingdoms had become nominally Christian. Once the opposite view had taken hold, there was a tendency to date many of the Final Phase cemeteries to the later part of the seventh century, which, implicitly, was a better fit for the historical narratives of conversion (see Meaney and Hawkes 1970: 46–9; Hawkes 1973: 201; c.f. Welch 2011: 268). As the date of the Final Phase phenomenon was pushed later into the seventh century, the issues of understanding the transition from the preceding Migration Period were compounded. This received little scholarly attention, however, as the seventh-century burial practices tended to be treated as an entirely separate phenomenon.

[2] Chamberlain's Barn also became a type-site for the paired cemetery model, in which the founding of new cemeteries datable to the seventh century was interpreted as a conscious rejection of earlier 'pagan' burial grounds in the immediate vicinity (Hyslop 1963: 191). There were attempts to apply this model more widely (see Meaney and Hawkes 1970: 53–4; Faull 1976), but it has since become clear that burial practices of the seventh century were particularly varied.

These first generations of scholarship discussing the seventh-century funerary evidence were entirely culture-historical in focus. Objects were only addressed in as much as they could be used as a tool for typological dating and, in an abstract sense, their mere presence or absence a proxy for understanding the ideological beliefs of the deceased. The latter notion was only seriously challenged in 1990, when there was a review and critique of the Final Phase model as a whole undertaken by Boddington. The conclusions of this short review pointed out the inherent weaknesses in attributing a decline in grave furnishing to religious changes, and instead proposed that the broad transitions of the seventh century were due to a combination of other factors, both societal and economic (Boddington 1990).

As early medieval archaeology began to embrace wider developments in archaeological theory from the late 1970s onwards, there were few explicit discussions of seventh-century burial practices in their own right. Indeed, artefactual chronologies had become somewhat side-lined within the research agendas (Hines 1999: vii; Scull 2015: 73). The result was that, although seventh-century graves and artefacts continued to be integrated into broader studies of ranking and stratification, social identities such as gender and age, and cemetery organisation and landscape use, these studies were often based on outdated and imprecise artefactual chronologies.

New impetus for refined chronological studies arose during the early 1990s with the discovery and excavation of a series of large cemeteries dating, either wholly or partially, to the seventh century, coupled with a major project re-examining the royal barrow cemetery at Sutton Hoo (Suff.), which itself spanned the transition from the sixth to seventh century (Carver 2005). These discoveries both stimulated new interest in the seventh century as a discrete phenomenon and emphasised the need for robust chronological frameworks (Geake 1997: 3). Among these newly discovered cemeteries were large, long-lived sites with burials spanning the whole period of furnished burial, including Edix Hill (Cambs.) (Malim and Hines 1998), Castledyke South (Lincs.) (Drinkall and Foreman 1998) and Lechlade (Glos.) (Boyle et al. 1998), which prompted specific questions concerning the transition from the Migration Period to the Final Phase. Around the same time a new Kentish chronological framework was laid out by Evison (1987), in the publication of the large cemetery at Dover Buckland. A series of Kentish burial phases were proposed, numbered 1–7, and, although these have been subject to revisions (Richardson 2005: 36–41; Brugmann 2012), they remain foundational to the regional chronology of early medieval Kent. A significant proportion of the well-furnished female graves at Dover Buckland date to the seventh century, assigned to Evison's phases 5–7.

The period from the late 1990s onwards saw the publication of a number of broader chronological studies of immediate relevance to the seventh century. Geake's (1997) doctoral

research represents a significant watershed. Beginning as a project exploring all aspects of seventh-century burial practices, focus quickly narrowed to assessing the grave-goods (ibid: x). A significant contribution of the project was the compilation of a comprehensive gazetteer of cemeteries and burials that could be dated to the seventh century, given the previous reliance on a handful of type sites. One of the main aims of the study was to refine the chronology of the seventh century, although this was primarily done by synthesising all available forms of dating evidence (ibid: 7–16), including small numbers of coin- and radiocarbon dates, as well as the results of detailed typological studies of individual classes of object (such as Harden 1956 on glass vessels, Evison 1963 and Dickinson and Härke 1992 on shield bosses, Avent 1975 on Kentish disc brooches, Evison 1979 on wheel-thrown pottery and Ross 1991 on pins).

One of the most important conclusions of Geake's (1997) study was the redating of the beginning of the distinctively seventh-century burial practice to *circa* AD600. Recognising the issues with the term Final Phase and its association with a specific group of apparently late cemeteries, the term 'Conversion Period' was proposed, with the definition covering the seventh century more broadly (ibid: 1). As part of her chronological framework, Geake proposed a rapid abandonment of typically Migration Period artefacts, and correspondingly dress fashions, around the turn of the sixth century (ibid: 123–4). Kent is an exception to this general rule; here there is more evidence of continuity. A new suite of Conversion Period material culture superseded earlier forms, and these tended to be types that remained popular across the seventh century, including a number of the objects associated with necklaces. Geake also identified a few artefacts that characterise a secondary phase of investment in the latter part of the seventh century, which were associated particularly with the classic 'Final Phase' cemeteries (ibid: 124). Finally, Geake dated the cessation of the furnished burial to the final decades of the seventh century and the beginning of the eighth, on the basis of a handful of graves containing early *sceattas* (ibid: 125).

Having established this chronological framework, Geake (1997, 1999) proposed a model to explain the macro-scale changes in the provisioning of grave-goods across the seventh century. The apparently rapid adoption of a new suite of material culture around AD600 is connected to processes of political centralisation and increasing social stratification, and Geake (1997: 109–120; 1999) suggests many of the artefact types represent a conscious emulation of Romano-British styles, and thus the creation through material culture of a sense of *Romanitas*. This, Geake argues, was part of a rejection of existing ethnic, tribal groupings in favour of a homogenous 'English' identity, a process which is neatly illustrated by the distribution maps of seventh-century objects, cutting across what had been – in the sixth century – distinct regional zones (1999; 1997: 132–4). The later part of the Conversion Period is characterised by the influence of Mediterranean or Byzantine styles, first identified by Hyslop (1963) and particularly evident in the female jewellery.

This is connected to the increasing influence of the Church via missionary activity, as the pan-English identity becomes equated with Christianity and the Roman church (Geake 1997: 133). Therefore, while the chronology derives from the archaeological evidence, the interpretative models of the seventh century as a whole continue to be shaped by the historical sources and the twin themes of kingdom formation and Christianisation with which authors like Bede were so concerned. The same is true of the term Conversion Period more generally; it is problematic in that it defines the seventh century primarily in relation to religious change (Welch 2011: 267; Scull 2015: 76).

Recent scholarship has seen the publication of a series of more robust chronological frameworks. Of foundational importance to the present study is Birte Brugmann's (2004) typo-chronological study of early medieval glass beads. Although undoubtedly the most numerous category of object within early Anglo-Saxon female burials, glass beads had previously been subject to little rigorous scholarly attention (although see Guido 1999). Based on a large national sample of over 13,000 beads from secure funerary contexts, Brugmann's (2004) study used correspondence analysis to detect three major phases of bead fashion, labelled A, B and C. Phase C covered the later part of the seventh century, beginning around AD650, a period that roughly corresponds to the Final Phase. Alongside the amethyst and cowrie shell beads typical of the seventh century, Brugmann (ibid: 58–70) also identified a small number of glass beads datable to the seventh-century phase C: opaque monochrome wound spiral beads, translucent 'doughnut' beads and the large and highly decorative annular twist beads, a type first identified by Margaret Guido (1989; 1999).

The most recent detailed chronological framework is that provided by the *Anglo-Saxon Graves and Grave Goods of the Sixth and Seventh Centuries* project[3] (Hines and Bayliss 2013). This began in 1997, inspired in part by the promising results of small-scale chronological studies focused on individual cemeteries, such as the phasing using correspondence analysis of graves at Edix Hill (Cambs.; Hines 1998) and the preliminary results from radiocarbon dating of burials at the Buttermarket cemetery in Ipswich (Suff.; Scull and Bayliss 1999). For the *Anglo-Saxon Graves and Grave Goods* project itself, Bayesian statistical modelling was utilised to combine the results of seriation by correspondence analysis and high-precision radiocarbon dating to distinguish and closely date a series of material culture phases (Hines and Bayliss 2013). The later sixth and seventh centuries are a period particularly suited to analysis incorporating radiocarbon dating, since this is a period that corresponds to a favourably smooth region of the radiocarbon dating calibration curve. A lack of comparable and diagnostic object types regularly buried with both genders meant that female and male graves were phased separately. As the female sequence is of immediate relevance to the present study, the following discussion focuses on these results, although the underlying

[3] Henceforth referred to as the *Anglo-Saxon Graves and Grave Goods* project.

methodology is comparable for both the female and male sequences. Correspondence analysis of a broad, national sample of furnished graves thought to date to the sixth and seventh century first established a chronological framework. A targeted and ambitious programme of radiocarbon dating provided narrower and more accurate date-ranges for key burials and assemblages, and Bayesian statistics were used to reflexively integrate the results of both the correspondence analysis and the radiocarbon dating into a robust chronological model. The female furnished burial sequence was divided into four phases, labelled AS-FB to AS-FE. The seventh-century phases are AS-FD (in terms of absolute dates AD580/640–625/650) and AS-FE (625/650–660/680) (Hines and Bayliss 2013: table 8.2; see also figure 1.2). A further important contribution of this project was the redating of the end of the furnished burial tradition slightly earlier than previous models had suggested, to between AD660 and 680 (Hines and Bayliss 2013: 464–73, 553–4). Notably, however, there is a slightly discrepancy between this modelled date and the date of the latest graves containing silver *sceattas* (Archibald 2013a).

One of the most striking results of the project was the modelling of the frequency of furnished burial through time. While the male sequence showed a gradual decline in the frequency of furnished burial from a peak in the mid-sixth century (Hines and Bayliss 2013: fig. 8.14b), which implicitly fits with models that suggest the Conversion Period represents a gradual transition from largely furnished (and hence pagan) to largely unfurnished (and therefore Christian) funerary practice, the same cannot be said for the female sequence. Instead, phase AS-FE sees a dramatic surge in the modelled frequency of furnished female burial in the third quarter of the seventh century (fig. 1.1). Although previous studies had noted the phenomenon of well-furnished female burials (see Geake 1997: 128–9), the results of the *Anglo-Saxon Graves and Grave Goods* clarified the sheer scale of this investment, and placed questions surrounding gender and female power at the centre of research agendas. Indeed, the authors note that this phenomenon presents both the most intriguing and challenging result of the project as a whole (Hines and Bayliss 2013: 520; see also Hamerow 2016: 424). Again, necklaces and their component elements and materials are repeatedly highlighted among the features that mark out these graves as particularly well-furnished (Hines and Bayliss 2013: 520, 538).

As well as setting the scene for the research questions explored in this thesis, other outcomes of the *Anglo-Saxon Graves and Grave Goods* represent important contributions. A major part of the project was a new typology of grave-goods developed by Karen Høilund-Nielsen (2013), which facilitated comparison across the national sample. The typology of glass beads largely followed that produced by Brugmann (2004), while a new typology of pendants and wire rings was created. With many of these object types assigned to discrete phases of the furnished female burial sequence, this represents a new chronological framework for later sixth and seventh centuries,

allowing for close and reliable dating of both the objects themselves and the wider burial contexts to which they belong.

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Figure 1.1: Modelled frequency of furnished female burial through time. After Hines and Bayliss (2013: fig. 8.14).

To summarise, the seventh-century Final Phase or Conversion Period has long been recognised as a distinct period within early medieval archaeology, and this distinctiveness has prompted a wealth of discussion. Even through this brief review of the relevant scholarship, it is possible to trace a shift in approaches, from culture-historical studies primarily interested in exploring transitions at a macro-scale, related to broader processes such as political reconfiguration and Christianisation, towards a more recent interest in questions addressing identity and society, and especially those of gender and power. These new research agendas have emerged alongside increasingly refined chronological models. It is now possible to utilise these rigorous chronological frameworks as a secure foundation for exploring the phenomenon of the well-furnished female burials of the seventh century.

1.3: THEORETICAL FRAMEWORKS

It is important at this point to briefly outline the theoretical underpinnings of this thesis. While fundamentally it is about the social role and identities of a distinct group of women in seventh-century England, the data at the heart of the research is the jewellery worn by and buried with these individuals. Implicit therefore within the methodology of the project is the notion, well established in both archaeology and material culture studies, that objects play a central, active and meaningful role in the social lives of individuals and groups and that objects shape and mediate

society through their entanglements within networks of people and things. In part, contexts of use determine the nature of these relationships. Hence elements of dress and items that adorn the body are particularly central to the construction of identity, serving as a kind of 'social skin' and are therefore more liable to accrue meaning and sentimental value (on dress, gender and identity see Barnes and Eicher 1992; Roach-Higgins and Eicher 1995). Equally, funerary archaeology provides perhaps the clearest articulation of the entangled relationship between people and things because burials are structured, meaningful deposits, shaped by the decisions made by the mourners at the funeral. The motivations behind the placement of objects in the grave can be complex and layered; the metaphor of burial-as-text or burial-as-poetry has been employed to highlight the constructed, communicative and sometimes enigmatic nature of this rite (Carver 2000; Price 2010).

One of the most useful methodological tools for exploring the relationship between people and things is the concept of object biographies. This proposes that objects, like people, have lives, undergoing spatial and temporal recontextualisations and becoming entangled in different sets of relationships (Joy 2009: 540). The metaphor of object biographies was first proposed by Kopytoff (1986), in an edited volume titled *The Social Life of Things*. This early anthropological use of the metaphor was explicitly concerned with commoditization and regimes of value: how the biography of an object allowed it to accrue value and how, utilising a biographical perspective, the state of being a commodity is a transitional phase in the overall trajectory of the object. Although methodologically-speaking archaeologists utilising the biographical metaphor are asking the same questions of objects that Kopytoff (1986: 66–7) outlined, the focus of such archaeological studies tends to be much broader in scope. A *World Archaeology* volume edited by Gosden and Marshall (1999) represented the first exploration of the potential of object biographies as a tool-for-thinking. Both in the introduction to the volume and the various case studies presented there is considerable variety in how object biography as a metaphor is approached and the kind of biographies of objects it is possible to write.

Subsequent studies have examined the applicability of object biographies specifically to archaeological material culture with a more critical eye. Joy (2009), for example, has explored how the metaphor of object biography can be productively applied to prehistoric objects, for which there is no historical source material or anthropological literature to mine for contextual information. He proposes that an archaeological use of the biography metaphor should not look to construct a single, linear narrative of the life of an object but to instead view biography as 'a series of connected jumps as the object becomes alive within certain clusters of social relationships and is inactive at other points in time and space' (Joy 2009: 544). Other studies have similarly problematised the linearity of the biography metaphor, noting the difficulties in defining

both the 'birth' and 'death' of objects in a strictly biographical sense (Meskell 2004: 57; Hahn and Weiss 2013: 4; Gillespie 2015). Joyce (2015) proposes the alternative metaphor of object itineraries, noting that this accounts for the periods of stasis common to the trajectories of many archaeological objects. 'Itinerary' is not entirely satisfactory as a metaphor either, however, since it emphasises movement and exchange. As several case studies have demonstrated, objects do not need to be physically in motion to accrue new meanings and significance; shifting contexts can also fundamentally reconfigure the relationships of people and things (see Moreland 1999; Gillings and Pollard 1999 for examples). An additional benefit of the biography metaphor, even with its associated semantic baggage, is that it helps to deconstruct dichotomies of people and things and fosters an understanding of objects as inherently possessing the capacity to act.

Recent studies have also drawn a distinction between the different scales at which object biography works as a metaphor. At one end of the spectrum is a 'narrative approach', the construction of the biography of a single object (Joyce 2015: 24). This approach is more suited to anthropological or historical investigations of objects or to examining the contemporary trajectories of archaeological objects, for which there is naturally more evidence available. The alternative approach is the relational approach, which explores a group of objects. Rather than attempting to write the biography of a single artefact, the relational approach aims to shed light on the *biographical possibilities* of objects, without minimising the agency of individual objects to divert and subvert normative trajectories (Joy 2009: 545; Kopytoff 1986: 66–8). Focus is explicitly directed towards the accumulation of the maximum amount of contextual data to shed light on the possible meanings of objects, and the range of networks in which they could have become entangled.

In the context of the present study, it is also worth noting how the biographical metaphor intersects with the idea of necklaces as contextually-related assemblages. Framing the study through a biographical lens serves to direct attention towards the capacity for necklaces to accrue layered and nested meanings. If each individual element of a necklace has its own trajectory and itinerary, the biography of the necklace as an artefact can be 'mutual and overlapping… shared… or even conferred and cumulative' (Meskell 2004: 57). Hence, the focus of object biographies on spatial and temporal recontextualisations serves as a useful corrective to the assumption that collections of material were always the fixed and static assemblage that has been preserved in the archaeological record (Gillespie 2015). Instead, accumulation-as-process is connected to the related – and better studied – phenomenon of fragmentation (see Chapman 2000). Just as the latter is understood to materialise and articulate social relationships, the former can be explored in the same way. These are ideas to which this thesis returns at several points.

The metaphor of object biography in its relational sense therefore serves to structure this thesis. While single objects are sometimes discussed as case studies, there is no attempt to write the biography of any one bead or pendant. Nor does this thesis attempt to present a kind of idealised biography of a seventh-century necklace. Instead, by following an object biographical framework, each chapter aims to aggregate the maximum contextual information of relevance to the topic at hand. Chapters 2 and 3 begin with the individual elements, focusing on their constituent materials and their contexts of manufacture. In this the potential meanings of different materials are explored, in addition to important questions of material supply and consumption. Chapter 4 explores the evidence for the use-lives of individual objects, highlighting points at which some individual elements were recontextualised. As well as considering the oft-used evidence of wear, repair and modification, insights from materials analysis and fine typo-chronological patterning are also considered as evidence for the complex biographical trajectories of individual items. From chapter 5 onwards focus shifts from the individual elements to necklaces as assemblages of materials. Chapter 5 addresses the composition of necklaces, how assemblages are put together and the general structuring principles underlying this, as well as considering the homogeneity of necklaces as a corpus of material. The practicalities of necklace-wearing are also examined, from their suspension to their relationship with other elements of costume. The evidence from the funerary context is the focus of chapter 6, the stage in the biography of these objects that seventh-century contemporaries might have considered the final recontextualisation in the lives of these objects, from elements worn in life as female dress accessories to gifts accompanying the deceased in the grave. Using a sample of burials with good contextual data, the gender and age associations of necklaces are examined. It is through the latter that the potential for the mirrored biographical trajectories of individuals and jewellery are considered. Chapter 7 steps back to take a broader contextual view of necklaces in seventh-century England. It addresses some of the broader questions and hypotheses surrounding the meaning of Conversion period material culture and the ways in which broader societal transitions shape and are, in turn, shaped by this jewellery. Finally, the evidence of the broader object biographical study is drawn together to shed light on the shifting funerary practices of the seventh century, by addressing the question of why these objects in particular so regularly made their way into female graves.

1.4: METHODOLOGY AND DATA COLLECTION

At the heart of this project are two databases recording all necklaces of seventh-century date from across England. Data was identified using both typological and chronological criteria. The objects themselves were those that (1) could be dated, primarily through typological and contextual dating, to phases AS-FD and AS-FE of the furnished female burial sequence, and (2) could be

identified as belonging to a necklace. While the former criterion is relatively straightforward (see below, section 1.5), the latter requires some clarification.

The definition of necklace adopted by the present study is deliberately broad. As the definition provided by the *Oxford English Dictionary* shows, 'necklace' can imply one of two types of objects: 'an ornamental *chain or string* of jewels, precious metals, beads etc., worn round the neck' (OED n.d.; author's italics). All of the jewellery of this kind from seventh-century England fits the latter category: they are assemblages of individual objects attached loosely to an organic string. There is no evidence that the necklaces worn in seventh-century England were conceived of as single objects, arranged and permanently fixed together in the manner that modern metal loop-in-loop chains are. For the period under discussion here, 'necklace' describes a collection of contextually-linked material. Therefore, it was decided to include all assemblages that fit this general definition, regardless of the total number of items present. The result is that the present corpus includes many necklaces composed of just a few items, as well as elements worn singly, for which there was sufficient contextual information (usually their position in the grave) to suggest they functioned as 'necklaces'. This identification is supported by the fact that many of the same object types suspended as part of complex necklace assemblages could also be worn singly, suggesting there was no fixed conceptual distinction drawn between the two. Equally, in a number of cases it was possible to identify necklace collections in unworn positions (usually deposited within small organic containers, such as bags or boxes; discussed in chapter 5.3.6) and so these have also been included in the project databases.

Of course, there is the possibility that some items that were originally worn as part of a necklace in seventh-century England have been missed due to a lack of contextual information. Single glass beads, for example, have not been classified as 'necklaces' unless this use is implied by their position in secure grave contexts, because it is clear that glass beads occasionally fulfilled other functions within female costume, attached to chatelaines, bracelets or decorating the edges of garments (for examples from seventh-century contexts see Hancock and Zeepvat 2018: 38, fig. 3.38; Penn 2000: 55, fig. 90; Evans et al. 2018: 332; see also Meaney 1981: 195–202).

The composite nature of necklaces, and the potential for these collections to be mutable and fluid, raises several interesting theoretical questions concerning the nature of assemblages, a subject to which this thesis returns at several points. More practically, however, it introduces a considerable methodological challenge, in that a necklace is simultaneously both a single composite item and a collection of contextually-linked individual objects. To accommodate this dual nature, from the outset of the project data was collected at two levels: that of the necklaces and that of individual objects. The foundations of this thesis are two Microsoft Access databases,

one (henceforth 'database I') collating information about necklaces, and the other ('database II') recording individual objects.

The process of data collection began by identifying cemeteries dating, either wholly or in part, to the seventh century, from which burials containing necklace collections could be extracted. Published gazetteers proved extremely useful in this regard, chiefly that provided by Geake (1997), supplemented by more recently published regional surveys, covering Kent (*Anglo-Saxon Kent Electronic Database* (ASKED); Richardson 2005), northern England (Buckberry 2004; Craig 2009) and the Wessex heartlands (Cherryson 2005). Other relevant seventh-century sites were identified from references in published material, searches of grey literature and enquiries with museums. Important unpublished sites (notably St Peter's Tip in Kent and Sheffield's Hill in Lincolnshire) have been included where access to the material was generously granted.[4] The aim of the data collection was to be as comprehensive as possible, but there are a small number of relevant sites that unfortunately could not be included within the project databases due to lack of readily available information.[5] In total, data collection revealed 143 sites, both cemeteries and single graves, that produced elements of necklaces datable to the seventh century; a full gazetteer of these sites is provided in Appendix I.[6]

Only burials for which there is a reasonable level of detail concerning the grave-goods (how many objects were present on each necklace, for example) and a record of the contents of each grave are recorded in database I. Database I records 574 burials containing a necklace, from 113 sites. The distribution of these sites is shown in figure 1.3. There is some variation in the quality of the available data: the publication of recent excavations provides a wealth of contextual information for each grave, as well as detailed descriptions and illustrations of each object. In some cases, it has also been possible to include the results of antiquarian excavations, the earliest of which are the series of Kentish cemeteries excavated by Rev. Bryan Faussett during the eighteenth century (Faussett 1856). While there is often a useable description of the necklace in the antiquarian reports consulted here, including the number of objects and a reasonably accurate indication of types, the same level of contextual data is not available for many of these burials. Only a small

[4] For this information sincere thanks are extended to Sue Brunning (British Museum) and Rose Nicholson (North Lincolnshire Museums Service).

[5] Examples of such unpublished cemeteries include the secondary early medieval burials in the Iron Age square barrow cemetery at Garton Station, E. Yorks. (for a brief summary see Stead 1991: 17–24), the larger part of the cemetery (graves 88–228) at Lord of the Manor, Ozengell, Kent (c.f. Richardson 2005: no. 209) and the sparsely furnished cemetery at Thornham, Norfolk (Gregory and Gurney 1986: 8). Post-excavation analysis is also ongoing at several recently excavated cemeteries dating in part to the seventh century, which will undoubtedly contribute further examples of necklaces of the type considered here. These include the cemetery of over 200 graves at Sittingbourne (Kent) and two substantial cemeteries on Salisbury Plain, at Tidworth and Bulford.

[6] In addition to listing these burial sites, the gazetteer also catalogues seventeen find-spots of seventh-century necklace elements, mostly older finds that pre-date the PAS.

proportion of artefacts are illustrated, plans of the grave were typically not drawn, with the position of artefacts merely described and there is no meaningful osteological data available, even where some excavators noted whether the grave was that of an adult or a child. Therefore, while database I records over 500 burials, in subsequent chapters it has often been necessary to utilise smaller sub-samples of the data; this is indicated clearly in each case.

Table 1.1 outlines the information collated in database I. Descriptions were standardised as much as possible, to facilitate both efficient recording and comparison across the dataset.

Record	**Description**
Necklace ID	Each necklace assemblage is given a reference consisting of the county and cemetery abbreviations (listed in table 1.3 and appendix I), plus the grave number following the format of the excavation report. In the case of single burials, these are listed as grave 01. Grave 8 at Exning is therefore given the ID SF.Ex.08.
Site name	The name by which the cemetery or site is conventionally known.
County	Here the pre-1974 historic counties are used.
Region	Each burial was assigned to a rough regional grouping defined by historic counties (listed in table 1.4). This division of the data was to allow for assessment of regional variation and should not be understood as corresponding to any historical realities (such as tribal groups or emerging kingdoms).
Coordinates	Given as six-digit eastings and northings.
No. of necklace components	The number of identified necklace components. Note that beads mounted on wire rings are counted as a single item.
Necklace components	The object types covered by the detailed object typology (see Appendix II). This builds on, and in some cases reworks or expands, previous typologies by Høilund-Nielsen (2013) and Brugmann (2004); for an overview, see below (section 1.5).
No. of individual types	The number of individual object types identified.
Bead colours present	The terminology of bead colours was standardised; colour descriptions are given in table 1.5.
Metal types present	Identification based on published descriptions or visual examination. No attempt is made to distinguish between different types of copper-alloy.
Date phases	Graves have been assigned to either phase AS-FD or AS-FE where possible. This was based on both the typological dates of the necklace components themselves, as well as those of any other closely dated objects from the same secure grave context. Since many object types span the transition from phase AS-FD to AS-FE, many necklaces cannot be assigned with confidence to one phase.
Skeletal material	Records the presence or absence of skeletal material.
Necklace position	Describes the position of the necklace items in relation to the body.
Osteological information	A variety of osteological information is recorded; the age and sex categories utilised are discussed in detail in chapter 6.2.

Body position	Four categories are used to describe the body position: supine, flexed, prone or unknown.
Details of grave	Various other details of the grave are recorded, including orientation, obvious skeletal pathologies, the presence of a coffin, double graves, evidence of disturbance or grave-robbing and the dimensions of the grave cut.
No. of other grave goods	The number of other grave-goods identified. Collections of objects worn at the waist, such as multiple latchlifters or a chatelaine, are counted as a single item.
Other grave goods	Descriptions closely follow the typological categories laid out by Høilund-Nielsen (2013).
References etc.	References, the date of excavation and the current museum location of the objects are given where the information is available.

Table 1.1: Outline of the information recorded in database I.

Individual objects are recorded in database II. This secondary database was broken down according to the broad object classes present, to allow object-specific information to be collected. Database II therefore consists of six individual tables, covering glass beads, amethyst beads, miscellaneous beads, pendants, wire rings and wire-mounted beads. Table 1.2 outlines the types of information collated in database II.

Record	Description
Object ID	For items from a secure funerary context, the object ID replicates the format of the necklace ID with an additional unique object number as a suffix. These object numbers follow the order of items listed in excavation reports where possible. In the case of stray or unassociated finds, the grave number is replaced with 00.
Site name	The name by which the cemetery or site is conventionally known.
Context	The nature of the objects – as secure grave finds, antiquarian finds or stray finds – is recorded.
Condition	The present state of the object is described, as either complete, broken or fragmentary.
Type	These descriptions correspond to the detailed object typology presented in Appendix I.
Material	Based on visual examination or published descriptions. For composite objects, primary and secondary materials are listed.
Colour (glass beads only)	Standardised terminology is used, based on that developed by Brugmann (2004: 24; see table 1.4). In the case of polychrome beads, both primary (i.e. the body of the bead) and secondary colours are recorded.[7]
Shape	For glass beads, standardised terminology developed by Brugmann (2004: 24; see table 1.6) is used. For other objects, a basic description is given.

[7] It is possible to characterise the colour of glass beads more accurately, using a set of standardised colour swatches (for a recent example of this approach see Delvaux 2018). For the purposes of this project, however, when a large number of beads were to be examined under variable lighting conditions, and when a proportion of the data sample was catalogued using published descriptions, it was decided to instead use a defined series of descriptors to characterise the colour of beads to allow for comparison across the sample.

Dimensions	Length, width and thickness are given in millimetres to one decimal place. For beads, the dimensions of the diameter (taken across the perforated face), length (taken longitudinally, parallel to the perforation) and perforation diameter are given.
Weight	Given in grams to one decimal place.
Wear and repair	Assessed based on visual examination and recorded using a series of descriptive categories; see chapter 4.2 for detailed discussion.
Accession no. etc.	Museum location, accession number and/or PAS reference number given.

Table 1.2: Outline of the information recorded in database II.

Database II also contains records of unassociated objects or stray finds not included in database I. Much of the unassociated material derives from antiquarian excavations. Stray finds were collected primarily from the Portable Antiquities Scheme (PAS) online database.[8] While much of this material probably derives from ploughed out graves, there is an obvious bias within this data in terms of both materials and object types represented, with the majority of stray finds recorded being pendants made from gold. Nevertheless, stray finds provide a valuable additional source of contextual information. Database II records 5,646 individual objects from both secure grave contexts and stray or antiquarian contexts.

Following initial cataloguing of the published data, a series of museum visits were undertaken by the author. Priority was given to museums holding the largest relevant collections. First-hand examination of the objects greatly refined the records in the secondary databases, allowing for accurate recording of object types as well as measurements. Each object examined was recorded on a proforma designed to correspond to the secondary databases (see appendix III for examples). Dimensions were taken using a set of plastic-tipped digital callipers and objects were weighed using a digital pocket scale. Objects were photographed against a grey felt background using a Nikon D3000 camera. A Dino-Lite AM4815ZT microscope was also used to examine and photograph fine surface detail of certain objects. A total of 1,458 objects were examined, recorded and photographed by the author, representing around a quarter of the total corpus.

1.5: OBJECT TYPOLOGY: AN OVERVIEW

The purpose of this final section is to provide an overview of the range of object types recorded in database II, in order to situate the reader. A detailed typology of all the objects examined during the course of this project can be found in appendix II. The typology and naming conventions utilised by the present project largely follows that produced by Høilund Nielsen (2013) and

[8] Available at www.finds.org.uk. A final search of the PAS was conducted on 1 October 2020.

Brugmann (2004) (see above, section 1.2), but in some cases the examination of a larger and more complete sample has allowed some categories to be slightly reworked or expanded. Figure 1.2, based on the chronological framework outlined by Hines and Bayliss (2013), summarises the chronological salience of the different object types discussed below.

The breakdown of the 5,646 objects recorded in database II into different classes is outlined in table 1.7.

Class	Number	Examined firsthand
Glass beads	3,241	812
Beads of other materials	949	353
Pendants	801	172
Wire rings	655	122

Table 1.7: The number of objects of each class recorded in database II.

Glass beads are the most numerous artefact category recorded. Despite this large number, there are relatively few bead types that characterise phases AS-FD and AS-FE (see figure 1.2). As noted, small monochrome bead forms predominate. Most beads are made from opaque glass, and greens and reds are the most common colours represented in the present corpus (c.f. Geake 1997: 45). The two most common types are the opaque wound spiral beads (type BE1-WoundSp) and the translucent doughnut beads (type BE1-Dghnt), both types dating to phases AS-FD and AS-FE (Hines and Bayliss 2013: 359, 362–3, tab. 10.1). Polychrome glass beads are relatively unusual in the seventh century, especially when compared to sixth-century necklace fashions (Brugmann 2004; see also Geake 1997: 43–4). Only two polychrome bead types appear to be new introductions during phase AS-FD (BE1-AnnTw and BE1-WhSpiral; see Hines and Bayliss 2013: 363, tab. 10.1) of these, the large and ornate annular twist beads are a relatively unusual form (see Guido 1999: 338–9). A small number of chronologically earlier polychrome bead types continue to be worn into phase AS-FD: beads of type BE1-Koch34 (specifically the blue-on-white variant) and BE1-CylRound are perhaps the best examples of types that persist in small numbers into the seventh century. The databases also capture small numbers of beads of types that appear to have ceased to be popular before the seventh century; these heirloom beads are discussed in chapter 4 (see below, section 4.5). Database II collects examples of beads securely dated to phases AS-FD and AS-FE from poorly recorded antiquarian contexts to contextualise the distribution of these seventh-century types (see figs. 9.42, 9.43); other beads are recorded only where they occur in secure grave contexts. Database II records large numbers of beads assigned to miscellaneous categories (types BE1-MiscMono and BE1-MiscPoly). Many of these beads derive from antiquarian excavations, where beads were not described in sufficient detail to attempt identification and where the beads have not passed into museum collections grouped according

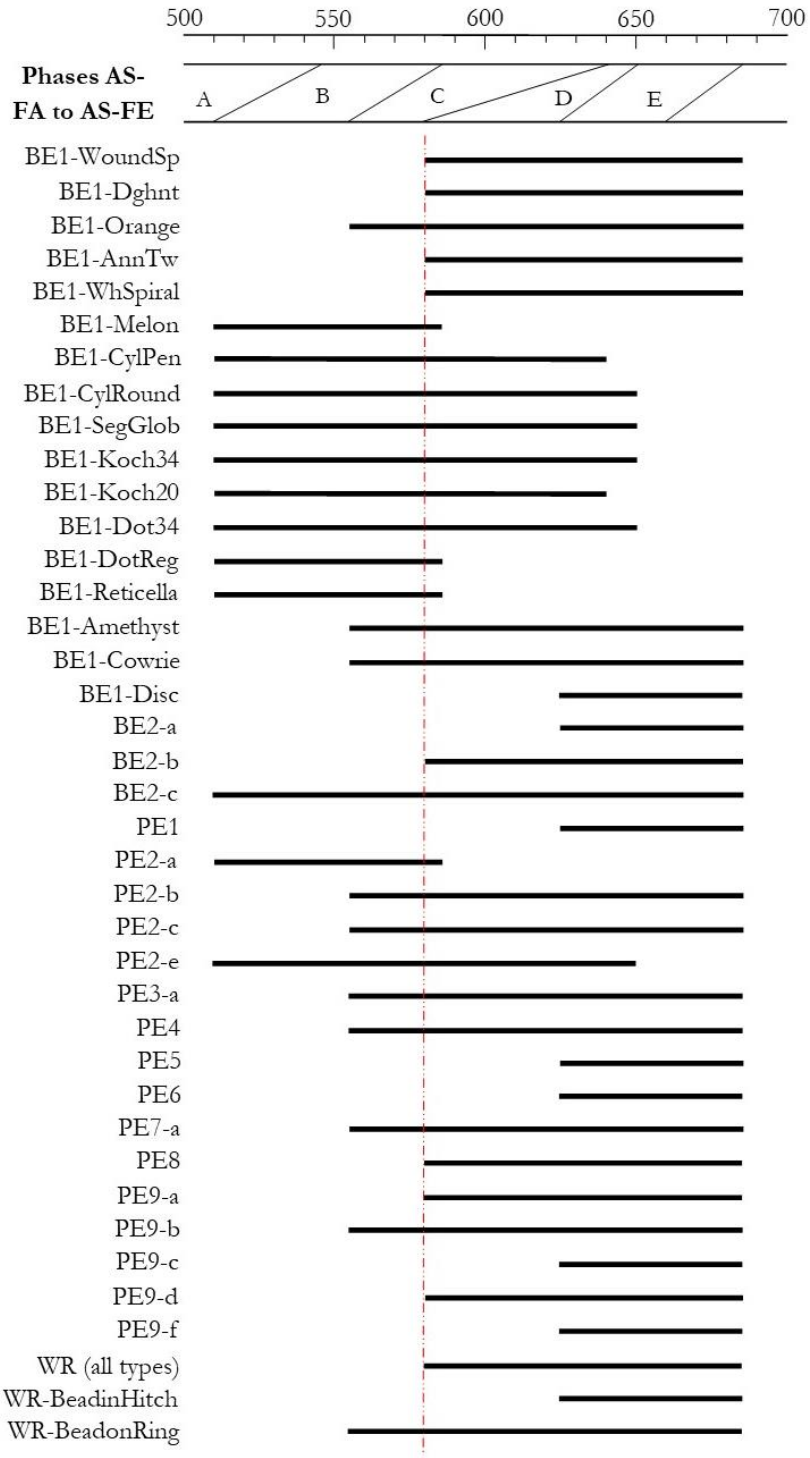


Figure 1.2: A representation of the chronological salience of various bead, pendant and wire ring types in the present study. The dashed line marks the earliest modelled date for the beginning of phase AS-FD. Artefact dating after Hines and Bayliss (2013: tab. 10.1).

to grave context. Although this represents a regrettable loss of valuable contextual information, the relative frequency of glass beads from more recent excavations allows conclusions regarding the typology, chronology and distribution of various types to be drawn.

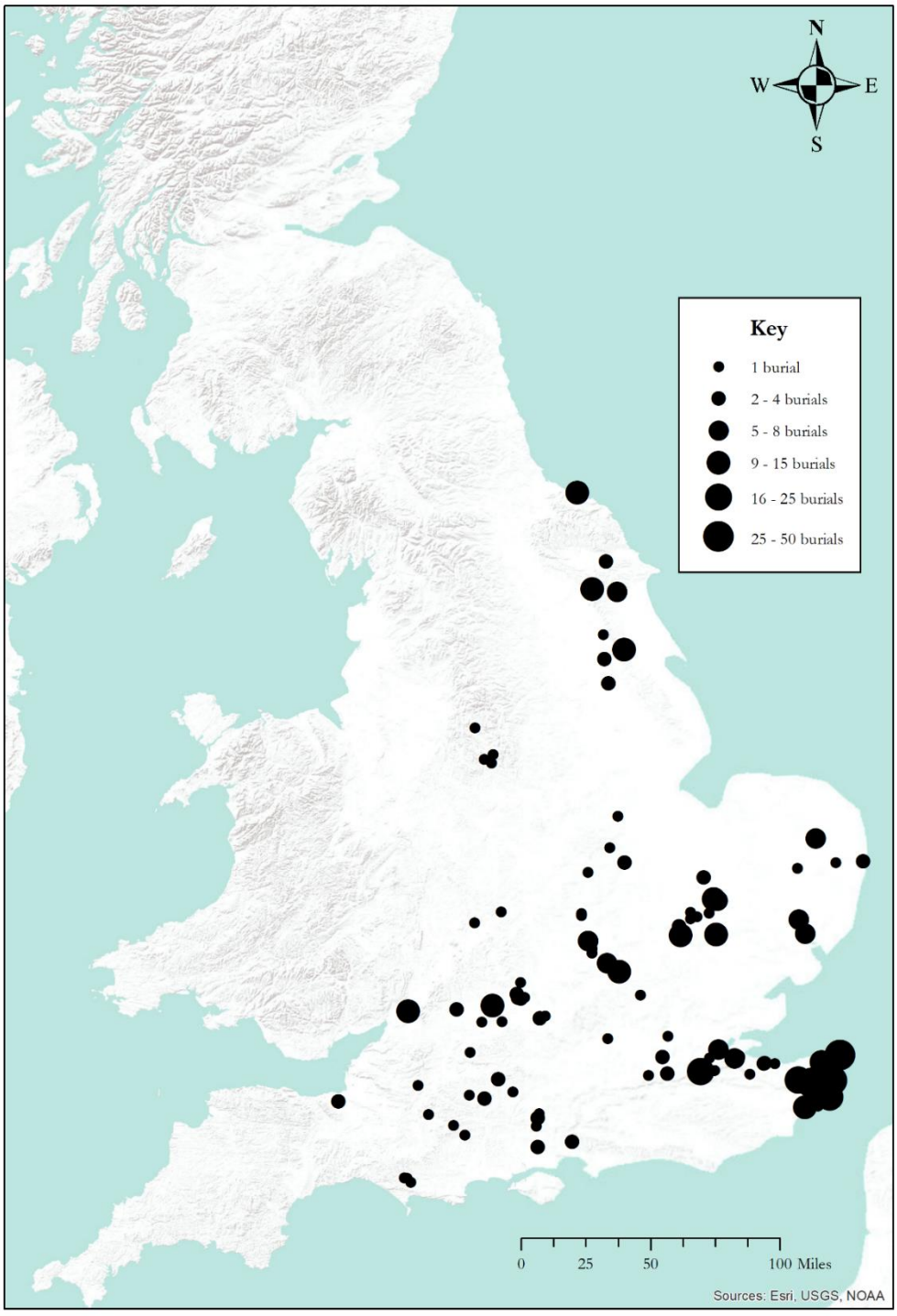


Figure 1.3: The distribution of the 574 graves containing a necklace collated in database I.

The seventh century also sees the introduction of a greater range of non-glass beads. During the fifth and sixth centuries amber was the primary form of non-glass bead worn (Owen-Crocker 2004: 87, 143). By the seventh century the popularity of amber beads (type BE3) had declined dramatically (Hines and Bayliss 2013: 359); the small number recorded in database II appear to

be another example of possible retained heirlooms (see below, chapter 4.5). Instead, beads made from amethyst (type BE1-Amethyst), cowrie shell (types BE1-Cowrie and BE1-Disc) and precious metals, mostly silver and gold (variants of type BE2) had become popular (Hines and Bayliss 2013: 538, 546; Owen-Crocker 2004: 143). Amethyst and cowrie shell beads, both imported materials, seem to have become available in Kent towards the end of the sixth century, during phase AS-FC, but persisted throughout phases AS-FD and AS-FE (Hines and Bayliss 2013: tab. 10.1; see also Huggett 1988). The biconical wire beads of type BE2-a, however, characterise the latest phase of furnished female burial, phase AS-FE (Hines and Bayliss 2013: tab. 10.1). Metal beads are among the object types recorded relatively frequently by the PAS.[9] Probably deriving from ploughed-out graves, recording of these stray finds provides a fuller understanding of the distribution of this type.

The popularity of pendants of diverse forms is perhaps the most characteristic feature of seventh-century necklace fashions (Owen-Crocker 2004: 144). During the sixth century, only simple scutiform pendants (type PE2) and bracteates (type PE3-b) were worn, and the latter are strongly associated with Kent (Hawkes and Pollard 1981; Behr 2000). Perhaps because pendants became such an important part of female jewellery from the early seventh century onwards, both types persisted in use, although new subtypes of both developed, datable specifically to phases AS-FD and AS-FE (types PE2-c and PE2-d and type PE3-a; Hines and Bayliss 2013: tab. 10.1). A range of distinctively seventh-century pendant types were also introduced, the most common of which are the precious metal composite disc pendants (variants of type PE1), a variety of inlaid pendants, set with cabochon gemstones or decorative glass (type PE9) and the small domed bulla pendants (type PE8) (dating after Hines and Bayliss 2013: tab. 10.1). Smaller numbers of other miscellaneous types are also recorded, which attest to the general popularity of pendants as an element of seventh-century necklaces. Some pendant types date specifically to the latest phase of furnished female burial, including the composite disc pendants and the small number of cruciform pendants (type PE5). Most other types were popular across phases AS-FD and AS-FE (see fig. 1.2). Pendants are another class of objects that are well represented among the stray finds. Numerous stray finds of composite disc pendants (type PE1), for example, have allowed for the further division of this group of objects into sub-types based on their iconography (see Appendix II for details).[10]

The final class of objects represented among the corpus of seventh-century necklaces are wire-rings. These are frequently delicate objects, made from thin (usually silver wire) shaped into a ring

[9] Examples include KENT-7009B3, SF-40CB01, NMS-6F95B0, BERK-71D8C4, WMID-033CC3, LIN-18EEC1 and PAS-2B1E44.
[10] Examples of composite disc pendants recorded by the PAS include ESS-7E4F06, NLM-DD07EF, LIN-7A7C04, NMS-4198A8, LEIC-47932A, SF-B6EFA1 and LVPL-C2D4CE.

and featuring a decorative terminal. For the purposes of the present project a new typology based on the form of these terminals is proposed (see Appendix II). The delicacy of wire rings means that often they are recovered in a fragmentary condition. Many wire rings are therefore recorded within an unidentified category in database II, and it is possible that the total number of wire rings present in a necklace is sometimes underestimated. There are a small number of precursors to the carefully made wire-rings of the seventh century in later sixth-century graves (Hawkes 1973: 192). Often these earlier examples are constructed from copper-alloys and feature simpler, loosely fastened terminals. A related practice was the suspension of beads of various types from wire rings. In most cases the wire simply passed through the perforation of the bead (type WR-BeadonRing) but occasionally more complex suspension hitches were constructed from wire (WR-BeadinHitch). This latter form appears to characterise the latest phase of female furnished burial, AS-FE, while the former has a longer chronological salience (dating after Hines and Bayliss 2013: tab. 10.1). Since the construction of the ring or hitch permanently fastened the bead in place, beads suspended from rings or hitches have been categorised as a single object in the present databases. Again, it is possible that the fragmentation of thin silver wire means that some beads originally suspended in this manner have been recorded amongst the unmodified types.

As figure 1.2 shows, many of the object types that make up seventh-century necklaces span phases AS-FD and AS-FE. Indeed, the primary distinction between the two phases is the introduction of a small number of pendant and bead types during phase AS-FE. The result of this is that, of the 571 burials catalogued in database I, only a small proportion can be dated to one specific phase, mostly to phase AS-FE.

1.6: A NOTE ON TERMINOLOGY

As this introductory chapter has demonstrated, a long history of scholarship has resulted in a number of terms to describe the various periods between the fifth and seventh centuries. Neither Final Phase nor Conversion Period are entirely satisfactory terms, especially since the former carries associated semantic baggage that is challenged by the results of recent typo-chronological research. For the purposes of this study, 'seventh century' is often used as a convenient shorthand for the distinctive burial traditions that characterise phases AS-FD and AS-FE. Conversion Period is sometimes utilised, especially when a distinction is made between this later phase and the earlier Migration Period, which itself is a useful catch-all term for the burial traditions of the later fifth and sixth centuries.

'England' is sometimes also used as a convenient shorthand to refer to the regions of lowland Britain where there is evidence for early medieval burial (and settlement) of the kind explored in

the current project (see fig. 1.3). It should not be understood as implying that England formed a cohesive political unit during this period; instead, the widespread connections implied by the distribution of burials and objects recorded here appear to be cultural links made across mutable and murky political frontiers. On a related note, it is important to acknowledge the recent problematisation of the term 'Anglo-Saxon'. Repeated misappropriation of the term means that it carries deeply problematic connotations within modern socio-political discourse. Where it is used in the present thesis, it is strictly understood as a geographical and chronological label (referring for the early medieval archaeology of southern and eastern regions of Britain from the later fifth century to the end of the seventh century) and is only used in cases where such geographical and chronological specificity is necessary for the clarity of the overall argument.

This thesis also refers to necklaces as objects worn by women throughout. Previous studies have established that necklaces – along with other forms of jewellery – were gendered objects in seventh-century England, worn by and buried with biologically female individuals. (Geake 1997: 51). The specific gender and age associations of necklaces are explored in detail in chapter 6, but for convenience in earlier chapters necklaces are understood and referred to as objects circulating in distinctly feminine spheres.

CHAPTER TWO: MATERIALS AND MATERIALITY

2.1: INTRODUCTION

Materially-speaking, the typical seventh-century necklace is very different to the jewellery worn by high-status women in preceding centuries. Where once the most obviously ostentatious female jewellery – brooches, wrist clasps and belt-buckles – were produced largely from copper-alloys (for an overview, see Lucy 2000: 25–47), the necklaces of the seventh century are characterised by a greater range of materials. Interpretations of these different objects have been varied: many of them are items that have been considered particularly prestigious or exotic. Other items are of a more unusual, esoteric nature. The purpose of this chapter is therefore to explore some of the diverse materials that came to be incorporated into necklace assemblages during the seventh century. It explores questions of provenance, use and meaning.

2.2: MATERIALS

The wide range of materials within the necklace corpus is shown in figure 2.1. A distinction is made between primary and secondary materials, given the presence of multiple composite objects within the corpus. For the purposes of categorisation, precious metal pendant frames are considered primary materials and gemstone and other inlays are classified as secondary materials.

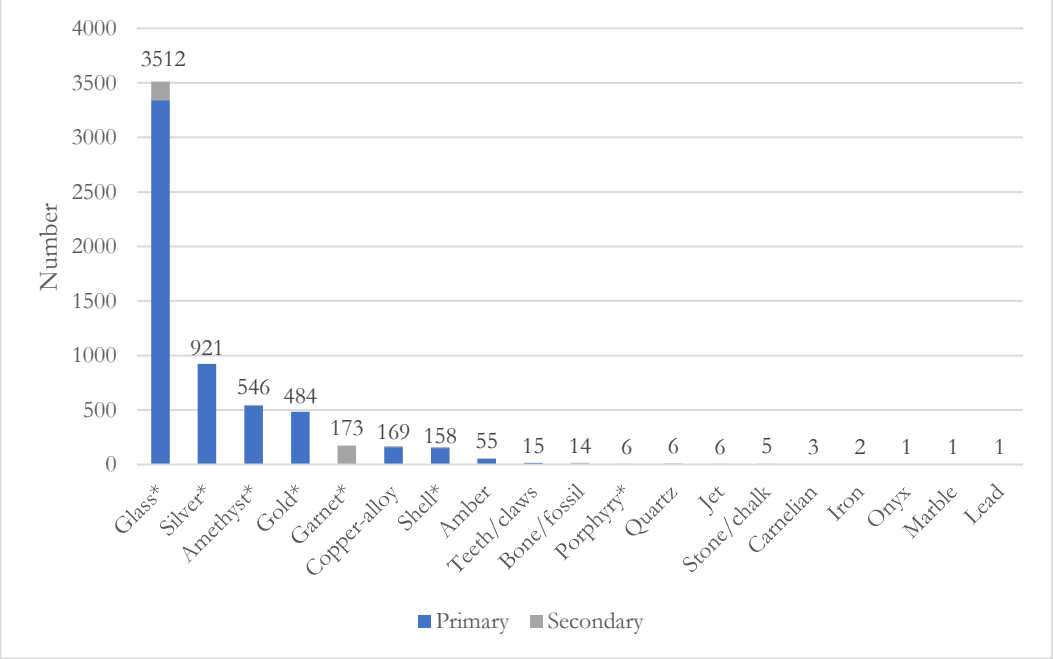


Figure 2.1: The range of materials present in the necklace corpus. Materials discussed in this chapter are marked with an asterisk (*).

In the case of beads suspended on wire-rings, again, the metal elements are considered the primary material. The discussion of materials in this chapter is not intended to be exhaustive. Instead, selected case studies focus on the most commonly occurring materials, those which have been most frequently discussed in the literature and those which have the potential to shed most light on the meaning and symbolic resonances of seventh-century necklaces. For a fuller discussion of the range of materials present, the reader is referred to Appendix II.

2.2.1: GOLD

Increasing use of gold is one characteristic of the newly introduced necklace styles of the seventh century (Hines and Bayliss 2013: 538). Database II records 487 objects constructed principally from gold (table 2.1). In part, this number reflects the significant proportion of precious metal objects among the corpus of stray finds, since these items are much more likely to be recovered during metal-detecting than the non-metallic elements of female jewellery. There are underlying chronological patterns here too. Many object types constructed principally from gold – composite disc pendants (class PE1), biconical wire beads (type BE2-a) and various types of inlaid pendant (class PE9) – are dated to phase AS-FE, the phase that sees the most dramatic peak in the frequency of furnished female burials (Hines and Bayliss 2013). Therefore, the general archaeological visibility of female graves during this latest phase of furnished burial is matched by a significant investment in a material sense, in the form of gold, towards the middle of the seventh century. This is a new phenomenon. Prior to the seventh century, items of female jewellery constructed primarily or even partially from gold are scarce (Harrington and Welch 2014: 164; Scull 2013: 546). The only major class of fifth- and sixth-century dress accessories made from gold are the early bracteates (type PE2-b), which are relatively rare items with a distribution concentrated in Kent (Hawkes and Pollard 1981; Behr 2000).

The increasing investment of gold in female jewellery fits into broader contemporary trends. Treasures like the Sutton Hoo regalia and the Staffordshire Hoard contribute to the impression that the seventh century was, quite literally, a golden age. These two assemblages represent the investment of gold as a material in a decidedly martial and masculine sphere. It is important, however, to recognise the important differences in the use of gold in feminine versus masculine contexts. The deposition of gold in the princely graves at Sutton Hoo and in the Staffordshire Hoard is both remarkably rich and relatively unusual. By contrast the female furnished burials attest to the much more regular deposition of smaller quantities of gold. Therefore, there are important gendered differences in the use of gold during the seventh century. To explore this further, it is necessary to examine how the material was sourced and how it was used.

Object class	No. of gold items
Pendants (various types)	411
Beads (mostly type BE2)	69
Wire rings	7

Table 2.1: Gold objects from database II according to type.

There have been a series of compositional analyses of Anglo-Saxon gold jewellery. Perhaps most important were two early studies, undertaken by Sonia Hawkes and colleagues (1966) and Brown and Schweizer (1973) that examined significant collections of seventh-century goldwork, in the World Museum, Liverpool and the Ashmolean respectively. This data can be supplemented with the results of smaller-scale compositional studies, typically focusing on objects from a single cemetery and presented as specialist reports in the site publications. Table 2.2 collates all the available compositional data for objects in the present corpus. Caution must be exercised when comparing the results of various programmes of compositional analysis. Different analytical techniques, and different instruments, are used in each study. In some cases, surfaces layers are abraded in a discrete area, in an attempt to analyse to analyse the bulk metal content (e.g. Hawkes et al. 1966; Brown and Schweizer 1973); others are necessarily non-destructive and therefore semi-quantitative, since the results may be affected by natural processes of surface enrichment (e.g. Turner-Walker et al. 1995; Jones 2012). Nevertheless, table 2.2 gives an idea of the range of compositional values across the necklace corpus.

Almost all Anglo-Saxon gold objects are ternary alloys, with varying proportions of silver and a small amount of copper. The same kind of ternary alloys are found in contemporary coinage, demonstrating that coins were the most significant source of gold in seventh-century England (Hawkes et al. 1966). There is little evidence for the exploitation of native gold sources in the British Isles, which sit outside the distribution of Anglo-Saxon settlements during the period, in lowland Scotland and along the Welsh coastlines.[11] It is possible that recycling of Roman gold objects may have introduced relatively high purity gold into the circulating stocks, since such material was quite clearly available on occasion (see below, chapter 2.2.7). Tracing the contribution that reused antique material might have made is difficult, however, in part because of the similarity of late Roman gold alloys to early medieval ones,[12] and also because the overall contribution of this material compared to contemporary coinage was almost certainly minor. The

[11] The chronology of gold use in these regions is perhaps the strongest evidence – albeit negative – for the absence of British gold deposits in Anglo-Saxon jewellery, since high-quality gold objects continued to be produced in early medieval Scotland and Ireland into the eighth and ninth centuries, by which time Anglo-Saxon metalworkers had switched over to silver almost entirely, for jewellery, metalwork and coinage (Whitfield 1993: 126).

[12] The gold jewellery in the late fourth-century Thetford Hoard, for example, was composed of ternary alloys, with small amounts of silver and copper. The average gold content was 93.3% (Johns and Potter 1983: 59).

consistently low copper content of the Anglo-Saxon gold objects, rarely exceeding five percent, also shows that there were no efforts to stretch gold supplies using copper, either freshly mined or in the form of scrap (Blakelock et al. 2016: 50–1). The supply of gold for jewellery was therefore closely intertwined with the general availability of coins.

The relationship between jewellery and coinage can also be seen via evidence for debasement. Both Merovingian and Anglo-Saxon coins show a progressive reduction in gold content throughout the seventh century (Williams and Hook 2013). This was the result of decreasing quantities of gold (almost certainly also arriving in coined form, which was then melted down) reaching north-western Europe from the Mediterranean in the form of tribute, subsidies and diplomatic gifts from the later sixth century onwards. Silver was added in increasing proportions to extend gold supplies. Correspondingly, much of the seventh-century female jewellery shows a considerable range in fineness, from relatively pure to considerably debased (fig. 2.2).

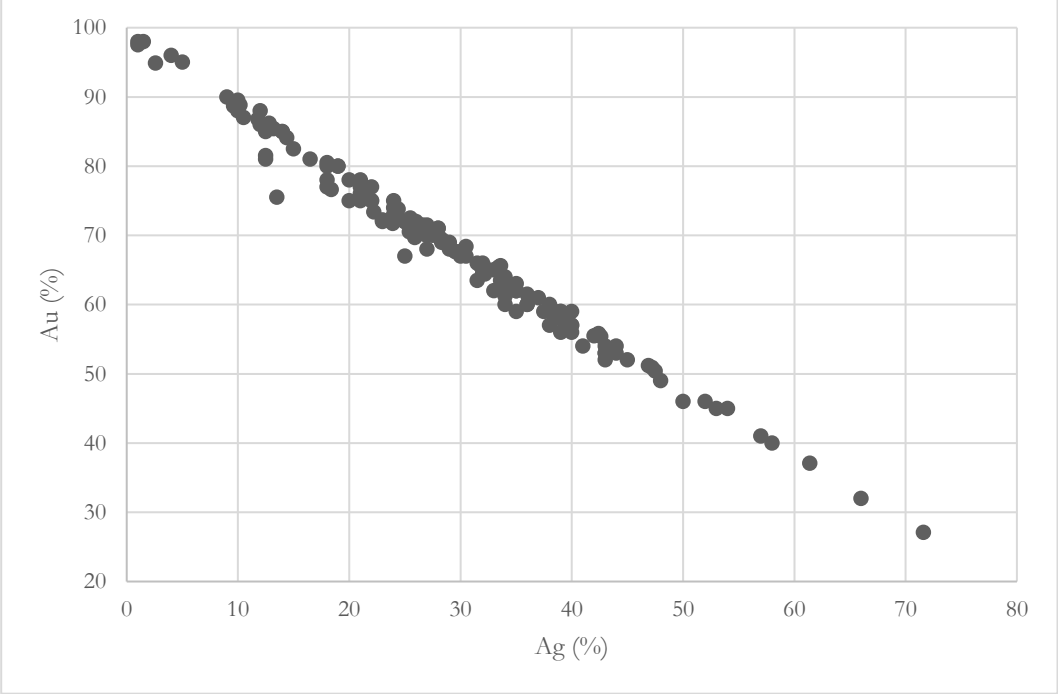


Figure 2.2: Fineness graph showing the relative gold and silver content of eighty-two gold necklace objects; 156 data points in total. See table 2.2 for details.

The variability in the gold contents of the necklace items can be compared to other contemporary material culture. Figure 2.3 plots the available compositional data for objects in the necklace corpus against that of a selection of the gold objects from the Staffordshire Hoard (after Blakelock et al. 2016). While the gold objects are composed of the same type of ternary alloys, the Staffordshire Hoard objects show much less variation in their overall gold content compared to the necklace elements and are generally made from much purer gold (fig. 2.4). One explanation

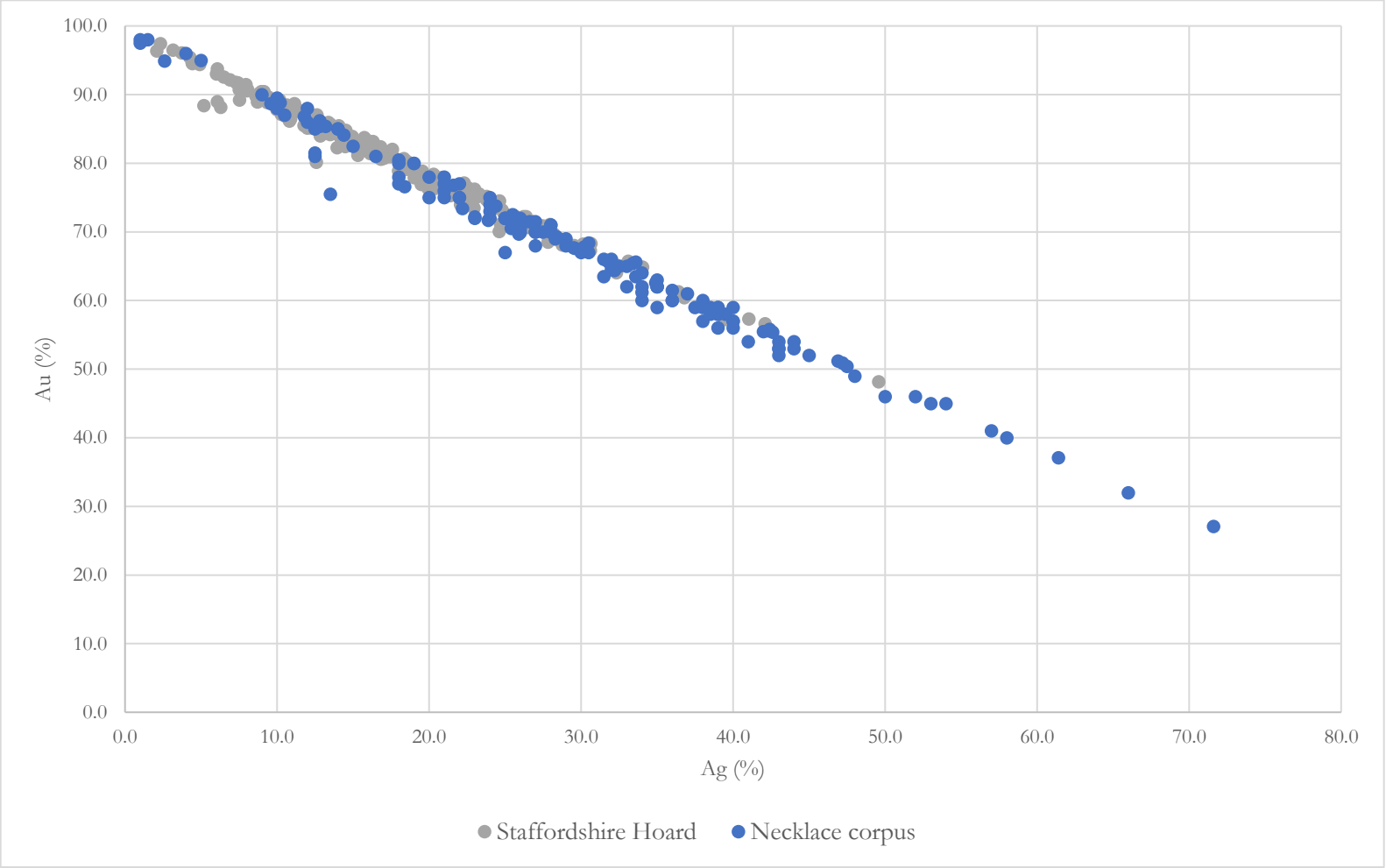


Figure 2.3: A comparison of the range in relative gold and silver contents of gold objects from the necklace corpus and the Staffordshire Hoard. Data on the Staffordshire Hoard objects after Blacklock et al. (2016).

for this discrepancy might simply be differing underlying chronological patterning: that the necklace elements were, generally speaking, manufactured later than the contextually-linked objects of the Staffordshire Hoard, at a point when the gold content of coins had declined accordingly.

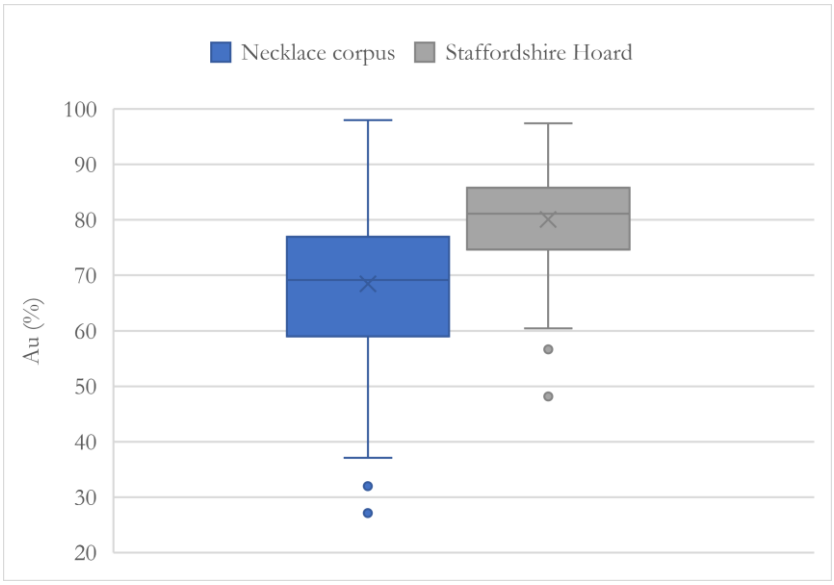


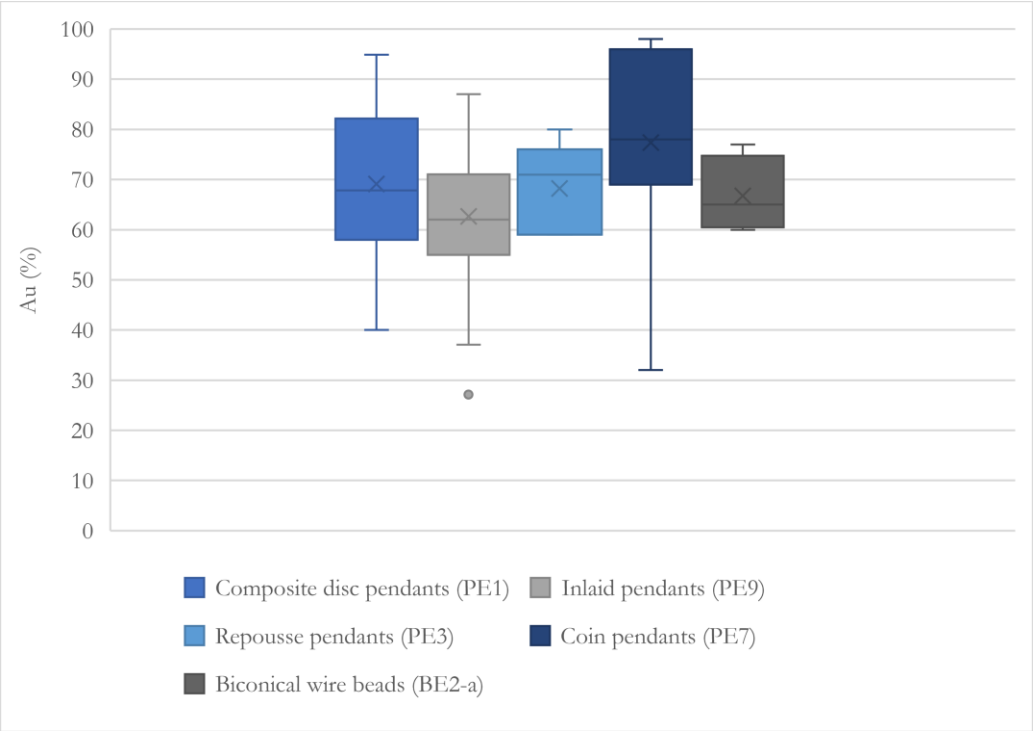
Figure 2.4: Box-and-whisker graph comparing the range in gold contents of objects from the necklace corpus and from the Staffordshire Hoard. Data on the Staffordshire Hoard objects after Blakelock et al. (2016).

A similar kind of straightforward chronological patterning has been suggested previously. As coins can be closely dated, fineness graphs have been produced, notably by Kent (1972), charting the debasement of gold supplies with an apparently high degree of chronological precision. There have been attempts to use such graphs to provide accurate dates for gold jewellery, principally by Brown and Schweizer (1973: table 1), but also more recently (e.g. Turner-Walker et al. 1995: 400), despite early – and justified – criticism (e.g. Hughes et al. 1978).

The problems associated with this gold-fineness dating are numerous. Firstly, new research is beginning to show that the debasement of the early gold coinages is a more complex and less 'neat' process than had first been imagined. Comparing the gold content of die-linked coins has demonstrated that the control of gold supplies even at the mint was not always particularly careful (Williams and Hook 2013: 67). It is also clear that coins did not drop out of circulation once new, more debased issues became available, and so a wide variety of types were in use at one time. The best evidence for the variety of coins available for transforming into jewellery are those that

survived the process intact: the coin pendants (class PE7).[13] As well as contemporary *tremisses* and *thrymsas*, both late Roman gold *solidi* (fig. 9.104iv) and early seventh-century Byzantine gold *solidi* (fig. 9.104iii) were clearly in circulation. The latest imperial gold coins to have arrived in seventh-century England in substantial numbers are those minted during the joint reign of the Byzantine emperors Heraclius and Heraclius Constantine (AD610–641; Bland and Loriot 2010: table 32).

Official imperial coinage maintained a consistently high gold standard into the eleventh century (Oddy and La Niece 1986). The variety of coins in circulation, with variable compositions, therefore cautions against using gold content as any kind of chronological indicator. This observation is also borne out by the results of the Staffordshire Hoard analysis itself, which found no connection between gold alloy compositions and the typological date of artefacts (Blakelock et al 2016: 52). Equally, there seems to be little correlation between particular pendant types catalogued in the present study and gold contents (fig. 2.5). The only possible exception are coin pendants (type PE7), which show a generally higher average gold content (although admittedly this is based on just eleven samples). Since coin pendants were worn during phases AS-FD and AS-FE (Hines and Bayliss 2013: tab. 10.1), this is unlikely to reflect underlying chronological patterning. It is possible that the access to gold coins for transformation into jewellery is itself indicative of access to supplies of gold of higher purity.



[13] It should be noted, however, that there may have been specific and meaningful reasons behind the selection of particular coins or types for modification. These objects are unlikely to represent a random, representative sample of all coins in circulation.

Figure 2.5: Box-and-whisker graph showing the range in gold content of objects of various classes. Note that in the case of the coin pendants, the compositional data used is that of the loop or pendant frame, rather than the coin itself.

As well as the compositional evidence that calls into questions whether the gold in coinage was debased at a smooth and regular rate, there are other reasons to question the applicability of gold fineness dating to the gold jewellery of the seventh century. Even though coins are ultimately the source of much of the gold in the necklace corpus, the relationship between the two is almost certainly not as straightforward as has perhaps been imagined. This can be demonstrated by examining the weight of gold objects in the corpus. Figure 2.6 presents the weight in grams of sixty-one gold objects that can be identified as comprising only of gold. This number includes some objects that originally featured other materials, such as garnet inlays, which are now missing. Broken objects have not been included. This data includes measurements collected first-hand by the author during museum-based research visits and information collected from the PAS database.

The red lines on the graph represent increments of 1.3g, which was the nominal weight of the gold *tremissis* after the sixth century (Williams 2014: 40). Since *tremisses* were a third of the weight of contemporary *solidi*, the uppermost red line corresponds to the nominal weight of these larger coins. The lack of any correlation between the weight of the gold jewellery items and the weight standard for contemporary coins shows that the relationship between coins and jewellery is not particularly direct. In other words, the gold used in the manufacture of many of the pendants and bead types in the present corpus is unlikely to have been in coined form. This observation can be compared with the results of previous studies, which have examined the weight of gold artefacts in the Sutton Hoo regalia and revealed a close correlation with contemporary weight standards of coins (Spratling 1980; Hines 2010). The great gold buckle from the ship burial in Mound 1, for example, at 403.35g, is the very close to the nominal weight of 300 *tremisses*, the *wergild* specified for noblemen in contemporary Kentish lawcodes (Hines 2010: 57). However, it is perhaps not surprising that the same kind of immediate relationship between coins and jewellery is not evident within the female jewellery as it is in princely regalia.

Instead, the evidence of the female jewellery points to the existence of a complex dual-currency economy, in which bullion almost certainly circulated alongside coinage (c.f. Kershaw 2017). Imported gold coins certainly provided the ultimate source of much of the gold, perhaps supplemented by the occasional discovery and melting down of Roman or prehistoric objects (see below, section 2.2.7), and there is little evidence that this supply was ever deliberately extended using available copper-alloys. However, there are likely to have been several steps between the arrival of gold in coin form and its use to produce female jewellery. Recycling of old objects was

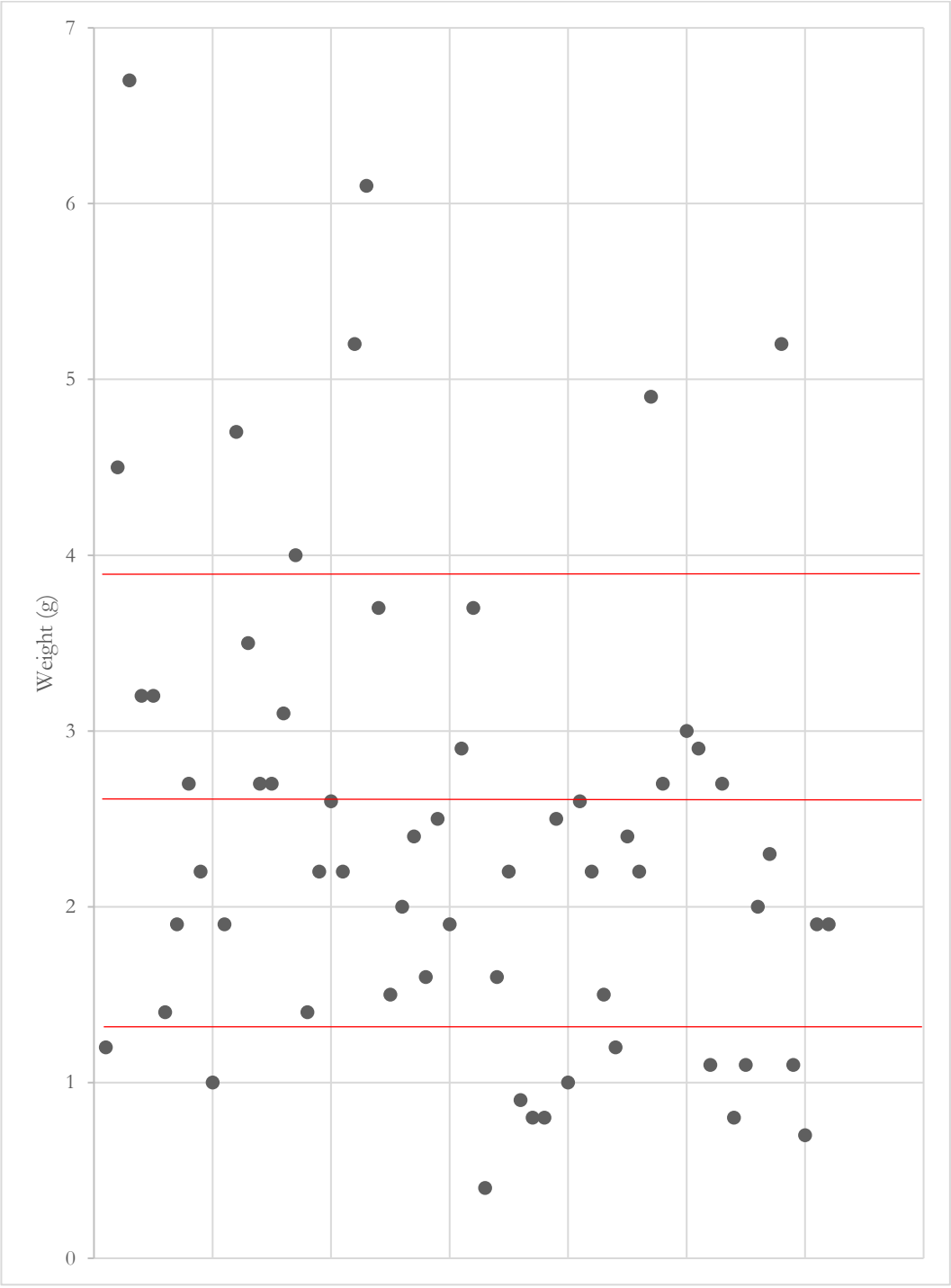


Figure 2.6: The weight in grams of 61 gold objects recorded in database II. The red lines on the graph represent increments of 1.3g.

almost certainly a very widespread process. Archaeological traces of what must have been a fairly intense recycling economy can be hard to detect, but it does seem to be evident in the systematic and fairly careless dismantling of objects in the Staffordshire Hoard (Blakelock et al. 2016: 44; Dickinson et al. 2019: 357–9). It is also probable that small quantities gold circulated in uncoined

form, perhaps as ingots, although archaeological evidence for this is understandably scarce (see below, chapter 3.4.2).

2.2.2: SILVER

There are indications that, into the seventh century, the availability of silver follows the same trajectory as gold. Silver is relatively common within the corpus of necklace material. The secondary databases record 920 objects constructed principally from silver, mostly wire rings (n. 584), pendants (n. 273) and beads (n. 63).

The apparent abundance of silver in the seventh century – as reflected in the necklace corpus – can, again, be compared with the situation in the fifth and sixth centuries, when silver seems to have been relatively scarce (Scull 2013: 546). Of all the Anglo-Saxon brooches recorded by the recent *Beyond the Tribal Hideage* project, just eight percent were constructed principally from silver and the distribution of silver objects clusters primarily in Kent (Harrington and Welch 2014: 169–72). The consensus is that this small amount of silver circulating in fifth- and sixth-century England is derived from surviving late Roman stocks (Leigh et al. 1984; Harrington and Welch 2014: 168–9). The presence of lead, zinc and, in some cases, tin in many of these objects speaks to an intensive process of recycling, in which copper was introduced in the form of existing copper-alloy scrap to eke out the available silver supplies (Leigh et al. 1984: 38). Compositional data helps to illustrate the extent of this recycling and debasement during the fifth and sixth centuries. A collection of sixth-century Kentish square-headed brooches, for example, have a silver content ranging between 69.6 and 96.3 percent (Leigh et al. 1984). Comparable brooches from Suffolk are so debased as to contain only around thirty percent silver (Brownsword and Hines 1993: 2). The British Museum's online catalogue reports a similarly low silver content for a square-headed brooch from a sixth-century grave at Chessel Down.[14]

If one assumes the same pool of continuously recycled Roman silver was the main metal source into the seventh century, a reasonable expectation would be that the seventh-century silver jewellery would be as, if not more, debased than earlier objects. This is not borne out by the small amount of compositional data available for the silver items in the necklace corpus (see table 2.3). Again, while it is important to remember that this small quantity of data should be considered semi-quantitative, overall the results suggest that the silver used to make items in the seventh-century necklace corpus was of a fairly high purity. No objects have a silver content lower than eighty-four percent. Other groups of silver objects from necklace contexts have been analysed

[14] See https://www.britishmuseum.org/collection, catalogue no. 1867,0729.5.

qualitatively, and these results also suggest reasonably pure silver with a small admixture of copper-alloy scrap (Wilthew 2006a; Mortimer 2011: 113; Haworth 2018).

Although more compositional results would be needed to confirm this hypothesis, the data seems to suggest the introduction of new sources of silver in the seventh century. It remains to be seen in what form these new stocks were introduced. By the early eighth century Bede was clearly aware of deposits of argentiferous lead ores within the British Isles (*Historia ecclesiastica* I.1, transl. McClure and Collins 1994: 9), but if these sources were exploited during the early Anglo-Saxon period, this seems to have been on a relatively small, local scale (Hinton 2011: 427). The importation of silver from the eastern Mediterranean (c.f. Naismith 2014: 10; Hinton 2011: 427) is another possibility, one which would not be inconsistent with other evidence for long-distance movement of prestige goods during the seventh century (see below, section 2.2.6). Some of this silver may have been in the form of plate, as exemplified by the ten Byzantine silver bowls and the Anastasius dish in the Sutton Hoo ship-burial (Bruce-Mitford 1983: 1–165). Bede's account of Oswald of Northumbria breaking apart a silver dish to provide alms for the poor (*Historia ecclesiastica* III.6, transl. McClure and Collins 1994: 9) perhaps echoes wider practices of transforming precious metal objects into bullion for reuse.

Extraction of freshly mined silver on the continent towards the middle of the seventh century may also be relevant here. Recent analysis of Alpine ice-core data has shown that the extraction of silver from the mines in Melle (dep. Deux-Sèvres) began in AD640±10 and intensified around AD660±10 (Loveluck et al. 2018). The exploitation of the Melle silver deposits is almost certainly connected with the minting of the earliest Anglo-Saxon *sceattas* (Loveluck et al. 2018: 1580–1), but whether the chronological models allow for this fresh silver to have made any contribution to the wider pool of available metal in seventh-century England is, at present, uncertain.

In addition to the evidence for new sources of higher purity silver, it is also interesting to note a shift in the way that silver was used in the seventh century. Rather than occasionally producing larger, cast items using debased silver, as was seen in the sixth century, the seventh-century objects made from higher purity silver are fairly small and delicate. The recorded weights of complete wire rings, for example, range between 0.3g and 1.5g and for silver pendants between 0.1 and 0.7g. The emphasis on delicacy seen in seventh-century female jewellery may in part be motivated by a desire to make the most of a relatively limited supply of higher-purity silver.

2.2.3: GLASS

In terms of the sheer number of objects represented, glass is by far the most common material in the corpus of seventh-century necklace material. The secondary database catalogue 3241 glass beads, and glass in various forms is also a feature of some pendants (types PE9-d, for example). However, when considering the sources and use of glass as a material, it is important to distinguish between three different types of objects: (1) heirloom items that were already a few generations old when buried, or, more rarely antiques; (2) imported beads that arrived in finished form and (3) contemporary glass items manufactured in seventh-century England. The present discussion will focus only on the latter category, as evidence for the circulation and use of glass in seventh-century England; imported and heirloom bead types will be examined in subsequent sections (see below, chapters 2.2.6 and 4.5).

It is essential to distinguish between the production of glass in its raw form and the manufacture of glass objects. All early medieval glass objects, including beads, vessels and window glass, are made from soda-lime-silica glass, produced by mixing calcareous quartz-rich sand with natron, a mineral soda (Freestone et al. 2008: 29; Peake 2013: 496). The production of raw glass therefore depends on the availability of both a source of sand with the correct lime content and natron; the former tend to be found in the coastal zones of the Levant and the latter has only been identified in Egypt. Therefore, for much of the first millennium, primary glass production took place close to the source materials, at a limited number of locations in the eastern Mediterranean. Previous studies have identified at least five different glass types produced in Egypt and the Levant between the fourth and ninth centuries AD, each representing a primary glassmaking centre (Freestone et al. 2008: 32). In discussing how glass was sourced to make beads and pendants in the seventh century, therefore, the important question is in what form was glass available for reuse, rather than necessarily at what primary production centre was the glass originally made.

Hypothetically there are few different forms in which glass would plausibly have been available for transforming into beads. One is as cullet, in the form of window- or vessel-glass sherds. This might have been available on an *ad hoc* basis, especially where scavenged from Roman sites, but trade in cullet is also a possibility. The alternative is the exchange of unformed lumps of raw glass, from which chips could be broken off for reworking. Bead-making sites in sixth- and seventh-century Maastricht and eighth-century Ribe have revealed chunks of unformed glass and corresponding splinters, mostly dark cobalt blue in colour, representing supplies of material awaiting reworking (Saberolles et al. 1997: 297; Jensen 1991: 37). Another important source of glass may have been mosaic *tesserae*, again either contemporary products (probably from northern

Italian workshops) or scavenged from Roman sites (Freestone et al. 2008: 41). A blue glass *tessara* of this type was recovered from Flixborough (Leahy 2003: 107).

There is some evidence to suggest that glass supplies became generally scarce from the later sixth century onwards. Analysis of fifth- and early sixth-century vessel glass has suggested that fresh glass supplies continued to be available, probably from the continent, after the end of Roman Britain, although glass stocks were supplemented by some recycling of older material. Compositional analysis of later vessels, dated to the sixth and seventh centuries, have revealed an admixture of poor-quality glass rich in potash to the natron-based glass in circulation (Freestone et al. 2008). These potash glasses were probably produced in north-western Europe and seem to represent an attempt to extend a declining glass supply. Other evidence from the seventh century onwards also implies more intense recycling of glass during this period. Analysis of glass used as a decorative inlay in seventh-century Anglo-Saxon jewellery revealed evidence for the reuse of Roman glasses, in the form of antimony-based opacifying agents, which fell out of use from the third century onwards (Bimson and Freestone 2000). There is also evidence for the deliberate curation of glass cullet from the Middle Saxon period onwards, as demonstrated substantial assemblages of vessel glass at Winchester and Southampton (Leahy 2003: 107; Peake 2013: 38–9).

Although there are more questions that might be asked concerning the supply and availability of glass during the early medieval period, it is intriguing to note that the evidence for a declining supply, in the form of increased recycling and the addition of small amounts of potash glass, is contemporaneous with a general reduction in the number of glass beads worn as part of female costume and the predominance of simple, mostly monochrome, bead types, as well as the introduction of a greater range of materials.

2.2.4: GARNET

Within the corpus of seventh-century necklaces, garnet appears in different forms (see fig. 2.7). Most common are cabochon garnets with convex polished surfaces; of the 188 instances where garnet was utilised an element of pendants and beads, cabochon garnets account for almost 64 percent of this group, featuring on 120 objects in the present database. Some are very small hemispherical stones, typically decorating fairly complex objects, including composite disc pendants (see figs. 9.91, 9.92) and cruciform pendants (figs. 9.99i and v). These small, rounded cabochons are relatively unusual, present on just 14 percent of all garnet-inlaid objects in the necklace corpus. The most common form of garnet across the whole corpus are large cabochons, almost always measuring in excess of 10mm. These larger stones are present on almost 40 percent

of the objects featuring at least one garnet inlay, mostly pendants of type PE9-b (a single large garnet in a looped pendant frame; see fig. 9.109). Among the corpus of larger cabochons there is a variety of shapes and sizes, including triangular, sub-rectangular and droplet-shaped stones, as well as the more familiar ovoid and circular shapes. The smaller hemispherical cabochons are occasionally found decorating other types of contemporary material culture, including disc brooches, buckles, pins and strap-fittings.[15] By contrast, use of the larger cabochons is almost entirely restricted to pendants.

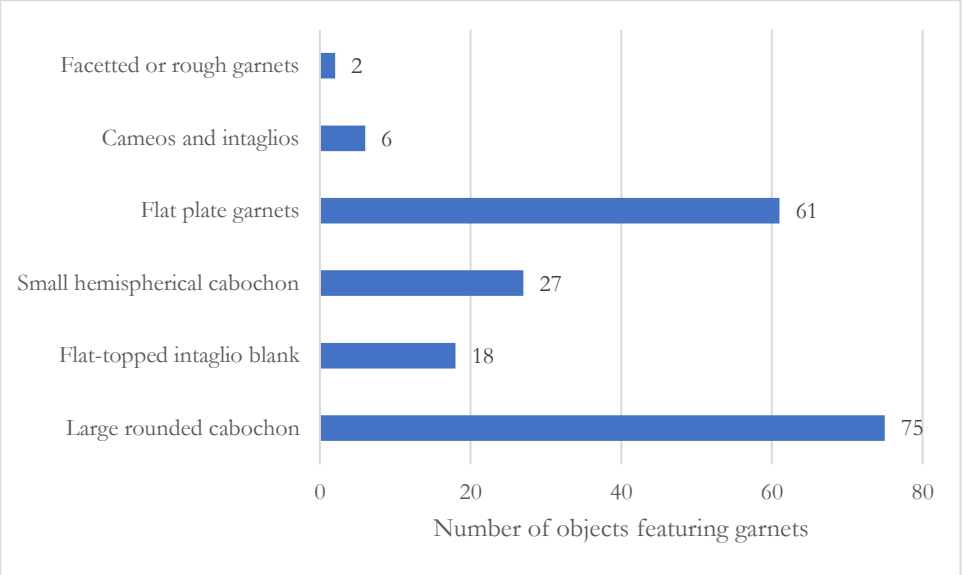


Figure 2.7: Relative frequency of garnets of different forms across pendants and miscellaneous bead types in the present corpus. The project databases record the presence of at least one garnet inlay of a particular form within a composite pendant or bead.

The other major gemstone-working technique represented in the necklace corpus is flat polished garnet plates set into vertical cell walls; where multiple tiny cells inlaid with garnets are present, this technique is known as cloisonné. Around a third of the garnet-inlaid objects (n. 61) feature at least one flat polished stone. Within this group are objects which can be considered among the finest pieces of cloisonné garnet work in Anglo-Saxon England, including the Ixworth (SF.Ix.00.01) and Wilton pendant crosses (NO.Wl.00.01; fig. 9.104iii), the Old Westgate Farm pendant (KE.OW.00.01) and the Winfarthing pendant (NO.Wi.01.06). These pendants, along with a handful of other examples (see figs. 9.103ii and iv; 9.118iii), feature both dense cloisonné and complex garnet plate shapes, including mushroom, stepped and T-shaped forms. These objects can be compared to the well-known and spectacular garnet cloisonné jewellery from

[15] See, for example, the use of small hemispherical cabochons on the Sutton Hoo and Staffordshire Hoard metalwork (Bruce-Mitford 1978: 397–8, fig. 279, 479, fig. 341a; Blakelock and Fern 2019: 169). Among the composite disc pendants, small hemispherical cabochons feature on brooches from Monkton, Priory Hill and Sarre (all Kent), among others (Avent 1975: pl. 62, 64 and 66).

Sutton Hoo and the Staffordshire Hoard, objects of a decidedly masculine and martial nature (see Bruce-Mitford 1978: 599–603; Fern et al. 2019).

Among the corpus of female jewellery, however, these spectacular cloisonné pendants are the exception, rather than the rule. In general, small plate garnets are used sparingly and very simple shapes, mostly triangles, circles and sub-rectangular forms, predominate. These flat polished garnets are used to form simple honeycomb-type designs, sometimes as decorative elements in a pendant frame (for examples, see figs. 9.94ii; 9.109xi and xxix; 9.114ii; 9.117ix). Small flat plates of garnet are also frequently set in single cells, often as part of the wider decorative elements of composite disc pendants (see figs. 9.90; 9.91iv and v; 9.93) and pendants of type PE9-i (see fig. 9.118vii and x).

A wealth of scholarship discussing the provenance of early medieval garnets allows the evidence from the seventh-century necklace corpus to be contextualised. This analysis has focused overwhelmingly on garnet cloisonné, since this is a wider north-western European jewellery tradition spanning the fifth to seventh centuries and much of the compositional analysis to date has focused on primarily Merovingian and Visigothic cloisonné objects (Arrhenius 1985; Hilgner 2018). Garnets are one of the most common gemstones on earth. While the main component of all garnets is silica, twenty-four separate 'species' are recognised by modern gemmologists, depending on the relative proportions of other constituent elements (Adams 2015: 151; Hilgner 2018: 300–1). The red-purple garnets in early medieval jewellery tend to be almandines or pyropes, or hybrids thereof. Archaeometric analysis (primarily PIXE (proton-induced X-ray emission) analysis, μ-Raman spectrometry and XRF-spectrometry) can be used to determine the bulk composition, trace elements and mineral inclusions of garnets from archaeological contexts (Calligaro et al. 2002: 321–4). These can then be compared to reference garnets from known deposits to establish a likely provenance for the early medieval gemstones.

A series of studies have grouped early medieval garnets into types on the basis of chemical composition and suggested likely provenances for each. The earlier classification, identified by Calligaro et al (2002; 2007), divides the garnets into five types (I–V); these have been slightly modified and renamed (as types A–E) in a later study by Gilg et al (2010). Types A/II and B/I are almandine garnets distinguished from each other on the basis of differing magnesium and calcium contents. They are thought to derive from deposits on the Indian subcontinent (Pion et al. 2020: 839, 843–5). Types D/IV and E/V are pyropes, separated by their variable chromium content. These have been identified as deriving from European deposits, in Monte Suimo

(Portugal) and Bohemia respectively (Pion et al. 2020: 846).[16] Type X/III are a much more heterogenous group of hybrid pyraldine garnets; these have been tentatively connected to sources in Sri Lanka, perhaps representing a smaller supplementary source moving along the same exchange networks as the more common almandine garnets (Pion et al. 2020: 845).

In terms of the analysed cloisonné jewellery from the continent, the distribution of these different garnet types shows interesting chronological patterning. The garnets from Asian sources (types A/II, B/I and X/III) are predominately found on fifth- and sixth- century objects. Garnets from European sources (types D/IV and E/V) are found exclusively on jewellery dated to the seventh century (Pion et al. 2020: 846–7).[17] These recent compositional studies have therefore confirmed the hypothesis, first suggested by Quast and Schüssler (2000), that there was a major shift in the sourcing of garnets around the turn of the seventh century from Indian almandines to European pyrope garnets. Disruption of the long-distance trading networks in the Arabian peninsula is usually thought to be the reason for this sudden change (von Freeden 2000; Hamerow 2017: 77), although other economic factors could also be involved (Gilg et al. 2010: 100). It was after this transition that the popularity of garnet cloisonné in Merovingian jewellery declined rapidly, apparently because the generally smaller European pyrope garnets are less suitable for the production of cloisonné jewellery (Adams 2011a: 17; Ambers and Higgitt 2019: 167).

In Anglo-Saxon England (and also in Scandinavia) the use of garnet cloisonné follows a markedly different chronological trajectory, spanning the later sixth century to the third quarter of the seventh (Hamerow 2017; Hilgner 2018), which is difficult to reconcile with the models suggested based on provenancing of continental garnet jewellery. The only Anglo-Saxon garnet cloisonné objects that have been analysed to determine the provenance of the gemstones are thirty-one pieces from the Staffordshire Hoard (Ambers and Higgitt 2019).[18] Many of the cloisonné garnet objects in the hoard are dated to the early seventh century, perhaps AD610–650 (Fern 2019), post-dating both the switch from mainly almandine to mainly pyrope garnets and also the overall decline in the popularity of garnet cloisonné on the continent. Interestingly, the Anglo-Saxon cloisonné garnet objects do not replicate the same patterning in the provenance of the stones seen in the continental material. While ten objects from the Staffordshire Hoard feature only

[16] Gilg et al. (2010) have also posited the existence of type of calcium-rich almandines (type C), which they locate to deposits in Sjönevad, Sweden. In Scandinavia, therefore, there may be evidence for the extraction and working of native garnets (see Ljungkvist et al. 2017).

[17] The use of these European garnets also displays interesting regional variation. Type E/V pyropes from the famous Bohemian mines are most common in southern German ceemteries, while the garnets from the Portuguese deposits predominate on objects from modern-day Spain and France. This would seem to suggest that the sourcing of prestigious raw materials, like garnet, had become increasingly localised in the seventh century.

[18] There have been other programmes of scientific analysis of Anglo-Saxon garnets (see Bimson et al. 1982; Hamerow 2017), but since these did not analyse trace elements or inclusions, this data cannot be used to assign the gemstones to the subtypes outlined above.

pyrope garnets of type V, deriving from the Bohemian deposits, fourteen objects are composed of garnets of types I/II/III, of Indian origin and seven objects display a mixture of Indian almandines and European pyropes, sometimes deliberately employed to contrast the slight variations in colour between the stones (Ambers and Higgitt 2019). These results suggest that large, gem-quality garnets from multiple sources continued to be available for use in jewellery production in early medieval England during the first half of the seventh century. Whether this suggests an alternative supply of the gemstones, or a particular idiosyncrasy of the circulation, use and retention of garnets in seventh-century England, is a topic deserving further attention.

It would be especially interesting to compare the types of cloisonné garnet in the Staffordshire Hoard with those present in contemporary female jewellery, because, while the former show surprising evidence for the continued availability of garnet, features of the latter are suggestive of a declining supply. As well as the relatively restricted use of cloisonné garnets on seventh-century pendants and a tendency for simple shapes already noted, there is frequent evidence of cloisonné plates with chipped or grozed edges (fig. 2.8). These features result from the shaping of cloisonné by hand and are therefore strongly suggestive of recycling. The evidence from the necklace corpus therefore corresponds to a wider recognised decline in the quality of cloisonné garnet, and associated lapidary skills, in seventh-century England (Hamerow 2017: 77). The same scenario is suggested by the latest in the sequence of composite disc brooches, such as the one from Boss Hall (Suff.), which features small, irregularly shaped garnets, and the asymmetrical repairs to the Harford Farm (Norf.) brooch, which seems to imply an inability to source garnets to replace those which had been lost through damage (Scull 2009a: 89; Penn 2000: 46–8).

Figure 2.8: Single plate garnet set in a collet on a composite disc pendant of type PE1-e (LI.SH.35.04). Note the grozed, uneven edges of the gemstone and the attempt by the goldsmith to compress the collet around this irregular shape. Diameter of pendant: 30.3mm. Image by the author © North Lincolnshire Museums Service.

The analysis of the Staffordshire Hoard garnets is also the first to characterise large cabochon gemstones, of the type found in the contemporary female jewellery. The majority were found to be pyraldine (type III) or almandine (type II) garnets from deposits in India and Sri Lanka, suggesting movement of this material along long-distance trade routes (Ambers and Higgitt 2019: 131). Interestingly, one cabochon, probably originally part of the great processional cross, was found to be an unusually large type V pyrope (*ibid*). This seems to suggest that the cabochon stones are derived from a variety of sources, with occasional finds of large pyrope garnets in Europe[19] supplementing a more regular supply of almandine and pyraldine garnets from the east.

An eastern origin for the cabochon gemstones in the female jewellery is also suggested by a small sub-group of garnets, which have a distinctive flat top (type PE9-b(ii); see fig. 9.111). There are at least eighteen examples of this type of garnet in the secondary databases, mostly from Kent, representative of around ten percent of all garnet-inlaid objects (see fig. 2.7). The shape of these garnets identifies them as unengraved intaglio blanks, of a type typical in Byzantine and Sassanian jewellery traditions (Adams 2011a: 13). An engraved example is set in a seventh-century pendant from Sibertswold (Kent) (KE.Si.172.05; fig. 9.117iii). Other unengraved blanks are known from sixth- and seventh-century jewellery from Ostrogothic Italy and Visigothic Spain (Adams 2011a: 13), confirming the movement of these semi-finished items along long-distance exchange networks.

The secure eastern provenance of the intaglio blanks indicates a similar origin for all the large cabochon garnets in the necklace corpus. Again, a Sassanian origin is plausible, since rounded cabochons are reasonably well represented in the corpus of Sasanian ring-stone seals (Ritter 2017: 279; Arrhenius 1985: 55). It seems likely that these gemstones arrived in their finished form. This scenario would explain the presence of a fairly clumsy gold 'sash' across the surface of a cabochon garnet set in a pendant from Barfriston (KE.Ba.34.01), probably to cover a significant crack or break in the stone (fig. 2.9). The fact that a large, damaged gemstone was not reshaped implies that cabochon gemstone polishing was not a technique within the repertoire of Anglo-Saxon jewellers. This in itself would be consistent with the evidence for declining lapidary skills in the contemporary cloisonné work already noted. That finished gemstones were regularly exchanged in Late Antiquity is evidenced by a hoard of sixteen cabochon and plate garnets from Mount Carmel (Israel), dated to the sixth century (Adams 2011b: 87).

[19] In the nineteenth century the Bohemian mines only produced garnet crystals exceeding 10mm in length (around 5 carats) for every two tonnes of garnet extracted (Adams 2011a: 17), although it is possible that by this point the deposits containing larger crystals had already been exhausted.

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Figure 2.9: Cabochon garnet pendant from Barfriston (KE.Ba.34.01) featuring a gold 'sash' across the front of the gemstone, presumably concealing a crack or break. Image after the *Novum Inventorium Sepulchrale* database © Oxford University Institute of Archaeology.

2.2.5: AMETHYST

Along with garnet, amethyst is one of the most commonly occurring gemstones in the seventh-century necklace corpus (see fig. 2.1). As a material, the use of amethyst is almost entirely restricted to beads, of which there are 537 examples in the secondary databases. The only exceptions are eight pendants of type PE9-a set with amethyst cabochons; the majority of these are repurposed beads mounted in pendant frames.[20] The beads show a remarkable consistency in terms of shape and manufacture. They are typically pear- or droplet-shaped and when viewed in profile most beads have one flatter lower side. The perforated faces of the beads are polished to a flat facet (see figs. 9.144).

Amethyst beads are almost certainly all imports, probably in their finished form. Very similar beads are found in Merovingian cemeteries on the continent, Lombardic cemeteries in northern Italy and in Scandinavian graves of seventh- and eighth-century date (Drauschke 2010; Paroli 1996: tav. 5, 10, 17, 18; Ljungkvist 2010: 421–5). Stylistically-speaking, the shape of the beads connects them to Late Antique jewellery traditions, and indeed Byzantine jewellery of the sixth and seventh centuries features many closely comparable amethyst drops (Baldini Lippolis 1999; Drauschke 2010: plates 1–4). Although amethyst is a relatively common form of quartz, there are no deposits in the British Isles that could have been exploited during the early medieval period. Equally, the absence of amethyst in any other form of contemporary material culture strongly suggests that there were no supplies of unworked amethyst available. Indeed, the unfamiliarity

[20] Exceptions to this pattern include an amethyst cabochon pendant from Chatham (KE.CL.12.01, fig. 10.22(i)), which, based on the size, shape and clarity of the stone, is probably a reused Roman gemstone. Two rings from the late fourth-century Thetford Hoard (Norf.) are set with closely comparable cabochons (Johns and Potter 1983). The other unusual amethyst cabochon from the necklace corpus is the central setting of a large and unusual pendant from Stretham (CA.St.00.01). The flat-topped shape of this stone identifies it as an intaglio blank, similar to those found in pendants of type PE9-b(ii).

with working amethyst as a material may be the reason for the presence of broken beads in several necklaces (examples include BE.MD.A1.03, CA.SC.62.02, KE.Po.73:37.12, KE.SP.337.01 and SO.Ca.98.01), which show no attempt to reshape the bead or polish flat the rough surfaces. It seems highly likely, therefore, that the shaping of amethyst into beads took place close to the point of extraction, and that all the amethyst in seventh-century England arrived in the form of finished beads.

The exact source of the amethyst from early medieval contexts is not certain. Unlike garnet, no scientific analyses of the provenance of amethyst have been undertaken,[21] so identifying possible sources has largely been a matter of educated guesswork. Previous studies have frequently suggested India as the likely point of origin (e.g. Meaney 1981: 76; Huggett 1988; Harris 2003: 65; Harrington and Welch 2014: 59). Certainly, there are deposits of gem-quality amethyst in south-eastern India, and it is probably to these that Pliny the Elder referred when he stated that India was the source of the finest quality amethyst known to the Roman world (Pliny, *Naturalis Historia* XXXVI.40, transl. Eichholz 1962: 263; Francis 2001: 55–6). Some doubts were cast on the likelihood of an Indian provenance for amethyst based on the evidence, on the continent at least, for the declining availability of almandine garnets from south Asia (see above, section 2.2.4), since in Merovingian cemeteries, amethyst beads appear during the second half of the sixth century and continue to be popular until around AD700 (Drauschke 2010). However, the supply of garnets into the seventh century is now known to be more complex than first thought.

Nevertheless, it is worth exploring the possibility that amethyst was derived from an alternative source, either wholly or partially. Of particular interest here is the observation that, on the continent, amethyst beads from earlier contexts tend to be shorter and of a darker hue, while later examples are much longer and pale to almost colourless (Koch 1987: 346), which may suggest a shift in source. Other sources of amethyst were known in the Roman period; as well as India, Pliny's *Natural History* (XXXVI.40, transl. Eichholz 1962: 263) notes that amethyst of 'secondary quality' could be obtain from deposits in Petra in Arabia, Lesser Armenia, Galatia in the highlands of Anatolia and Egypt, while 'imperfect and worthless' amethyst occurs in Cyprus and Thasos. Of these locations, Egypt is the most promising possible alternative source for the early medieval amethyst beads. There are two known amethyst quarries in Egypt. Amethyst, along with rock crystal, was extracted from the more substantial deposits, at Wadi Abu Diyeiba, during the early Roman period, perhaps up to the middle of the second century AD, while the more famous quarry at Wadi el-Hudi was first exploited during the Middle Kingdom period and then reoccupied during the late Roman period and possibly later (Harrell et al 2006; Shaw 2007).

[21] It is not clear whether such a programme of analysis would be feasible. While there are fewer potential deposits to consider, amethyst exhibits fewer distinctive trace elements than garnets (Drauschke 2010: 52; Guerra and Calligaro 2007: 67).

Finished amethyst beads, of the familiar pear-shape, have also been found in a number of Byzantine-period cemeteries in Egypt, including Illahun and Qau (Drauschke 2010: note 47). Finally, there are indications that the raw material was being processed, as well as used, in Egypt: fragments of amethyst, as well as other semi-precious stones, including rock crystal and agate, have been found in a sixth- to seventh-century glass-working workshop in Byzantine Alexandria (Rodziewicz 2009: 93).

In an attempt to understand whether there was a change in the source of amethyst in the seventh century, Drauschke (2010) compared the length of beads from southern German graves. This revealed that beads of between 9 and 16mm in length are the most common, and that these beads form the largest proportion of the finds across all chronological periods. Larger beads, in excess of 17mm, seem largely restricted in date to the seventh century. The objects themselves therefore show little evidence for a wholesale shift in the source of amethyst across the period, although there is a slight possibility that the larger beads of the seventh century may represent an additional source of raw material (Drauschke 2010: 57). In an aside, Drauschke (2010: 58, note 99) suggested that amethyst beads in England may actually be from a different source entirely, as 'their average size is much larger than those from the Continent or Mediterranean area', an observation which seems to be based on the measurements of the beads from Dover Buckland (Kent).

In order to test this association, and to assess the similarity of the amethyst beads from Anglo-Saxon England and southern Germany – ostensibly part of the same long-distance exchange network – data on the length of 368 amethyst beads recorded in database II was gathered. Most of the measurements (over seventy percent) were recorded by the author during first-hand examination of 263 amethyst beads in various museum collections; the additional data was collated from published cemetery reports. The results confirm Drauschke's (2010: 58) observation that the beads in Anglo-Saxon England are considerably longer than any of those in the southern German sample (fig. 2.10). Forty-three percent of the beads from Anglo-Saxon cemeteries measure in excess of 2.0cm, the largest category used in Drauschke's (2010) study, and one to which few of the continental beads belonged. There is, however, overlap in both the length of the shortest beads measured in both datasets and in the relative frequency of beads measuring between 1.2 and 1.4cm, a group to which just over twenty percent of the Anglo-Saxon beads belong. The results seem to suggest that Anglo-Saxon England had access to both beads of the same size as those from continental row-grave cemeteries, and also to much larger beads. Whether this can be connected to different sources for the raw material is debatable; if smaller beads were more desirable, for example, this might explain why the larger examples appear in Anglo-Saxon England, furthest away from their ultimate eastern Mediterranean source.

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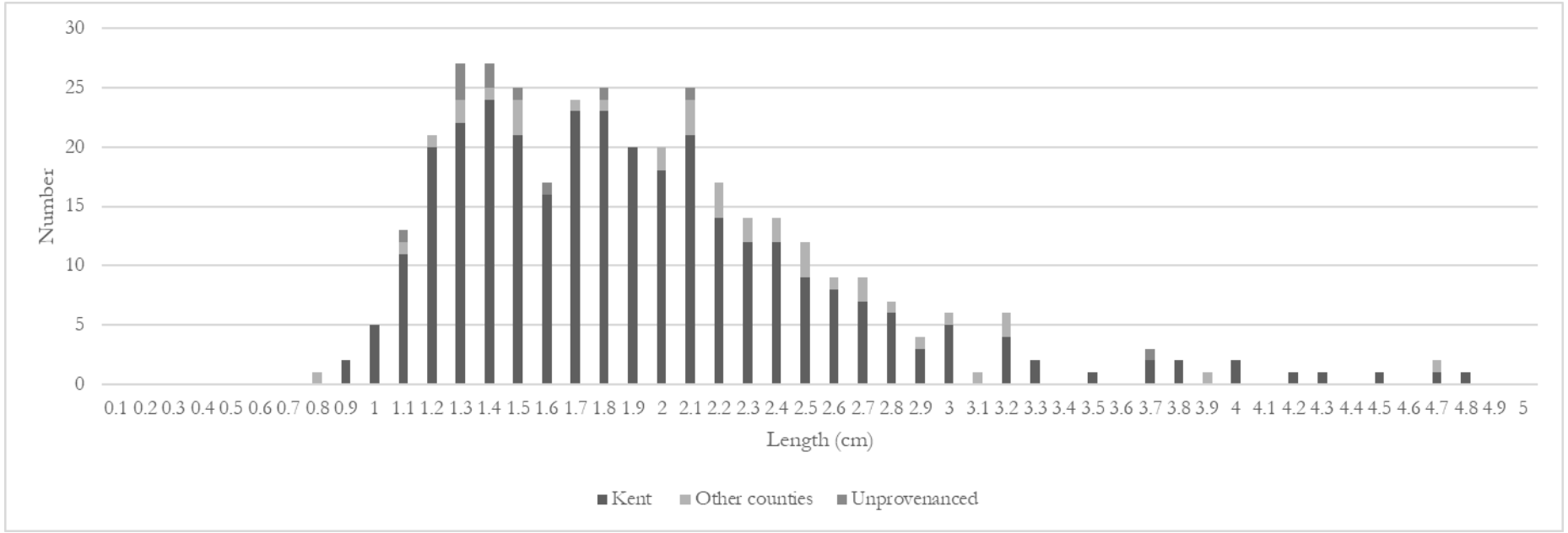
Figure 2.10: (*top*) Length profiles of 776 amethyst beads from early medieval graves in southern Germany (after Drauschke 2010: plate 10) and (*bottom*) 368 beads from seventh-century Anglo-Saxon contexts.



Data was also collected concerning the colour of the amethyst beads, to test whether any correlation between colour and length could be found. Here only the 263 beads measured and examined first-hand by the author are assessed. Beads were assigned a score of between one and five based on visual examination, with one being the palest and five being the darkest (see fig. 9.144 for an illustration of the range of colours present). A series of reference colour swatches were used in an attempt to maintain consistency, but the results should naturally be considered qualitative. The results show little obvious patterning (fig. 2.11). Indeed, very few of the beads are translucent and of one consistent colour, features which are considered essential criteria of modern gem-quality amethyst. Distinct areas of colour banding within a single bead are common and some of the darkest beads include streaks of opaque white quartz (see, for example, fig. 9.144ix). Smaller and thinner beads are often naturally more translucent than the larger examples, and this may explain the relatively higher frequency of pale category one beads within the shorter length profiles, between 1 and 1.7cm in length. Again, this evidence would suggest that the patterns in the supply of amethyst beads are perhaps more complex than previous studies have suggested.

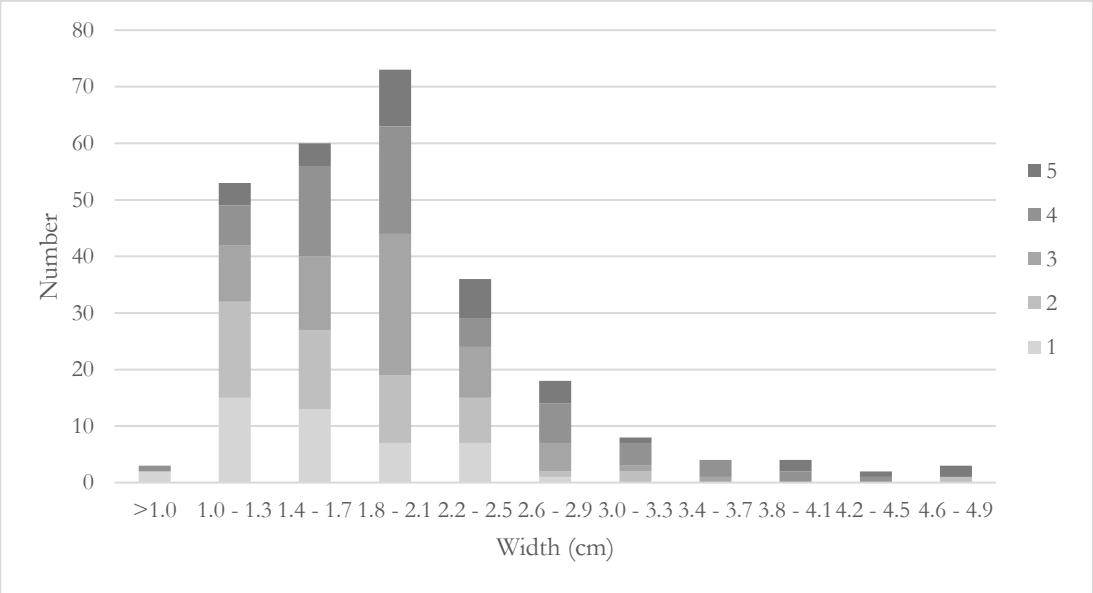


Figure 2.11: Distribution of colour grades across amethyst beads of different lengths.

Although amethyst beads can be unquestionably identified as imports in seventh-century England, there are still intriguing questions concerning both their point of origin and availability. There is considerable scope for future studies to explore these questions in more detail, potentially utilising compositional data, as well as drawing comparisons with beads from other parts of north-western Europe.

2.2.6: OTHER EXOTICA

Garnet and amethyst are not the only materials present in the necklace corpus known to have moved along long-distance trading networks. There is a wide variety of other imports, sometimes arriving as raw materials for reworking and sometimes in the form of finished objects.

The most common imported material after garnet and amethyst is cowrie shells, represented in the secondary databases by beads of type BE1-Cowrie (127 examples recorded) and pendants of type PE10-a (8 examples recorded). These are sub-rectangular segments cut from the ridged ventral lips of large cowrie shells, perforated either lengthwise or at one edge to form a bead or pendant (fig. 2.12). Both feature the distinctive ridging that allows them to be identified as cowrie shells (see figs. 9.120i and 9.145). The size of the beads and pendants precludes them from being made using the shells of all but the largest species, the panther cowrie (*Cypraea pantherina*) or the tiger cowrie (*Cypraea tigris*). Beads made from perforated discs of shell (type BE1-Disc) may also conceivably have been made from cowrie shells, although this cannot be confirmed purely on the basis of visual examination.

Figure 2.12: Schematic illustration showing how beads can be cut from the ridged lip of a cowrie shell and the resulting profile of the beads. Adapted from Trotzig 1988: fig. 6. Not to scale.

The presence of complete cowrie shells in seventh-century female graves across Anglo-Saxon England (see Geake 1997: 62–3 and table 2.4) strongly suggests that the shells arrived in their unmodified form and were sometimes subsequently transformed into beads. Indeed, the distribution of unmodified cowries is broadly consistent with the distribution of the cowrie shell beads and pendants (compare Evison 1987: fig. 120 and fig. 9.70). Particularly clear evidence for the production of beads from complete shells can be seen in the objects from grave 6 at Dover

Buckland (Kent). A cowrie shell had been sawn in half lengthways to remove the ridged ventral lips; the remaining domed upper section was deposited at the feet of the deceased (Evison 1987: 122, 217). The necklace from the grave included a cowrie shell bead (KE.BD.06.08), perhaps cut from the same shell.

Typically, it is only possible to identify the species of complete cowries, based on the size and morphology of the shells. The close connection between shell beads and pendants and the complete cowries therefore allows the provenance of the former to be assessed more securely. The complete examples from Anglo-Saxon England are almost all panther cowries; only a single shell from antiquarian excavations at Breach Down (Kent) has been identified with certainty as a tiger cowrie (see table 2.4). This is consistent with finds of whole cowrie shells from Merovingian cemeteries and Viking Age burials in Scandinavia, which are also almost exclusively panther cowries (Banghard 2001; Thedéen 2010: 106). Panther cowries are endemic to the Red Sea and the Gulf of Aden, while tiger cowries are found in the Indian Ocean and western Pacific (Kovács 2008: 61). The range of the two species does not overlap (Harasewych and Moretzsohn 2010: 337).[22]

Another unusual material represented by a small number of objects in the present database is red-purple porphyry. Three pendants (KE.We.00.07, KE.KD.241.01 and 02; see fig. 9.118ix) feature flat polished slabs of porphyry set in pendant frames, and there are perforated porphyry discs suspended from a silver wire hitch in a manner comparable to bead-in-hitch pendants. One extant example is said to be from Faversham (KE.Fa.00.132; fig. 9.160iii) and two similar items are described in records of a grave excavated at Teynham (Kent) in the nineteenth century (Payne 1895a). Porphyry is a hard igneous rock with light coloured feldspar crystals floating in a darker matrix; the red-purple variety, known as imperial porphyry, derives from a single mine in Egypt (Meaney 1981: 102; Lynn 1984: 19). It is not clear exactly how this material was obtained, but the fact that it occurs at multiple sites, coupled the broader evidence for the exchange of unusual and exotic materials, may suggest that porphyry is another example of a seventh-century import. The post-Roman periods saw extensive robbing of porphyry monuments for *spolia* (Lynn 1984: 19). Chips of red-purple porphyry recently recovered from eighth-century layers at Ribe (Denmark) lends weight to the suggestion that this material was occasionally traded.[23]

As well as providing an imported source of raw materials (see above, section 2.2.1), imported coin types were also utilised as elements of jewellery largely in unmodified form. Among the coin

[22] Panther cowries are now found in the Mediterranean, but their introduction there almost certainly post-dates the construction of the Suez Canal in the nineteenth century (Reese 1991: 159; Gofas and Zenetos 2003: 240).
[23] These are now in the Sydvestjyske Museer in Ribe (find numbers: SJM 3x1279 and SJM 3x0949).

pendants of types PE7-a and PE7-a there are ten examples of genuine imperial gold coins, minted in the names of various eastern Roman emperors, from Justinian (565–74) to Heraclius and Heraclius Constantine (610–41). These genuine long-distance imports were also imitated in western Europe; the coin pendant corpus also contains sixteen examples of pseudo-imperial gold coins of Visigothic, Ostrogothic, Gallic, Lombardic and Provençal origin.[24] Presumably these genuine and imitation imperial coins were carried along the same trade networks that moved other imported goods.

There are also examples of glass beads that represent likely long-distance imports. Mosaic (type BE1-Mosaic) beads, sometimes also called millefiori beads, stand out from the contemporary bead corpus due to their complexity and aesthetically appealing decorative patterns (fig. 9.137). Their method of manufacture from pre-formed chips of mosaic polychrome glass is also unique (Brugmann 2004: 21). Beads of this type are found in large numbers in Merovingian cemeteries around the Rhine and Danube, as well as in the Lombardic cemeteries of northern Italy (Andrae 1973: fig. 26; Paroli 1996: tav. 8, 18, 21). The original source of these beads has previously been identified as Egypt, partly because their distribution pattern is closely comparable to that of other long-distance imports, notably the Coptic bronze vessels (Andrae 1973), and also because large numbers of very similar mosaic beads have been found in late Roman and early Byzantine cemeteries in Egypt.[25]

Finally, it is also worth briefly examining the more unusual objects of demonstrable Byzantine or 'eastern' provenance within the necklace corpus, as an illustration of the range of objects that could move along long-distance exchange networks. The garnet intaglio depicting a pacing lion from Sibertswold (KE.Si.172.05) has been mentioned already; it is either Byzantine or Sassanian in origin (Henig 1974: 197; Arrhenius 1985: 55). Also of likely Byzantine or Sassanian origin is the spectacular garnet cameo set in the Ewell pendant (SY.Ew.00.01; fig. 9.117viii), carved in the form of a bearded male bust in profile, wearing a Phrygian cap (Henig 1974: 196–7; Webster and Backhouse 1991: 54). The major cemetery complex at Saltwood (Kent) has produced two more Late Antique intaglios: one (KE.Sw.C6416.01) is a blue glass imitation of nicolo onyx with a crude engraving of a figure holding a staff, while the other (KE.Sw.C4699.01) is a large brown glass intaglio depicting the Virgin flanked by Greek crosses, perhaps originally fifth or early sixth century in date (Walton Rogers 2006: 27–9).

[24] For a catalogue and discussion of imperial and pseudo-imperial gold coins in Britain, both the modified examples discussed here and unmodified coins, see Bland and Loriot (2010: 314–33, 338). More recent stray finds of modified imperial and pseudo-imperial gold coins recorded on the PAS database include KENT-AC7E52, ESS-881CD6, NMS-EB4A16, KENT-E5C9B7, NMS-98E733 and YORYM-701955.
[25] See, for example, beads from Lahun in the Fayum in the Petrie Museum, University College London, acc. nos. UC6771, UC6772, UC22768.

An unusual pendant from Finglesham (KE.Fi.68.21; fig. 9.122iv) features the convex base of a mould-blow glass vessel with an equal-armed cross in relief (Hawkes and Grainger 2006: 70). This was set in a silver pendant frame. The best parallels for this object are vessels of eastern Mediterranean (perhaps Syrian?) manufacture, produced in the later sixth and early seventh centuries (Stern 1995: 260–4; Barag 1970). It is not clear whether the vessel itself arrived in seventh-century Kent in its complete form and was then subsequently broken and reused, or whether the base itself was considered an object inherently worthy of exchange. There is also an unusual pendant from Stretham (CA.St.00.01; fig. 9.122i), which features a perforated polished disc of clear rock crystal in a frame of gold and cloisonné garnets, with a central amethyst cabochon (itself also of probable eastern origin, since its flat-topped shape suggests it is an intaglio blank) (Lethbridge 1953: plate I). The crystal element does not find any close parallels in objects of the same material in earlier Anglo-Saxon graves, such as the facetted quartz beads or the spherical crystal balls, but it can be compared to a similarly shaped rock crystal disc in a Byzantine 'button' of early sixth-century date in the collections of the Cleveland Museum of Art (Gertsman and Rosenwein 2018: 110–3).[26]

2.2.7: Reused Antiquities

There is a small, but significant corpus of reused antiquities among the corpus of necklace material. An important point in the definition of reused objects is that they substantially retain their primary form (Caple 2010: 310). This helps to separate the Roman antiquities, for example, from what was once a much broader pool of recycled material, which probably served primarily as a source of raw material. Reused antiquities are fairly easy to identify in the necklace corpus, thanks to the considerable chronological discrepancy between their date of production and their recontextualisation in the seventh century (Caple 2010: 310; Swift 2013: 91–2). The reuse of antiquities in early medieval contexts has been assessed by several scholars, but most previous studies have tended to examine the corpus of reused material as a group (Meaney 1981: 192–230; White 1989; Eckhardt and Williams 2003), rather than to focus on any particular periods or specific contexts of use. Reused prehistoric material has also tended to receive less attention than Roman objects. An exception to these general trends is Sherlock's (2016) assessment of reused material in Conversion Period graves, focusing on the material from Street House (N. Yorks.) as a case study.

Perhaps not surprisingly, Roman objects are best represented among the reused antique items. There are numerous examples of reused Roman types among the corpus of glass beads, mostly

[26] There is also a similar polished rock crystal disc in the centre of the late ninth-century Warminster Jewel, a probable *aestel*, which Webster (2015: 64) has identified as a reused element.

first- and second-century turquoise melon beads (type BE1-RoMelon; 20 examples in the present corpus) and translucent drawn cylindrical beads (type RoCane; 15 examples). Among the more unusual reused elements are gemstone cameos and intaglios (in one case, still set within a finger-ring), panels of millefiori glass and a few miscellaneous metal objects (table 2.5). Reused prehistoric material is much rarer, restricted to a small number of Iron Age glass beads and a Bronze Age penannular ring (table 2.6).

Object ID	Object type	Reused element	References
HA.Pr.01.02	PE9-h	Hemispherical garnet cameo with eight lobed segments	Kendrick and Hawkes (1937)
HA.SM.5508.04	WR-Misc	Silver finger-ring set with a moulded glass intaglio depicting Minerva facing right; fourth century	Henig (2005: 68)
KE.Fi.200.01	PE-Misc	Copper-alloy belt-stiffener, rivets on reverse removed or filed down; late fourth- or early-fifth century	Hawkes and Grainger (2006: 133); for parallels, see Appels and Laycock (2007: 275–6)
KE.Fi.200.03	WR-Misc	Terminal and shank of a copper-alloy ring-headed key	Hawkes and Grainger (2006: 133–4)
KE.Sa.A.12	PE9-e	Polychrome millefiori roundel; originally the central element of a disc brooch or belt-plate; first to third century	Laing (1999); White (1988)
KE.Si.172.09	PE9-e	Polychrome millefiori roundel; originally the central element of a disc brooch or belt-plate; first to third century	Laing (1999); White (1988)
KE.SM.00.07	PE9-h	Carnelian intaglio, depicting Minerva holding a spear and shield; second or third century	Henig (1974: 84)
KE.Ul.00.01	PE9-h	Carnelian(?) intaglio, depicting Minerva and Mars holding spears	PAS: KENT-B8F318
NH.Ha.00.01	PE9-h	Scallop-shaped garnet cameo	PAS: DENO-859998; Sherlock (2016: 250)
NY.Se.00.07	PE9-h	Scallop-shaped garnet cameo	Wright (1865: pl.18)
NY.SH.42.06	PE9-h	Scallop-shaped garnet cameo	Sherlock (2016: 250); Sherlock (2012: 49)
SF.Pa.00.02	PE9-h	Onyx intaglio, depicting one of the Dioscuri beside a horse	Henig (1974: 197)

Table 2.5: Reused Roman antiquities from seventh-century necklace contexts.

The origin of much of this antique material is thought to be disturbed archaeological contexts: burials, hoards or settlements. This assumption is the basis of Eckhardt and Williams' (2003) argument that the mysterious origins of these recovered artefacts made these 'objects without a past' inherently interesting, and thus more likely to accrue the kind of mnemonic significance and biographical entanglements that led to their reuse and subsequent burial. Implicit in this model,

therefore, is a relatively direct relationship between the recovery of the antique object and its secondary recontextualisation. An example of this from the present corpus might be the Bronze Age penannular ring (KE.SP.159.06) from St Peter's Tip, a cemetery superimposed over earlier prehistoric barrows. A scenario in which this object was recovered from a Bronze Age barrow on or near the site of the cemetery and subsequently incorporated into jewellery worn by a member of the immediate community (perhaps even the finder?) is plausible, if ultimately unprovable.[27]

Object ID	Object type	Reused element	References
CA.SC.24.01	BE2-Misc	Blue and yellow Class 8 Iron Age glass bead	Lethbridge (1936); for parallels, see Foulds (2017)
CA.SC.71.01	BE1-IronAge	Blue and translucent greenish blue Iron Age(?) glass bead	Lethbridge (1936)
DE.CL.01.07	PE9-g	Segment of a blue and white Class 6 Iron Age glass bead	Bateman (1848: 95); for parallels, see Guido (1978); Foulds (2017)
KE.SP.159.06	BE-Misc	Copper-alloy penannular ring with a thick layer of surface gilding; Bronze Age	For parallels, see Taylor (1980: 64–5)
LI.SH.68.01	PE9-g	Segment of a polychrome Class 11 Iron Age glass bead	For parallels, see Foulds (2017)
LI.SH.68.07	PE9-g	Segment of a blue and white Class 6 Iron Age glass bead	For parallels, see Guido (1978); Foulds (2017)
NY.SH.43.06	PE9-g	Segment of a blue and white Class 6 Iron Age glass bead	Sherlock (2016: 251, 255); for parallels, see Guido (1978); Foulds (2017)
OX.WC.02.02	BE1-IronAge	Blue and white Class 6 Iron Age glass bead	Dickinson (1977: 91); for parallels see Guido (1978); Foulds (2017)

Table 2.6: Reused prehistoric material from seventh-century necklace contexts.

In the case of other object types, however, this hypothesised origin seems overly simplistic. A more complex trajectory from the point of recovery to the point of recontextualisation seems likely. The three pendants set with Class 6 Iron Age beads (DE.CL.01.07, LI.SH.68.07 and NY.SH.43.06; see fig. 9.116), all of them from northern cemeteries, are good example of this. Although the beads themselves are a fairly common Iron Age type, with a wide distribution (Guido 1978: 55; Foulds 2017: fig. 36), the similarity of the three pendants is remarkable, and strongly suggests a common origin, perhaps of provenance or manufacture. The other reused Iron Age beads, a class 8 bead from Shudy Camps (Cambs.) and a Class 11 example from the same grave at Sheffield's Hill (Lincs.) that produced the reworked Class 6 bead (see figs. 9.116 and 9.151ii), are both very rare types, and this rarity also seems more consistent with the exchange

[27] Certainly, the cemetery of St Peter's Tip lies within the core distribution area of this late Bronze Age object type, along the southern coastlines of England (Taylor 1980: 64–5). I am grateful to Dr Sue Brunning for discussing this object, and the wider context of the St Peter's Tip cemetery, with me.

of these objects than to chance recovery. Therefore, the potential for antique materials to circulate through seventh-century exchange networks should be recognised. Of course, this observation does not necessarily negate the potential symbolic significance of the antiquity of these materials, perhaps as signifiers of power, lineage and legitimacy (see Sherlock 2016).

In a wider study of reused Roman material, White (1989) argued that reused material was intended to serve as a (cheaper or more easily obtainable) skeuomorph for contemporary items. While this may be valid in some contexts, it clearly cannot be the case of the reused antiques incorporated into seventh-century necklaces. It is extremely unlikely that the contemporary viewer familiar with seventh-century jewellery fashions would not have recognised these reused elements as distinctive or unusual. Most find no parallels in the corpus of contemporary material culture. The Iron Age and Roman beads tend to be much larger than most types in use in the seventh century and in some cases are constructed from different materials or feature more complex polychrome designs. The circular panels of reused Roman millefiori glass in pendants from Sarre and Sibertswold (both Kent; see fig. 9.114) are much larger than the chips of millefiori used in other seventh-century jewellery, which typically appear as small segments floating in larger panels of enamel or, rarely, as discrete areas of cloisonné inlay (see, for example, fig. 9.109xi) (Laing 1999; Brenan 1999: 20). It seems much more likely, therefore, that these reused antiquities were valued specifically because they were visually identifiable as exotic, if not also necessarily as 'objects without a past'.

2.3: Discussion

2.3.1: Long distance imports

By reviewing the uses and sources of the main materials represented in the necklace corpus, it is clear just how much of this material is the result of long-distance exchange. There is a considerable range of materials represented, in a variety of forms. There are objects that might be considered the typical 'exotica' that characterise this distinctive seventh-century phase, including the garnets, amethysts and cowrie shells (Hines and Bayliss 2013: 538), but other more unusual long-distance imports are also present, chance survivals of what must have been a broad range of items that moved, perhaps infrequently, along established long-distance trading networks (see Harris 2003). Equally, it is clear that the same exchange networks indirectly underpin the circulation of gold (and probably also silver and glass), although this is then complicated by what were clearly intense processes of recycling. The exercise of classifying items arriving as finished objects (such as amethyst beads) or as raw or semi-finished materials (like loose cabochon garnets) is an arbitrary

one, since these distinctions are frequently blurred. Complete items, such as whole cowrie shells, could be subsequently repurposed in a way that also renders the imports a source of raw materials.

There are diverse points of origin represented by the imported material in the necklace corpus. Here Drauschke's (2007) category of 'oriental' finds is a useful one, in describing materials originating in the eastern Mediterranean but distinguishing them from items specifically manufactured within the Byzantine empire. As the examination of garnet and (potentially also) amethyst have shown, the materials present in larger quantities may be derived from multiple sources. There is scope for further work here to clarify specific patterns of provenance, and to clarify the relationship between the materials found in Anglo-Saxon England and Scandinavia. There is unlikely to have been any direct contact with the eastern Mediterranean world. Parallel finds of amethyst beads, complete cowrie shells, cloisonné garnet and mosaic beads in cemeteries in southern Germany and northern Italy suggests a trade network crossing the Alpine passes and traversing the Rhine (Harris 2003: 66). Again, there is scope for further work to clarify some of this patterning; the discrepancies in the length of amethyst beads might be explained through a more detailed analysis, perhaps involving the provenancing of the raw materials. Equally, the presence of a remarkably large number of cabochon garnets in Anglo-Saxon England is also a subject deserving of further attention.

There is a broader context for this imported material of eastern origin. Other comparable objects circulating in relatively high numbers include the so-called Coptic bronze vessels (Richards 1980; Mundell Mango 2001), spoons and other Byzantine silverware (Bruce-Mitford 1983: 163–5) and ivory-bag rings (Hills 2001; Huggett 1988: 68–9). Neither is this phenomenon specifically restricted to the seventh century, as the latter category of objects dated mostly to the sixth century. Generally, however, the seventh century does seem to see a greater number of imported objects, as well as an increased range of types (Drauschke 2007: 72). It is interesting as well that some materials appear, to judge from the burial evidence, to be associated only with women. In the case of amethyst beads and cowrie shells this might result from the forms in which these objects arrived and their possible symbolic associations, but notably the large cabochon garnets also appear to be primarily associated with female jewellery.

This consideration of the sources of the material has also revealed evidence suggestive of the decreasing availability of many materials, seen particularly in the variable gold content of the necklace corpus, the deliberate extension of the glass supplies and the scarcity of cloisonné jewellery in the necklace corpus, coupled with evidence of intense recycling. Disruption to established trading networks in the eastern Mediterranean during the seventh century is often cited as the reason for this declining availability (von Freeden 2000; Freestone et al. 2008: 42).

However, the relative chronologies of the different imported materials are suggestive of more complex and nuanced shifts in the availability and long-distance exchange of various materials. The evidence that suggests that these exotic imported materials were becoming increasingly scarce also sheds important light on the question of status as it relates to the necklaces, since the capacity to control and display such objects and materials is a clear indicator of the social capital of the wearer.

2.3.2: AMULETIC MATERIALS

It has frequently been assumed that many of the objects worn on necklaces had an amuletic or protective significance (Hamerow 2016: 429), and that the use of amulets increased during the Conversion Period (Meaney 1981; Gilchrist 2008: 121). The definition of the term 'amulet' within medieval archaeology has generally been fairly broad. They are generally understood to be magical objects, worn on the body or kept as personal possessions, to either avert potential negative occurrences or to obtain positive results (to bring luck, for example) (Meaney 1981: 3–4; Gilchrist 2008: 124; Geake 1997: 98). The most important study of Anglo-Saxon amulets was undertaken by Meaney (1981), which covers a broad range of objects and materials.

Meaney's (1981) study identified a significant proportion of the objects in the necklace corpus as probable amulets, including various pendant types, wire rings, polychrome beads, amethyst beads and cowrie shells.[28] Sometimes these identifications are based on the visual properties and affordances of the objects. Hence the resemblance of some types of scutiform pendants (type PE2) to shields is argued to have given them a particular symbolic resonance; visually complex items, and especially knotted or ring-shaped objects, such as polychrome beads and wire rings, are suggested to have served to distract the Evil Eye. In other cases, it was necessary to refer to documentary sources for evidence to support the identification of particular materials and items as amulets. Thus, reference can be made to the classical tradition that amethyst guarded against drunkenness (see, for example, Pliny, *Naturalis Historia* XXXVI.40, transl. Eichholz 1962: 265; Meaney 1981: 77), while in Christian writings amethyst – the twelfth apocalyptic gem – is said to 'recall the mind of the humble to the heavenly kingdom' (Meaney 1981: 77). Garnets may also have had a specific symbolic resonance, as symbols of Christ, and thus, in a Chrisitan context, possibly an apotropaic function (Adams 2015).

[28] Of obvious relevance to a discussion of amulets are the large number of items bearing cruciform iconography. However, as this section is primarily concerned with materials, these inscribed items are discussed elsewhere (see chapter 7.5), in relation to the broader Christianisation processes of the seventh century.

If all of these identifications are accepted, it might seem as though necklaces are *primarily* collections of amuletic or apotropaic materials, and that their chief function was to protect the wearer against harm. In fact, the sheer variety of items identified as amulets by Meaney (1981) is a result of the methodology employed; her study sought to collate evidence that various of objects and materials *may* have had an amuletic function, resulting in an extremely broad corpus of material. For many of the necklace objects, however, it simply is not possible to know whether these symbolic resonances and visual affordances were understood and considered meaningful by the wearers and owners of these object. For this, more contextual information is needed. This could be in the form of evidence for the use of the objects in a particular performative ritual or insights from the biographical trajectories of the objects.

A good example of how contextual data, coupled with careful use of the documentary source material, can shed light on amuletic materials is Gilchrist's (2008) study of amulets in later medieval graves. In this, frequent allusions are made to apparently comparable amulets in Conversion Period burials. There is an important distinction between the two, however: because the later medieval burial tradition was largely unfurnished, the placement of objects can be more securely connected to grave-side rituals, either as a form of symbolic post-mortem healing of the deceased or to serve as protection for the living in the case of a bad death (Gilchrist 2008). It is via these processes of selection and performative action that amulets can be identified with confidence. This is not the case in the seventh century. It is the contention of the present study that the various objects deposited as part of necklaces were worn in life, rather than assembled at the funeral, so the reasons for choosing these items for placement in the grave cannot be so straightforwardly deduced.

In attempting to explore the potential amuletic significance of necklaces, it is necessary to focus on case studies where additional contextual information can shed light on the possible use and meaning of these objects. Cowrie shells are one of the object types most frequently, and perhaps most confidently, identified as amulets. The resemblance of the underside of the shell to a vulva or a half-open eye is typically cited as the reason that these shells had a protective, prophylactic function (Meaney 1981: 127). Indeed, broader cross-cultural and ethnographic studies have shown that cowrie shells are frequently associated with women and girls, which lends credence to the idea that they were symbolically associated with fertility (for an overview see Kovács 2008). Within the necklace corpus, cowrie shells beads are one of the few objects for which it is possible to sketch something of a generalised biography, from the import of complete shells to the use of these objects as a material for making beads. If the whole cowrie is understood to have fulfilled an amuletic function, this secondary use is particularly interesting, since this process removes and destroys the elements of the shell that makes them visually so arresting.

Archaeological evidence for the same kind of secondary recontextualisation is also available in the case of the reused antiquities, another type of object frequently identified as having an amuletic function (Meaney 1981; Eckhardt and Williams 2003). According to these general surveys of the phenomenon of Roman reuse, the mysterious origins of this material is thought to imbue it with a magical significance, and thus prompts both the retention of this object in life and its deposition in the grave. In the case of the necklace corpus, however, it is clear that there was a deliberate and very narrow process of selection of the types of reused material (polychrome glass, gemstones and only the occasional metal item), from what must have been a wider pool of available Roman and prehistoric material. Rather than reflecting a generalised interest in antique material as potential magical, the selection of these items in particular seems to relate specifically to their inherent aesthetic appeal and rarity. Many of the reused antique objects underwent a substantial physical transformation as part of this selection and recontextualisation: the Iron Age beads were reshaped to display their decorated sides as a cabochon inlay and the Roman millefiori panels were prized from existing objects and reworked to fit a new pendant frame. The reworking of these objects accentuates their visual appeal ahead of maintaining their physical integrity, which in turn sheds some light on the reasons why this material was chosen for reuse in a necklace context.

The purpose of this discussion is not to refute the idea that at least some of the items in the necklace assemblage were considered by their wearers to fulfill a protective or magical function. Some individual items almost certainly held a deeply personal significance to their owners that cannot now be identified. Instead, the conclusion to be drawn here is that these items were probably imbued with layered symbolism, and the reasons why an individual item was incorporated into a necklace assemblage were undoubtedly numerous, a fact which can be overlooked when labelling them simply as amulets. Indeed, perhaps the most important contribution of Meaney's (1981: 245–6) study is the observation that necklaces are – to judge from the burial evidence – the appropriate *means* by which amuletic material could be worn and displayed.[29] Thus, we should not be at all surprised to find amulets in necklace contexts, even if it can be difficult to identify them with certainty.

2.4: CONCLUSIONS

The distinctiveness of seventh-century necklaces partially results from the new repertoire of materials available during this period. The supply of precious metals seems to have increased dramatically, first gold and subsequently silver. The incorporation of these materials into

[29] The same can also be said of girdle assemblages and bag and box collections.

necklaces worn by women can be contextualised by wider processes reflective of the greater availability of gold and silver: masculine artefacts datable to the same period are also constructed from these materials, although within the masculine sphere precious metals are concentrated in fewer contexts and represent a much more dramatic investment of portable wealth. There is a relationship between these phenomena and the increasing circulation of coinage during the seventh century, first in the form of imported gold coins, then the minting of Anglo-Saxon gold issues and finally the transition towards the silver *sceatta* coinages in the later part of the seventh century, although this relationship is likely to have been complex (Williams 2014). The connections between coins, precious metal supplies and female jewellery find material expression in the transformation of gold and silver coins into pendants (type PE7) from the end of the sixth century onwards. Such objects are frequently dismissed as items that no longer have any economic significance or function, worn by women simply as amulets or trinkets. There is considerable scope for future projects to deconstruct these kinds of outdated ideas regarding women and their engagement in the economies of the seventh century.

Much of the gold, and probably at least some of the silver, in circulation arrived in seventh-century England as an import. Other materials that can be considered characteristic of seventh-century necklaces also represent imports: garnet, amethyst, cowrie shells and various other exotica, as well as potentially additional fresh supplies of glass. Within this group, an interesting division occurs: while cloisonné garnet can be compared to gold and silver in that it appears regularly within both feminine and masculine high-status metalwork, many of the other imported materials appear only in female contexts. Amethyst beads, cowrie shells and cabochon garnets are examples of objects that appear to have circulated within distinctly feminine spheres. Such objects represent a considerable material investment in female graves. In the context of the present study, it is especially interesting to note that the necklace appears to have been the primary vehicle for the display of these materials rendered prestigious by their scarcity. While amethyst beads clearly arrived in their finished form, cowrie shells and polished cabochons were transformed in ways that facilitated their inclusion as part of necklaces.

This chapter has also considered the more esoteric objects regularly incorporated into necklaces. By focusing on the specific context of necklaces, this study has revealed that items were not worn simply because they were inherently interesting as antiques or amulets, but that there was a deliberate process of selection, mediated by other factors such as the visual and aesthetic appeal of the reused items. This serves as a useful reminder that particular items and materials probably derived their significance and sentimental value as the result of layered and complimentary meanings. It also seems likely that valuable antique materials circulated through networks of exchange prior to their reworking into seventh-century jewellery, which is an observation that

should be taken into account in future studies considering the broader category of reused antiques.

Returning to the object biography metaphor (see above, chapter 1.3), an examination of the materials within the present corpus reveals that some things probably carried quite complex biographical entanglements prior even to their reworking as necklace items. Several categories of material reveal evidence for an intense recycling economy during the seventh century. Gold, silver and glass are perhaps the most obvious examples of this, although garnets were quite clearly also recycled. In the cases where the sources of these recycled materials were themselves objects with individualised biographical trajectories, we should be mindful of the potential for processes of recycling to imbue even newly-made objects with meaning and a deeper life history (see Caple 2010). Equally, in the case of imported objects, it is important to consider how the acquisition of these objects contributed to their overall meaning. Although the complexities of the early medieval economy continue to be debated, one general observation is that exchange is to some degree socially embedded during the early Anglo-Saxon period (see Scull 2011). Objects circulated through processes like gift-exchange and the payment and redistribution of tribute, rather than through trade in its neutral and entirely alienable sense. This fits with the evidence for the mechanisms by which long-distance imports seem to have moved (Harris 2003; McCormick 2001; Drauschke 2007: 70–1). It seems likely, therefore, that the acquisition of portable wealth of the kind so regularly incorporated into necklaces materialised and reified the social relationships through which the materials were acquired (Gaimster 2011: 878). A final point raised by considering the biographies is the question of known versus unknown biographies. A contextual approach to the archaeological materials allows us to trace the particularly complex trajectories of particular objects and materials – the long-distance movement of items produced in the eastern Mediterranean, for example, or the repurposing of objects that were several hundred years old by the point of their reuse – but whether the full life-history of these objects would have been known to their seventh-century owners and wearers is debatable. Here, however, we can point to the important observation that mysterious and unknown biographies can themselves imbue objects with meaning and significance (Eckhardt and Williams 2003).

It is clear, therefore, that the individual objects that were incorporated into necklaces did not simply *do* one thing. Proposing that necklaces were primarily advertisements for the social status of the owner or collections of amuletic material intended to protect the wearer overlooks the potential for individual items to draw their value and significance from multiple sources: the prestige associated with materials that were inherently scarce, the aesthetic appeal of many of these materials, the biographical entanglements they carried with them and the social relationships

they symbolised. These ideas also serve to emphasise the importance of thinking about necklaces as assemblages and palimpsests of layered meanings.

CHAPTER THREE: TECHNOLOGY AND MANUFACTURE, CRAFTWORKERS AND PATRONS

3.1: INTRODUCTION

This chapter seeks to explore how the objects that make up seventh-century necklaces were made: what were the contexts of production for these items, what light can this material shed on the nature of craftworking during this transitional period, and, crucially, how the relationship between producer and consumer is likely to have been articulated.

The foundation of this chapter is the author's first-hand examination of almost 1,500 objects, of all types, during a series of museum visits (see chapter 1.4). As part of the recording process, evidence related to manufacture was assessed, and the various component parts of composite objects (such as filigree, suspension loops and inlaid materials) were listed individually (see database II and the object record sheets in appendix III). This experience garnered during fieldwork serves as the basis for an exploration of the range and frequency of manufacturing techniques represented in the present corpus of necklace material, the combination of techniques in a single artefact, the degree of specialism represented, and the likely scale and context of much of this activity.

Rather than reviewing the technology of individual artefact classes, this chapter is structured around the manufacturing techniques themselves. Indeed, as will be demonstrated, the same, relatively restricted repertoire of techniques underpins much of the necklace corpus. The production of sheet metal and wire, for example, is a commonly occurring feature of numerous different types of precious metal artefacts, while beads of various forms are made using one of three key processes. These observations regarding the connections evident in terms of manufacture across the corpus therefore provide important insights into the potential contexts of production of this jewellery.

Precious metal objects (mostly pendants and beads) and glass objects (mostly beads) are considered separately. Although there are many more objects made from glass in the present corpus (see tab. 1.7 and fig. 2.1), there is both more evidence for non-ferrous metalworking in the archaeological record, and a greater wealth of scholarship discussing this craft, and so inevitably this is the subject of more discussion. The evidence derived from examination of the objects themselves is then contextualised through a consideration of the archaeological evidence for tools, workshops and craftworkers themselves, as well as the documentary source material of near-contemporary date.

3.2: NON-FERROUS METALWORKING

Many of the metal objects in the present databases are the products of non-ferrous metalworking. Non-ferrous metalworking describes the working of mainly precious metals (gold, silver and copper-alloys) and is therefore distinguished from the more everyday and utilitarian craft of blacksmithing. There are numerous important syntheses discussing early medieval non-ferrous metalworking. The most important is Coatsworth and Pinder's (2002) detailed assessment of the evidence. Detailed studies of the manufacturing technology of seventh-century object types (such as MacFadyen's 1998 study of composite disc brooches) or of collections of material (such as the detailed examination of the gold objects in the Staffordshire Hoard, see Blakelock and Fern 2019) are of obvious relevance to the present study.

3.2.1: MANUFACTURING TECHNIQUES

3.2.1.1: SHEET METAL ELEMENTS

Undoubtedly, one of the foundational techniques in the manufacture of the precious metal objects recorded in the present corpus was the production of thin sheets of metal. Thin metal sheet forms the basis of disc pendants onto which stamped (type PE2) or repoussé decoration (type PE3) or filigree, wire and other inlays (type PE1) could be applied. Shaping and cutting sheet metal results in the domed bulla pendants (type PE8), lunate pendants (type PE4) and beads of type BE2-b. Many components of pendants, such as backplates, collets to hold gemstone inlays, cloisonné cells and suspension loops, are made from strips of sheet metal. Very thin rods of sheet metal are also required to produce wire (see below, section 3.2.1.2), which is the basis of wire rings and biconical wire beads (type BE2-a). Indeed, there are very few objects of silver, gold or copper-alloy in the present database for which the manufacture of sheet metal was not a primary stage in their production.

Thin sheets of gold or silver can be produced relatively easily. Assuming that most source metal was in the form of scrap or perhaps coins (see above, chapter 2.2.1), this would first be melted in a small crucible and then cooled to produce a small metal billet. This billet is hammered out on a flat surface, such as a stake or a flat-topped piece of stone (Coatsworth and Pinder 2002: 45). At the beginning of the process a heavier, full-faced hammer is used, but as the sheet gets thinner, a smaller, lighter hammer with a flat face is required. The metal must be annealed regularly to maintain its workability as the thickness is reduced. This technique can produce extremely fine sheets of metal, down to around 0.01mm thick (Coatsworth and Pinder 2002: 87). Sheet metal

was probably only produced in relatively small quantities, as required. The largest single piece of sheet metal among the corpus of necklace objects is the backplate of the spectacular Winfarthing pendant (NO.Wi.01.06), measuring 57.8mm in diameter; this figure perhaps indicates the upper limit in terms of the size of sheet metal produced by seventh-century goldsmiths.[30] Sheets of this restricted size can easily be produced by a single craftsman (Coatsworth and Pinder 2002: 86).

Shears or snips were used to cut sheet metal to a desired shape, and relatively fine snips were probably required for working with very thin sheet metal. The circular shapes and complex geometry of many seventh-century pendant types also strongly suggests the use of dividers or calipers for marking out designs on the sheet metal prior to cutting. The use of two-armed dividers leaves a recognisable dent or perforation in the centre of circular objects, and this feature is visible on a number of seventh-century pendants (fig. 3.1).

Figure 3.1: Dents in the backplates of composite disc pendants resulting from the use of two-armed dividers; (*left*) EY.Un.31.01 (diameter of pendant: 26.2mm); (*right*) SF.EY.00.01 (diameter of pendant: 33mm). These marks would originally have been hidden from view by the now-missing central settings. Images by author © (*left*) Yorkshire Museum and (*right*) British Museum.

A particularly interesting window onto the use of thin sheet metal is provided by a silver cruciform pendant from Lechlade (GL.Le.187.20). On the reverse of the pendant are a series of incised lines in the region of the lower vertical and horizontal right arms: a small compass-drawn circle and the corresponding indentation at its centre, plus nine crude linear scratches (fig. 3.2). These incised markings can be interpreted one of two ways. The arrangement of the lines particularly on the lower vertical arm bears a slight resemblance to the shape of the finished pendant, although crudely executed. In this case the Lechlade pendant would be clear evidence for the drawing of templates onto sheet metal ready for cutting, perhaps in this case a clumsy first attempt. If the

[30] The only example of an anvil from seventh-century England, in the Tattershall Thorpe grave (see below), measures 76mm x 60mm, which is generally consistent with this observation (Hinton 2000: 23).

incised lines do not relate to the pendant in its present form, they might instead point to reuse of the sheet metal, perhaps cannibalized from an existing item or representing a rough trial piece from a jeweller's stock-in-trade.

Figure 3.2: Illustration of the reverse of pendant GL.Le.187.20, showing the presence of a compass-made point and circle and crudely scratched lines. Diameter of pendant 27mm. After Boyle et al. (1998: fig. 5.106).

3.2.1.2: WIRE, FILIGREE AND GRANULATION

Round wire was used extensively in seventh-century jewellery. It forms the primary component of objects like wire rings (n. 655), biconical wire beads (type BE2-a, n. 87) and wire pendants (type PE6, n. 16), as well as featuring heavily as a decorative element on the majority of pendant types. For example, of 764 pendants constructed primarily from non-ferrous metals in database II, beaded wire was a feature of 280 objects (36.6 percent) and filigree of 48 objects (6.3 percent). A number of techniques for producing round-sectioned wire have been identified and discussed, including hammering, block-twisting, strip-twisting, folding, casting and wire-drawing (Oddy 1977; Whitfield 1990; Coatsworth and Pinder 2002). In theory, each of these techniques should result in distinctive manufacturing marks on the surface of the wire, but, practically speaking, a number of factors affect the survival of such evidence, with the result that, of a large number of objects examined by the author, only a handful display clear evidence of manufacture (see Whitfield 1990: 13). Corrosion particularly affects the surface of silver wires and, although gold wires do not corrode, much of the evidence of manufacture has been obscured by secondary treatments like beading or soldering (see below), or in some cases, by heavy wear.

Where the manufacturing marks do survive, close examination of a number of objects suggests the use of the block-twisting technique to produce much of the wire. As part of an earlier survey of early medieval gold jewellery, Whitfield (1990) identified nine examples of pendants in the

British Museum and Ashmolean Museum collections that show evidence of block-twisted wires.[31] Examination of a greater range of material in the course of the current project has revealed three further instances of block-twisted wires, including the hitch of an unusual wire-mounted bead from Faversham (KE.Fa.00.23), a composite disc pendant from Wormwood Close, Ducklington (OX.WC.02.01) and an unprovenanced wire pendant in the collections of Canterbury Museum (Unprov.08). Although the evidence is somewhat scanty, it seems that this was the most widely used technique in Anglo-Saxon England during the sixth and seventh centuries. Block-twisting begins with a very thin rod cut from the edge of a metal sheet. This is then twisted so the corners of the rod deform, resulting in a round-sectioned wire with spiralling helical creases or seams around the surface (fig. 3.3). A distinction is sometimes made between square- and rectangular-sectioned block-twisted wires, depending on the profile of the original rod. Block-twisting a square-sectioned rod would result in a wire with four helical seams around the circumference, while a rectangular-sectioned rod would leave only two. However, cutting a perfectly square-sectioned rod from sheet metal using shears or snips would be extremely difficult, and so the two seams produced by block-twisting rectangular wires are to be expected for all hand-made wires (Oddy 1979: 45; see also MacFadyen 1998: 87). These seams are then flattened by rolling the wire between two hard surfaces (Oddy 1977; Whitfield 1990). Experimental reproductions have shown that block-twisting can be used to produce even the very fine wires used for filigree work, providing the diameter of the metal rod is close to the required size of the wire, as this, rather than compression during twisting, determines the finished thickness (MacFadyen 1998: 89).

[31] These include six pendants said to be from Faversham (KE.Fa.00.01, KE.Fa.00.02, KE.Fa.00.03, KE.Fa.00.05, KE.Fa.00.25 (see fig. 3.3) and KE.Fa.00.26), a pendant from Milton Regis (KE.MR.00.04), the Bacton coin pendant (NO.Ba.00.01) and a pendant from Compton Verney (WA.CV.00.02).

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Figure 3.3: Helical creases in plain wire resulting from block-twisting during manufacture; (*top left*) a composite disc pendant (OX.WC.02.01, diameter of pendant: 24.2mm); (*top right*) wire pendant of type PE6 (KE.Wr.00.01, diameter of pendant: 15.7mm); (*bottom left*) wire hitch for a mounted bead (KE.Fa.00.23); (*bottom right*) composite disc pendant (KE.Fa.00.25, diameter of pendant: 34.8mm). Images by author © Ashmolean Museum (*top left*) and British Museum (*top right*, *bottom left, bottom right*).

Other techniques for producing wire have not been identified in Anglo-Saxon contexts, although some contemporary Merovingian objects feature strip-twisted wires (Whitfield 1990: 18–20). Strip-twisted wire forms a very thin hollow tube, which has a tendency to deform when beaded (MacFadyen 1988: 95). Given the ubiquity of beaded wire in seventh-century jewellery, this may partly explain why block-twisting was the preferred technique. Wire-drawing (pulling wires through holes of decreasing diameter in a draw-plate) can also be used to make fine wire, but there is no evidence that this technique was used prior to the later eighth century (Whitfield 1990: 24).

Wire was probably made as and when required. Experiments have shown that the best results are obtained when making short lengths of wire, as this dramatically reduces the risks of snapping or distortion caused by uneven annealing (MacFadyen 1998: 88–9). Producing shorter lengths of wire would also have the advantage of conserving materials (Coatsworth and Pinder 2002: 93). One of the longest pieces of wire in the present corpus, which is soldered around the edge of the Acklam Wold pendant (NY.AW.00.01), measures roughly 128mm in length, and again perhaps represents the upper limit in terms of the wire produced.

Plain wire was chiefly used to make wire rings. A common feature of many of the wire rings examined during research visits is that the diameter of the wire at the terminals is much narrower than the diameter of the body of the ring. This provides a clear indication that these sections of wire were produced individually to make each ring, rather than cut from a pre-existing length of wire. Experiments using ready-made copper and silver-plated wire have shown that wire rings are relatively easy to make, and require a very limited tool kit, just a pair of slim-nosed pliers and

some wire-cutters. With practice, a single ring with simple wrapped terminals (type WR-Wrapped) can be made from ready-made wire in under five minutes (for examples of rings made by the author, see figs. 5.19, 5.23).

The wire used to make and decorate beads and pendants was almost always beaded. There has been extensive discussion concerning the production of early medieval beaded wire, based on experimental reproductions and close microscopic examination of late antique and early medieval gold jewellery (Whitfield 1998; MacFadyen 1998). The consensus is that the tool used was probably a double-edged swage, with teeth cut into the edges, which is placed at right angles to the wire and rolled over it to produce the impression of a bead. Such a tool is described in a twelfth-century metalworking treatise, *De Diversis Artibus*, by the monk Theophilus (III.10; transl. Hawthorne and Smith 1979: 90). A possible example of a tool of this type has been found amongst the Roman Iron Age votive deposits at Illerup Ådal (Denmark) (von Carnap-Bornheim 2001: fig. 1). Variations in the amount of pressure applied will determine the final shape of the bead; relatively light force results in a notched wire, while fully rounded beads require more pressure, typically applied through successive rolls of the tool across the wire (Whitfield 1998: 63). The shape of the beads is also determined by the profile of the groove cut into the swage. Figure 3.4 illustrates the range of different bead shapes that could result.

Figure 3.4: Variation in the profiles of beaded wire, from rounded (*top*) to ellipsoid (*bottom*) beads, which results from the shape of the swage used, degree of pressure applied and the hardness of the alloy. Note the medial seams (*Äquatorschnitt*) in the beads that can result from insufficient rolling of the swage across the wire (*bottom right*, *arrow*). Images by author © British Museum (*top left*, *bottom right*), Ashmolean Museum (*top right*) and Canterbury Museums and Galleries (*bottom left*).

Other tools for making wire are also described by Theophilus (*De Diversis Artibus* III.9; transl. Hawthorne and Smith 1979: 88–90), including the *organarium* – a more complex two-part swage block with channels carved into the opposing surfaces – but experiments have shown this is less suited to producing the very fine beaded wires seen in much of the early medieval jewellery (Whitfield 1998: 69; MacFadyen 1998: 94–5). The thinnest beaded wires, usually around 0.2mm in diameter, were used for filigree work, which is a feature of forty-eight pendants in the present corpus, the vast majority of which are composite disc pendants (type PE1). A relatively restricted number of filigree designs were used, most of them simple curvilinear shapes (fig. 3.5). S-spirals are most common (47.9 percent of all pendants with filigree) among the pendant corpus, followed by annulets (37.5 percent) and C-spirals (29.2 percent). Other shapes, such as the figure-of-eight (18.7 percent), heart- (16.7 percent) and U-shaped- (or volute) spirals (12.5 percent) are rarer. Similar filigree designs are present among contemporary composite disc brooches (see Avent 1975: fig. 2.6).

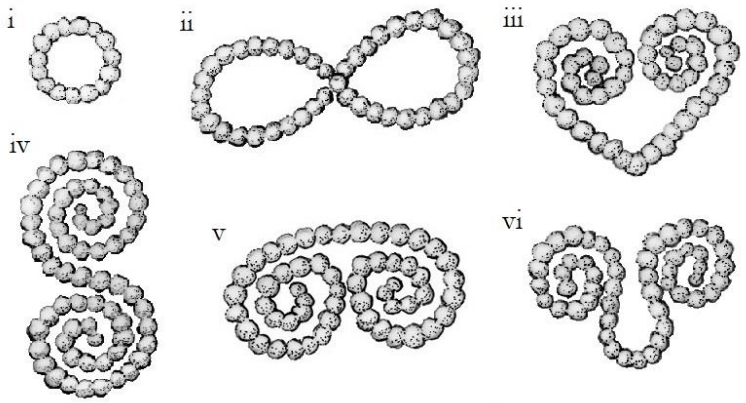

Figure 3.5: Filigree motifs in the present corpus: (i) annular; (ii) figure-of-eight; (iii) heart-shaped; (iv) S-shaped; (v) C-spiral; (vi) U-spiral.

A related technique is granulation, which appears alongside filigree work on around twenty pendants, mostly composite disc- (PE1) or lunate-types (PE4). Small spherical gold granules appear singly or in clusters, and sometimes in combination which filigree wire, especially when set within a ring of filigree to form a collared granule (fig. 3.6). These granules can be produced fairly easily, by melting very small pieces of gold in a reducing atmosphere, such as powdered

charcoal. The surface tension of the metal naturally forms a perfectly spherical gold globule (Coatsworth and Pinder 2002: 129).

Figure 3.6: Spherical gold granules set within beaded wire collars (*left*), in this case serving as the eye of a zoomorphic design in triple-strand beaded wire, and (*right*) at the terminals of S-spiral filigree; (*left*) composite disc pendant of type PE1-c (KE.MR.00.03, diameter of pendant: 27.9mm); (*right*) composite disc pendant of type PE1-f (KE.Br.01.01, diameter of pendant: 22.9mm). Images by author © British Museum.

3.2.1.3: REEDED STRIPS AND SUSPENSION LOOPS

Suspension loops are a feature of most seventh-century pendants. Of the 801 pendants recorded in database II, almost sixty percent have a suspension loop, and many other broken and fragmentary objects were also originally furnished with a loop. Only pierced coin pendants (PE7-a) and some natural pendants (types PE10-a and PE10-b) were typically perforated for suspension, rather than given a loop. In the process of examining and recording pendants during fieldwork, a variety of loop types were identified. On the basis of this assessment of the material, a new typology of suspension loops is proposed below:[32]

- Type 1: undecorated sheet metal loops (90 examples; see figs. 9.87vi, 9.89vii, 9.97v)
- Type 2a: loops constructed from reeded sheet metal with each rib of roughly equal width (299 examples; see figs. 9.88vii, 9.90i, 9.96ii, 9.115)
- Type 2b: loops constructed from reeded sheet metal with ribs of unequal width (40 examples, see figs. 9.87i, 9.98vi, 9.92iv, 9.109iv)

[32] The potential of using suspension loops as a tool to explore manufacture and workshops was recognised by Blackburn (2006) in his discussion of the looped coin pendants in the ninth-century Hoen hoard. The classification he proposed cannot be directly transplanted onto the seventh-century Anglo-Saxon material, partly because there is a considerable chronological discrepancy, but mostly because the modification of existing objects – coins – requires techniques and loop types that are not used in the production of pendants more generally. The use of rivets to attach suspension loops is a good example of a technique restricted entirely to coin pendants.

- Type 3: biconical or cylindrical loops with applied beaded or plaited wire (50 examples, see figs. 9.91iii and v, 9.102xviii and xxv, 9.104iii, 9.109xi)

Type 3 suspension loops share an obvious visual similarity with biconical metal beads (types BE2-a), and presumably relied on similar construction techniques, particularly in the use of wire. By far the most common loop type among the present corpus, represented by 70.8 percent of extant examples, are the type 2 loops, which have a distinct ridged shape. Type 2 loops are made from thin strips of metal, reeded to give them a corrugated profile, which helps strengthen the loop. Within the necklace corpus, reeded strips are occasionally also used for other purposes, such as the construction of frames for inlaid pendants (see fig. 3.7). The production of reeded strips has been extensively discussed (Pinder 2001; Coatsworth and Pinder 2002: 118–25). Four manufacturing techniques have been proposed by Pinder (2001: 134–8): chasing with a punch (either single-edged or multi-grooved); swaging, whereby the strip is hammered into a swage block with a grooved profile; carving, in which a scraper with the negative profile of the reeding cut into the edge is dragged along the metal strip to carve the design into the surface; and draw-swaging, which involves pulling the metal strip through a very small gap between the a specially cut-die and a hard surface. Experiments have shown these two latter techniques, carving and draw-swaging, leave a series of characteristic file parallel scratches in in the metal; similar marks can be seen on objects in the present corpus (fig. 3.7).

Figure 3.7: Reeded strips used to construct collets to hold gemstone inlays. Note the parallel scratches between the ribs, resulting from their manufacture by draw-swaging or, more probably, carving; (*left*) inlaid pendant of type PE9-i (KE.We.00.07), width of reeded strip: 2.6mm; (*right*) garnet cabochon pendant of type PE9-b(i) (KE.BD.67.20), thickness of pendant 3mm. Images by the author © Canterbury Museums and Galleries (*left*) and British Museum (*right*).

Pinder (2001: 138) prefers draw-swaging, as it represents the most efficient method and produces the most consistent results. However, this would have required a fairly complex arrangement of clamps to hold a die in place and seems somewhat at odds with the fact that other techniques,

like making beaded wire, seem to have relied on much simpler hand-held tools (see above, section 4.2.1.3). A further problem with assuming the widespread use of a draw-swage is the fact that the reeded loops of many pendants are integral with the backplates, rather than separately attached strips. It seems impossible that just the small area of the backplate corresponding to the loop could have been pulled through a draw-swage without risking considerable damage to the rest of the sheet. Some of the examples of reeding on suspension loops also feature troughs of uneven length (fig. 3.8; see also fig. 9.89iv), which precludes the use of any kind of die or carving tool. Therefore, based on examination of reeded strips in the present corpus, it seems likely that both techniques – carving with a handheld scraper and chasing using a single edged punch – were used.

Figure 3.8: Reverse of a pendant of type PE9-b(i) (OX.St.08.01). Note the uneven length of the troughs that create the reeded effect. The shape of the troughs suggests the use of a single-edged punch to chase individual channels in the loop. Image by author © Ashmolean Museum.

3.2.1.4: STAMPS, PUNCH-MARKS AND BOSSES

One of the simplest forms of surface decoration on many of the seventh-century necklace objects are punch-marks and bosses. These decorative elements are created by hammering a punch, a tapered iron rod, into the surface of the metal. Hammering the punch into the front of an object will create a depressed stamp punch-mark, while hammering the object from the reverse results in a raised boss. A range of punches are evidenced in the corpus of seventh-century necklace elements. Examples with narrow pointed ends were clearly used to create some of the finer punch-work on the scutiform pendants, while larger, more rounded types were used for some of the bossed shapes, and probably also to make the domed surfaces of hemispherical bulla pendants (type PE8) and spherical metal beads (type BE2-c). There are also occasional examples of more complex decorative stamps (fig. 3.9).

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Figure 3.9: Two different kinds of punch marks on a scutiform pendant of type PE2-c (KE.SP.165.01): a waffle-pattern stamp made by a carved, square-headed punch (white arrow) and a simpler rounded punch mark (black arrow). The edge of the pendant's central boss can be seen at the lower right corner of the image; this would also have been created using a punch, in this case hammered from the reverse. Diameter of pendant: 18.6mm. Image by author © British Museum.

More complex stamped designs, such as those found on Style II bracteates (type PE3-a; fig. 9.96), are made using engraved copper-alloy patrix dies, a technique properly known as *Pressblech*. The design of a copper-alloy die can be impressed into gold or silver sheet in two ways: by working the sheet metal over the die slowly using a burnisher, or by placing the sheet metal on top of the die, adding a protective leather pad or thick piece of lead and then hammering this to impress the design into the metal (Speake 1980: 68; Coatsworth and Pinder 2002: 114). Experiments have suggested the latter technique produces crisper results (Coatsworth and Pinder 2002: 113–4). Each die was capable of producing numerous pendants, certainly dozens, if not hundreds (Speake 1980: 68).

Copper-alloy dies were also used to make cross-hatched foils, a feature of 27 pendants of various types in the current corpus. These are wafer thin sheets of gold stamped with a variety of waffle designs, which were placed behind garnets to reflect and refract light, enhancing the appearance of relatively dull stones (Avent and Leigh 1977; East 1985). While cross-hatched foils are most commonly associated with cloisonné garnet, they were also placed behind some cabochon gemstones, particularly the thinner flat-topped type (figs. 9.109xxii, 9.111iii). The foils themselves are fairly easy to produce, using a copper-alloy die to stamp the design onto thin gold sheet and then cutting this to the required size. Often the foil was cut a little larger than the cell or collet into which it was placed, so that the excess became wedged in between the frame and the garnet inlay, to help secure the gemstone (East 1985: 129). Avent and Leigh (1977) drew a distinction between standard and boxed designs; both are present within the necklace corpus, sometimes within the same object (fig. 3.10).

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Figure 3.10: Standard (white arrow) and boxed (black arrow) cross-hatched gold foils beneath cloisonné and flat-topped cabochon garnets set in a pendant of type PE9-i from Faversham (KE.Fa.00.17). Length of pendant: 25.5mm. Image by author © British Museum.

A copper-alloy die of the kind used to produce cross-hatched foils has been found in seventh-century deposits at Tjitsma in Friesland, alongside other metalworking evidence (Tulp and Meeks 2000). The question of how the dies themselves were made has been subject to much speculation. Experimental reconstructions were only able to replicate the extremely high level of surface detail by cutting the die using a specially-designed mechanical jig (Meeks and Holmes 1985), but irregularity on certain foils may suggest that some dies were cut by hand (Coatsworth and Pinder 2002: 142). It may be that, while stamped gold foils could be produced easily and quickly, the dies themselves represent a more specialized craft (MacFadyen 1998: 176).

3.2.1.5: INLAYS

As outlined in the previous chapter, a major decorative element in much seventh-century necklace jewellery is the use of inlays, in a wide range of media. Gemstone and glass inlays predominate. Despite this, the degree of lapidary work undertaken by seventh-century precious metalworkers is, at present, unclear. As noted (see chapters 2.24 and 2.2.5), it seems that many of the gemstones used as inlays or in bead-form arrived in Anglo-Saxon England in essentially their finished form, undergoing little additional modification. The only exception to this, and even then, only in part, is cloisonné garnet. The well-formed, complex and sometime unique plate shapes of zoomorphic and geometric cloisonné strongly suggest that garnet-cutting formed part of the production of some high-status cloisonné jewellery, even if the upper and lower surfaces of the garnet plates may have been ready polished (Coatsworth and Pinder 2002: 147; Bimson 1985: 127). The smooth profiles of the edges of some cloisonné garnets speaks to the use of an abrasive wheel (fig. 3.11).

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Figure 3.11: Wheel-cut cloisonné garnet shapes; (*left*) from the frame around the Bacton coin pendant (NO.Ba.00.01, diameter of pendant: 35mm); (*right*) single-set plate garnet on a composite disc pendant from Faversham (KE.Fa.00.03, diameter of pendant: 32.7mm). Images by author © British Museum.

This was not a technique available to all precious-metalworkers, however, given the presence of roughly shaped garnet plates within the necklace corpus, many with chipped or grozed edges (fig. 2.6). This rough reshaping is understood to be evidence of a declining supply of garnets in the seventh century (Bimson 1985: 127). It is possible that these gemstones were reshaped using a more basic toolkit, perhaps comprising of simple drills, files and abrasives, which would otherwise be sufficient for the reshaping and polishing of other reworked materials in the present corpus, like glass and shell. Sandstone, quartz grit and ground earthenware are known to have been widely used as abrasives since antiquity (Burianek and Höltken 2017; Coatsworth and Pinder 2002: 146).

3.2.1.6: SOLDERING

Since many of the bead and pendant types in the necklace corpus are composite objects, made from thin sheet metal and fine decorative elements, soldering is a hugely important technique. Collets, cellwork, filigree and beaded wire and suspension loops were all attached to pendant backplates by soldering.

There are two main soldering techniques that could have been used. The first is the application of a metallic solder, either in the form of small fragments, a metallic powder or a slurry, close to the joins between the elements. When heated, the solder melts and is pulled into the joints by capillary action. The difficulty in placing and maneuvering tiny amounts of solder is high, and often this technique results in small blemishes, scars and areas flooded with excess solder (Coatsworth and Pinder 2002: 97–8). The alternative technique, known as the eutectic or reaction soldering, involves painting the area where two pieces of metal are to be joined with a liquid mixture made from a copper-rich salt (perhaps malachite or verdigris), an organic adhesive and a

flux, before heating (Coatsworth and Pinder 2002: 98; Turner-Walker et al. 1995: 398–9). When the organic material carbonises, the copper salt reduces and mixes with the surface metal to form a copper-rich alloy (Coatsworth and Pinder 2002: 98). The higher proportion of copper in this specific area lowers the melting point of the metal, allowing the two pieces to be joined. The results of the eutectic soldering technique tend to be much neater, since no additional material is being introduced, but it requires a very careful control of temperature, since overheating of the object can cause distortion of fine surface detail (Coatsworth and Pinder 2002: 98).

The small scale of many of the objects in the present corpus strongly suggests widespread use of the eutectic soldering method. The same observation seems to be true of much early medieval fine metalworking (Coatsworth and Pinder 2002: 99–100; Blakelock and Fern 2019: 141). As well as the neater finish it gives, the adhesive properties of eutectic solder allow the goldsmith to arrange and reposition the various applied elements before a single heating operation. Where there is occasional evidence for the use of metallic solders, this seems to have primarily been used to affix more substantial elements. Detailed examination of the composite disc pendant from Westbury-by-Shenley (BU.WS.55280.01) by Turner-Walker et al. (1995) revealed that, although eutectic soldering was used to secure a dense field of filigree annulets to the back-plate, the central bezel and the suspension loop were attached using the metallic soldering technique, evidenced by partially-melted pieces of sheet solder adhering to the interior of the bezel. The sheet solder used to attach the suspension loop (perhaps as a repair, at a later point; see chapter 4.3) was an unsuitable alloy, with too high a melting point, since the temperature required to melt it had also distorted the filigree in the area of the loop.

3.2.2: THE TOOLS

By considering the manufacturing techniques represented by the corpus of seventh-century metal jewellery items, it is possible to reconstruct the hypothetical toolkit used in the production of these objects (tab. 3.1, first column). This list can be compared to the list of modern tools used by MacFadyen (1998: 194), who, in a series of experiments, attempted to reproduce the techniques and processes involved in the production of Anglo-Saxon composite disc brooches (tab. 3.1, second column). Most of MacFadyen's (1998) experiments are directly comparable, given the similarity in terms of material, style and techniques of the composite disc brooches and many pendant- and bead-types; some processes, however, including as casting and niello decoration, are not represented in the present corpus of necklace items, and so the tools and materials required for these are not listed.

Tools identified from examination of objects	Modern tools used by MacFadyen (1998: 194)	Comparable tool(s) present in Tattershall Thorpe grave?
Crucibles	Crucibles	
Stake anvil	Stake anvil	✓
Hammer(s)	Hammer	✓
Shears or snips	Shears	✓
Dividers	Dividers	
Tweezers	Tweezers	✓
Tongs or pliers	Pliers	✓
Simple punches		✓
Stamps or dies		
Double-edged beading swage	Mild steel beading tool	
Reeding tool		
	File	✓
Abrasives	Emery, ground earthenware	

Table 3.1: The hypothetical toolkit of the seventh-century non-ferrous metalworker.

The archaeological evidence for tools associated with precious metalworking in Anglo-Saxon England is extremely scanty, almost certainly because of the value attached to these items. When Theophilus wrote his treatise on metalworking in the twelfth century, it is clear that precious-metalworkers made and repaired their own tools, a tradition which almost certainly stretches back into antiquity (Ogden 1994: 154), and it may be that master artisans passed their tools, as well as their expertise, on to their apprentices. Indeed, there is only a single collection of metalworking tools from early Anglo-Saxon England against which the hypothetical toolkit presented above might profitably be compared: the objects from the seventh-century smith's grave at Tattershall Thorpe, Lincolnshire (Hinton 2000; Coatsworth and Pinder 2002: 42). This grave contained a collection of tools, mostly of iron, and various items that were identified as scrap (Hinton 2000). Skeletal material was recorded on excavation but was in such a poor state of preservation that further analysis was not possible (Hinton 2000: 5). The location of the grave was extremely unusual; despite the large-scale excavation of the site, the grave was the only Anglo-Saxon feature in the immediate landscape (Hinton 2000: 101).

Present in the Tattershall Thorpe assemblage are many of the kinds of tools that would have been required to make the metal items in the present corpus (tab. 3.1, third column). Indeed, the form and size of many of the Tattershall Thorpe tools suggest that they were particularly suited to fine non-ferrous metalworking (Hinton 2000: 105–6).[33] The smallest of the three hammers recovered

[33] The presence of these fine tools is the strongest evidence to suggest that this was the toolkit of a specialised metalworker, probably working primarily with non-ferrous metals, rather than a general-purpose

from the grave, weighing 33g, can only have been used for very fine work, while the largest, weighing 450g, is relatively light for a hammer intended for heavy iron working (Coatsworth and Pinder 2002: 44; Hinton 2000: 20). Similarly, the relatively small pair of snips from Tattershall Thorpe would be suitable for cutting quite thin sheet metal, perhaps around 1.5mm thick (Coatsworth and Pinder 2002: 55; Hinton 2000: 26). Perhaps most interesting is the possibility that a cast copper-alloy cuboid from the grave, cautiously identified as a weight in the original report (Hinton 2000: 65, fig. 42) but substantially heavier than any other weight associated with scales from Anglo-Saxon England (c.f. Scull 1990), may in fact be a die for making stamped cross-hatched foils, an activity firmly connected to the manufacture of garnet cloisonné jewellery (Kevin Leahy *pers. comm.*).

Although it seems certain that the Tattershall Thorpe smith worked, at least primarily, with fine metalwork, the tool assemblage is missing some items that would definitively connect this individual to the production of the precious metal bead- and pendant types in the present corpus. The punches are all of simple forms (Hinton 2000: 108); there are none of the more decorative types and neither are there any stamps nor dies of the kind used to produce the Style II bracteates, although admittedly these are relatively rare objects. More striking is the absence of the kind of tools which could have been used to make beaded wire and reeded strips, both of which are very common elements of seventh-century pendants.

More generally, the absence in the Tattershall Thorpe collection of key tools and materials associated with jewellery production led Hinton (2000: 109) to suggest that the tool-kit was incomplete. Poor preservation of some items may explain some of the missing elements; certainly, there were a large number of unidentified corroded iron bars and rods recovered, which may represent small, now-unrecognisable tools, and of course any items made of organic materials (hardwood, bone, antler etc.) would not have survived (Hinton 2000: 108–9). Any potential curation or retention of tools prior to or during the funerary ritual also introduces a complicating factor, which, in the case of the Tattershall Thorpe grave these issues is compounded by the unusual nature of the grave, especially its very isolated location.

In Anglo-Saxon England, the Tattershall Thorpe assemblage is essentially without comparison. However, a broader context is provided by smith's graves on the continent, in the Merovingian *Reihengräberfelder* and in Vendel-period and Viking Age Scandinavia (Henning 1991). Comparison with the continental corpus serves to reinforce the identification of the Tattershall Thorpe assemblage, on the basis of the range and types of tools present, as that of a specialist

blacksmith. However, this individual almost certainly could and did produce iron implements as well, and the distinctions between jewellers, weaponsmiths and blacksmiths may have been somewhat blurred (Hinton 2000: 104–5; Hinton 1998: 5).

metalworker. The closest parallels for Tattershall Thorpe are the substantial tool collections in smith's graves at Poysdorf (Austria), Brno-Kotlářská (Czech Republic), Herouvillette (France), Kunszentmárton (Hungary), Mezöband (Romania) and Schönebeck (Germany) (Henning 1991; Daim et al. 2005). Most are assumed to be male graves; some contain fairly elaborate weapon-sets, a feature not paralleled in the Tattershall Thorpe assemblage. It is worth noting that very few of these continental smith's graves contain a hypothetically complete tool kit. Tongs, hammers, anvils and files are present in most, but other elements (like scrap, scales and weights, moulds and crucibles) occur more rarely across this group. This may reinforce both the context-dependent nature of early medieval metalworking, and the potential for selectivity in grave furnishings. Certain tools and equipment may also have been considered appropriate representatives of a wider collection, *pars pro toto*.

3.2.3: THE WORKSHOP CONTEXT

When Bayley (1991) surveyed the evidence for non-ferrous metalworking in Anglo-Saxon England nearly thirty years ago, very few finds could be dated earlier than the eighth century. The material traces of this craft were restricted to a handful of crucible and mould fragments from a few extensively excavated rural sites, and it is possible these may have been related exclusively to the working of copper-alloys (Bayley 1991: 121). A decade later, Coatsworth and Pinder (2002: 21) could only list a couple of new finds, including a fifth-century Visigothic gold coin from Canterbury, which was deliberately cut and had a piece of haematite (jeweller's rouge) adhering to it (Blockley 1982: 227).

More recently, however, new discoveries and new assessment of metal-detected assemblages have dramatically altered the impression of metalworking in Early Anglo-Saxon England. The most important evidence undoubtedly comes from Rendlesham (Suff.), where extensive metal-detector surveys have revealed scrap metal (gold, silver and copper-alloy), droplets and dribbles of precious metal probably deriving from crucibles, lead models, casting sprues and unfinished objects (Scull et al. 2016: 1602). Among the finished objects are a small number of necklace items, including beads of type BE2 (Scull et al. 2016: fig. 10). These finds cluster in an area south of the potential hall complex identified by geophysical survey, and so are probably indicative of the location of a workshop (Scull et al. 2016: 1600).

Traces of potential precious-metalworking activity have also been found on sites of a similar nature, and on the basis of comparison with the Rendlesham assemblage, their interpretation as likely workshops is strengthened. At Sutton Courtenay (Oxon.), another high-status settlement, metal-detecting has revealed a range of metal objects, in gold and copper-alloy, including some

which are fragmentary (Hamerow et al. 2007). From the same area that produced much of this metalwork, two fragments of gold sheet and three droplets of a gold-copper alloy (potentially a solder) were recovered (Hamerow et al. 2007: 186). A range of gold and copper-alloy objects in various stages, complete, fragmentary and unfinished, are also features of the metal-detected assemblage from the 'productive site' at Coddenham (Suff.) (Newman 2003: 104). One of the most interesting objects from the site is a fragment of a gold cloisonné cruciform pendant (type PE5); the distortion of the cloisonné cell-work suggests that the garnets were deliberately pried from their settings (Newman 2003: fig. 9.3c). Comparison can also be made with the evidence for non-ferrous metalworking at Yeavering (Northumberland), recovered from the area of the henge, southeast of the great enclosure and the palace complexes. Here the evidence was restricted to a small number of crucible sherds with copper-alloy residues and a single finished copper-alloy stud or rivet (Tinniswood and Harding 1991).

Rendlesham, Sutton Courtenay and Yeavering are all high-status settlement sites, each with evidence of major hall complexes (Scull et al. 2016; Hamerow et al. 2007; Hope-Taylor 1977). Both Yeavering and Rendlesham are described by Bede as royal centres (*villa regia* and *vicus regius* respectively: *Historia ecclesiastica* II.14, III.22, transl. McClure and Collins 1994: 97, 146). Similarly, Sutton Courtenay was probably a royal centre of the West Saxons: King Æthelred (AD865–71) issued a charter there in the ninth century (Hamerow et al. 2007; Brennan and Hamerow 2015). There is no historical evidence to show that Coddenham was a royal centre in the same way, nor is the organisation of the settlement as well understood as at the other, excavated sites, but there is clearly a high level of material wealth at the site and a fairly richly furnished seventh-century cemetery has been excavated 600m to the south (Newman 2003: 106; Penn 2011).

Such sites provide a valuable indication of the types of places where precious metalworking was undertaken during the seventh century: high-status central places, potentially with royal connections. Unfortunately, because the evidence largely derives from metal-detected finds, further work is needed to explore the exact arrangements of the workshops, their relationship to other structures and the nature of the hearths and furnaces. Future work on these sites might also make it possible to assess the scale of the activity taking place (see below, section 4.4.3).

3.3: GLASS-WORKING

As noted in the previous chapter (see above, chapter 2.2.3), not all the beads worn on necklaces in seventh-century England were products of Anglo-Saxon bead-makers; there are a significant number of imports and heirlooms in the corpus. Sometimes it is even suggested that beads of all types may be imports. It is perhaps for this reason that early Anglo-Saxon glass-working, and

specifically bead-making, has been subject to very little scholarly discussion, especially in comparison with non-ferrous metalworking. Such discussion is justified, however, since there is clear evidence for the production of some bead types in seventh-century England (see Guido and Welch 2000).

3.3.1: BEAD-MAKING

Understanding the practices of the early medieval bead-maker is complicated by the uncertainties surrounding the supply of material and the multi-stage processes necessary to transform glass into beads. Crucibles are only required when glass needs to be melted to colour or opacify it. In the early medieval bead-making workshop at Jodenstraat, Maastrict (Netherlands), the crucible sherds all derive from shallow barrel-shaped or biconical coarse-ware vessels, of the type otherwise used as cooking pots (Saberolles et al. 1997: 304).

Some bead-makers may have worked with ready-coloured opaque glass, perhaps in the form of rods or chunks. In this case, it is only necessary to heat the glass to a workable temperature, and for this a crucible is not required. Gam (1990) proposes that a simple iron pan can be used to soften glass. Archaeological examples of such pans in association with bead-making waste have been found at early medieval Ribe (Denmark), Lagore, Garryduff and Armagh (all Ireland) (Sode 2003: 47; Craddock 1989: 204). Discs cut from thick sherds of pottery may have served the same purpose in Viking-Age York, since they have been found with glass melt adhering to the surface (Leahy 2003: 108). It seems likely that similar tools were used by seventh-century bead-makers.

Finished beads must also be carefully cooled (annealed), since uneven variations in temperature can cause the beads to fracture. Experimental replication of the techniques of Viking Age bead-makers have suggested that the most reliable method for annealing finished beads is to place them in a small ceramic container filled with ashes set at the edge of the hearth (Gam 1990: 210).

3.3.1.1: WOUND BEADS

Of the three techniques used to make Anglo-Saxon glass beads, by far the most commonly used is winding. Softened glass is gathered up, probably using a simple iron rod, properly called a punty (Aschenbrenner 1995: 124–5). This glass is then wound around a second iron rod, called a mandrel, to form the bead (Gam 1990: 204). The shape and size of the bead is determined by the amount of glass applied and the manipulation of the mandrel. The winding technique can create a series of spiraling traces running around the sides of the bead, perpendicular to the perforation. It is this process that gives the very common seventh-century wound spiral beads (type BE1-

WoundSp) their name, as winding marks are particularly obvious on these beads, perhaps because the temperature of the fire was never sufficiently high enough to fully fuse the strands of wound glass together.

While the bead is still hot and malleable, any additional decorative processes can be undertaken, including the application of polychrome decoration (see below) or the shaping of the bead. One example of a shaping technique is marvering, in which a bead is pressed into or rolled across a flat surface to define the shape of the sides. It is not uncommon for glass beads of all shapes to be incorrectly described as marvered, particularly those with applied polychrome decoration (e.g. Evison 2008; Brugmann 2004: *passim*), but in reality marvering is only used in the production of cylindrical or sharply biconical beads, or those with a square- or pentagonal section (Gam 1990: 204). Another shaping technique can be seen in the production of melon beads (type BE1-Melon), which are made by pressing an edged implement into the sides of the bead while hot to form a series of lobes (Sode 2003: 47).

3.3.1.2: PIERCED BEADS

A more unusual bead-making technique of piercing is represented in the doughnut beads (BE1-Dghnt). Doughnut beads are produced by gradually heating small pieces of glass on a flat surface. As the glass becomes viscous, surface tension pulls it into a rounded hemisphere. This is then pierced with a pointed tool to form the perforation (Haworth 2018: 245). Many of the distinctive features of doughnut beads are a result of these manufacturing processes, including a narrow, often off-centre, perforation, and a rounded hemispherical profile with a flat, irregular underside. Experimental reproductions undertaken by Sue Heaser (*pers. comm.*) have suggested that this irregularity could be the result of heating, piercing and annealing the beads on a surface painted with a clay slip. Doughnut beads are made exclusively from translucent glass, in a range of colours corresponding closely with that of contemporary or near-contemporary glass vessels: blue-green, deep cobalt blue and yellow-brown (Evison 2000: 71–2; 84–6). The closeness of this recycling relationship may explain a small number of doughnut beads manufactured from glass of two colours (see Brugmann 2004: fig. 98), a product perhaps of recycling a sherd of polychrome cullet, such as a piece of a vessel glass with applied trails.

3.3.1.3: DRAWN BEADS

A final technique for making beads is drawing. In the present corpus the only contemporary drawn beads are the small segmented type (BE1-SmallSeg), a type found predominately found in Kent. The technique is also represented by the longer cane beads (BE1-RoCane), but these are

exclusively antique or heirloom types. Drawn beads are made by blowing an air bubble into heated glass and using tweezers to pinch out a hollow tube. In the manufacture of segmented beads an edged tool is used to impress a series of grooves at regular intervals along the bead. The final step in the production of these beads, whether shaped or not, is to cut or crimp the beads to the required length.

3.3.1.4: POLYCHROME DECORATION

The vast majority of the beads in the present corpus are monochrome types (see above, chapter 1.5). Among the corpus of polychrome beads, many are imports (such as beads of type BE1-Mosaic), antiquities (type BE1-IronAge) or potential heirlooms (see below, chapter 4.5). Polychrome bead-making therefore seems to have been a relatively rare practice in seventh-century England. Where it does occur, most of the applied decoration on polychrome beads takes the form of simple lines, waves or dots in a secondary colour. In modern lampwork bead-making very thin rods of glass, known as stringers, are used to apply a thin trail of colour onto the surface of the bead. Stringers are made by pinching a blob of molten glass with a pair of tweezers and stretching out a thread of the required thickness. This process results in droplet-shaped pieces of waste glass with a flattened cross-section (examples can be seen in fig. 3.12). Pieces of glass waste displaying these kind of tweezer marks have been found associated with the bead-workshops at Ribe (Aschenbrenner 1995: 125). It seems likely that glass-workers would prepare their own stringers as a first step in the bead-making process, since the fragility of the rods would seem to preclude storage or exchange.

A more complex type of applied decoration is reticella rods.[34] These twisted bichrome trails appear on only a handful of objects in the present corpus, including beads of type BE1-AnnTw and pendants of type PE9-f. To produce reticella rods pieces of two different colours of glass are heated together on a mandrel and then tweezers are used to pinch and stretch a stringer, twisting constantly. Premade rods can then be applied to the surface of a bead or cabochon and are either left standing proud of the main body or heated to become flush with the surface.

3.3.2: THE TOOLS

The toolkit of the Anglo-Saxon bead-maker is likely to have consisted of only a handful of tools: a mandrel, a punty, tweezers, a knife, a pan or other flat surface on which to heat glass, a marvering surface and a ceramic container in which to anneal beads. There is wide variability in perforation

[34] This is not true reticella, strictly speaking, but the term is so widely used with reference to Anglo-Saxon glass that alternative terms, such as 'bichrome cables' (Henderson 2000: 145) would introduce further ambiguity.

diameter across the bead-corpus; assuming that a bead-maker did not restrict themselves to making beads of a single type, this is probably a good indication that each bead-maker carried several mandrels of various shapes and thicknesses. Such simple tools are essentially archaeologically invisible. At Helgö, for example, it was only possible to identify the broken tip of an iron mandrel because the remains of a partially made wound glass bead still adhered to it (Lundström 1976: fig. 2). Without good contextual data, it seems unlikely that any bead-making tools could be identified in the archaeological record; certainly they are unlikely to be recognised among the corroded, and therefore unidentifiable, iron implements present in graves and settlements.

3.3.3: BEAD-MAKING: THE WORKSHOP

Archaeological traces of bead-making workshops could, hypothetically, be in a number of forms: remains of tools (e.g. crucible fragments or heating trays), stray pieces of cullet, waste products from the bead-making process (e.g. stringers or reticella rods) and failed beads (see fig. 3.12).[35] Traces of such activity in early Anglo-Saxon England, however, are extremely scarce. A review of the evidence by Bayley (2000) could only point to a crucible sherds coated with layers of either opaque yellow or opaque white glass, from sixth-century layers at Buckden (Cambs.). The colours are consistent with the use of this glass to make beads, although the absence of other evidence from the site makes it difficult to draw firm conclusions about the nature of this activity. This general absence of evidence for early bead-making workshops almost certainly reflects both the small-scale nature of this kind of craft activity, probably using a simple furnace and a small toolkit, and also how 'clean' the process could be, in that any waste glass could be efficiently recycled. In their discussion of the results of compositional analysis of Merovingian glass beads, Heck and Hoffmann (2000: 356) argue that a mobile craftsman producing beads from scrap glass and metal (for use as a colouring agent) accounts for both the relatively poor glass quality of early medieval beads and the potential for small groups of beads from the same context to be of identical composition. The same model would seem consistent with the paucity of evidence for glass production in Anglo-Saxon England.

[35] Comparison can be made, for example, with other early medieval sites with evidence for glass-working and bead-making outside Anglo-Saxon England, including the monastic centres of Portmahomack and Dunmisk, high-status secular sites like Lagore, Moynagh Lough and Garranes and the earliest urban centres in Scandinavia, such as Ribe and Kaupang and on the continent, at Maastricht (Campbell 2016; Henderson and Ivens 1992; Peake and Freestone 2014: 5; Saberolles et al. 1997).

Fig. 3.12: Glass 'waste' from experimental bead-making, including stringers, broken and failed beads, scrap glass and short sections of reticella rods. Image by author, with thanks to Sue Heaser.

3.4: DISCUSSION

Given that most of the evidence consists of finished objects, and that archaeological evidence for either tools or workshops is extremely scarce, is it possible to say anything further about the context of production of these objects? How was this kind of craft activity organized? What degree of specialism exists among craftsmen? How did they practice their craft? What was their status? And what role did the consumer of the jewellery play in this process?

3.4.1: THE NATURE OF CRAFTWORKING

Assessing the nature of craftworking in Early Anglo-Saxon England relies on understanding something of the individual artisans. With the available evidence, it is very difficult to get a sense of the individual. Single objects cannot suggest the full range of activities undertaken. The Tattershall Thorpe smith's burial is an exceptional case where an individual craftsman is identifiable in the archaeological record, but the grave contains no finished items, and so inferences as to the practices of this artisan must be drawn from the surviving tool kit (which may, in itself, be incomplete). It is also impossible to know how representative this grave is of metalworkers in general. Although the number of individuals who produced this kind of jewellery at any one time is likely to be low, the surviving corpus undoubtedly represents the output of multiple craftsmen (Coatsworth and Pinder 2002: 5). In all likelihood, there was probably a great deal of variability in the day-to-day organisation of craft-working (Costin 1991; Ashby 2015).

Such variability can sometimes be obscured by the terminology used. The production of pendants, rings and beads from non-ferrous metals and glass involved a series of complex and highly technical processes. Such craft production required a high degree of skill, as numerous experiments attempting to replicate the technology of the early medieval goldsmith and bead-worker have demonstrated (MacFadyen 1998; Gam 1990). As such, the objects in the present corpus can – not incorrectly – be described as the products of specialist craftsmen. It is important to recognise, however, that craft specialisation is a spectrum (Ashby 2015: 16; Costin 1991). It is important, therefore, to critically assess the issue of specialism, as much as the evidence will allow; simply describing an artisan as a specialist craftsman actually sheds little light on the realities of practice and daily life of these individuals, nor the range of activities undertaken.

Other aspects of terminology that can potentially obscure rather than clarify are short-hand descriptors like 'goldsmith', 'jeweller', and 'bead-maker'. 'Goldsmith' is a term that primarily describes an individual engaged in the working of non-ferrous metals (c.f. Coatsworth and Pinder 2002: 3). 'Jeweller' is defined as someone who makes small portable items, especially dress accessories, usually from valuable materials. 'Bead-maker' and 'glass-worker' are equally specific in their meaning, and in the case of glass this specificity is important in distinguishing between the making and the working of glass. Finished objects can be assigned to these categories of craftworking relatively easily; glass beads are the result of bead-making, a composite gold-and-garnet pendant the product of a goldsmith or, perhaps more specifically, jeweller. It is important to recognise, however, that these terms only refer to the fact that an individual practiced such activities, and do not imply that they were exclusively, or even primarily, engaged in this activity. Various (mostly late) documentary sources preserve Old English terms for specific types of craftsmen, including *goldsmiþ* (goldsmith), *seolforsmiþ* (silversmith), *mæstlingsmiþ* (copper-alloy smith), *irensmiþ* or *isensmiþ* (iron smith) and *gimmyrhta* (jeweller), but the use and meaning of these terms is always context-specific (Coatsworth and Pinder 2002: appendix A). The relevance of the term goldsmith, in its modern sense, to the day-to-day lived experience of an Anglo-Saxon craft-worker may be limited.

Any discussion of the nature of craft production and craft specialisation in seventh-century England must begin with the objects themselves. As already noted, on a basic level, the corpus of metal objects essentially corresponds to the output of a goldsmith or jeweller and the glass beads to a bead-maker. Within the corpus of metal objects especially there is relative consistency in terms of manufacture and construction. Some production techniques span multiple categories of objects. Wire, for example, is used extremely widely, in the manufacture of beads, pendants and rings. A craftsman capable of producing very fine wire for filigree could presumably also make thicker, undecorated wire suitable for twisting into rings. The production of the domed

central boss of a disc or scutiform pendant would, in terms of process and the tools used, be similar to the shaping of the hemispherical face of a bulla pendant. This internal consistency of technique within the corpus of metal items suggests that goldsmiths could – and in all likelihood did – produce a wide variety of object types. Indeed, composite objects like the disc pendants of type PE1 are a clear illustration that many craftsmen were capable of multiple techniques.

It also seems very likely that fine metalworkers frequently worked with all three metals. Many object types in the present corpus were constructed in gold, silver and copper-alloy. With the exception of variable melting points, the affordances and working properties of these three metals are very similar (Coatsworth and Pinder 2002: 2–3). Certainly, the evidence from the Tattershall Thorpe grave suggests a familiarity on the part of the craftsmen with various metals, since copper-alloys were present in the form of rods, sheets and complete objects and silver in the form of strips, probably all intended for recycling (Hinton 2000).

Focusing on the details of manufacture and technique also helps to distinguish a few categories of objects that do seem to be distinct from the wider corpus of material, which in turn may point to a different production context. Doughnut beads (type BE1-Dghnt) are a good example of such an object type. They seem to have been made exclusively and directly from recycled translucent glass, with no colouring or other pre-treatment of the source material. The piercing technique avoids the need for manipulation of hot glass on the part of the bead-maker and only very simple tools are required. Potentially, therefore, the production of doughnut beads does not require the same degree of specialist glass-working expertise as other bead types and may have a different – perhaps even domestic – context of production.

The techniques evidenced by the necklace objects, in metal and glass, can also be used to draw connections between the craft of the jeweller or bead-maker and the production of other types of material culture. The manufacture of drawn bead types by blowing an air bubble into hot glass shares obvious similarities with the production of contemporary glass vessels, which were hand-blown, shaped and trimmed (see Evison 2008: 2 for details). The application of bichrome reticella trails to annular twist beads (type BE1-AnnTw) and cabochons (pendant type PE9-f) is a further connection between the production of some bead types and of glass vessels, given that vessel sherds bearing identical reticella decoration are known from multiple contexts in Anglo-Saxon England (Evison 2008: 8). Cutting of segments of cowrie shells for perforating as beads sat within the range of techniques of craftworkers working with bone and ivory, producing combs and similar items (MacGregor 1985). The production of many pendant types, particularly the Style II bracteates (type PE3-a), involves techniques associated with minting, such as the shaping of the circular backplates and the use of patrix dies. Coin pendants and pseudo-coin pendants also speak

to a connection between the worlds of money and jewellery. Some blurring of the roles of smith and moneyer is therefore possible (Naismith 2017: 60; Werner 1991: 29).

One particularly interesting question concerns the distinction – or potential lack thereof – between the metal- and glassworkers. It is clear from looking at the pendant corpus, for example, that composite objects are extremely common, and the individuals who made these objects were, by necessity, familiar with setting, if not also shaping, other materials like garnet, glass, shell and other organic substances. A small number of glass beads in the present corpus also provide evidence of the same mixing of media in a single object. In the seventh century some bead-makers experimented with making beads using a central tube of rolled copper-alloy sheet (for a discussion of manufacture see Haworth 2018; Frey and Greiff 2009).

The Tattershall Thorpe grave contained at least five glass sherds, one of them the base of a bag beaker in deep cobalt-blue glass (Hinton 2000: 75–83). It is difficult to see these as anything other than cullet intended for recycling; their presence in the grave therefore implies that the Tattershall Thorpe smith was accustomed to working with glass in some form. Other near-contemporary smith's graves, including that from the Merovingian cemetery of Herouvillette, also contain collections of scrap glass, suggesting that the Tattershall Thorpe smith is not exceptional in this regard (Coatsworth and Pinder 2002: 41).

Microanalysis of glass beads from Eriswell (Suff.) has also demonstrated a close connection between metal- and glass-working industries in the early Anglo-Saxon period, showing that the colour of opaque red glass is produced by adding copper (probably in the form of an oxide scale or dross) and slag from iron or copper smelting to a base glass (Peake and Freestone 2012). Various copper compounds can also used in the production of other glass colours, including orange and green (Matthes et al. 2004; Heck and Hoffman 2000). White beads are also known to have been coloured primarily with lead oxides, and so a hypothetical relationship between this and the use of lead-tin soft solders in metalworking is plausible (Matthes et al. 2004: 147). At the very least this evidence suggests a close working relationship, and physical proximity, between the glassworkers producing coloured opaque glass and smiths engaged in iron- or copper-ore smelting. However, it is not clear at present how widely glass colouring was undertaken; it is possible that some bead-makers worked exclusively with ready-coloured scrap glass.

As a complement to these various threads of evidence implying a connection between glass- and metal-working, it should be noted that the practical requirements for each are similar. The required temperatures to work both non-ferrous metals and glass (c. 500–700ºC for lead-rich glass, 1063ºC for gold and 960ºC for silver) can be achieved using a simple charcoal hearth

(Coatsworth and Pinder 2002: 30; Peake 2013: 507; Matthes et al. 2004: 118); various experimental projects replicating metal- and bead-working techniques have succeeded using fairly similar, simple hearths. If precious-metalworkers also worked in iron, as seems likely to have been the case, it would have been similarly advantageous for a bead-maker to be able to make and maintain their toolkit. It also is notable that many of the near-contemporary sites in Ireland and Scandinavia where precious-metalworking is identifiable in the archaeological record also show clear evidence of other potentially-related craft-activity, such as glass- or amber-working (on glass working, see, for example, the evidence from Dunadd and Portmahomack, for amber-working see Moynagh Lough; Campbell and Lane 1993; Campbell 2016; Bradley 1993).

3.4.2: The role of the consumer

Recognising the involvement of specialist craftworkers in the making of much of the jewellery, prompts interesting, related questions surrounding the relationship between producers and consumers, craftsmen and patrons. How close was this relationship? How much agency did the wearers or commissioners of the jewellery exercise over its production? What are the implications of this for the status of the craftworker?

A useful place to begin is by considering the question of who supplied the materials necessary for the production of the jewellery. The Tattershall Thorpe grave contained an extensive collection of scrap, which might initially suggest that the material supply was the responsibly of the artisan. As well as the glass cullet already discussed, present among the tools were bundles of copper-alloy, iron, lead and silver scrap (Hinton 2000). Apart from silver, the metals were represented both by rods and sheets and by complete or broken objects, the latter probably waiting to be recycled. At least some of the complete copper-alloy objects, including an openwork disc and several scabbard studs, are continental in origin (Hinton 2000), suggesting a fairly complex itinerary that may or may not involve the Tattershall Thorpe smith himself. Five small pieces of flat-cut garnet were also identified; more may originally have been present. Two pieces were very fine wheel-cut garnets of fairly unusual shapes, while the others showed the kind of grozed edges typical of the later seventh-century cloisonné work (Hinton 2000: 83–6; see above, chapter 3.2.4).

Given that it is unclear what the Tattershall Thorpe smith was habitually making, it is difficult to say how usable this scrap collection would have been. Certainly, the amount of iron scrap would probably not have been sufficient to make a single *seax* (Hinton 2000: 105). The non-ferrous scrap metal would probably have been enough to make several small jewellery items, of the kind found on necklaces (such as wire rings and small bulla or scutiform pendants). The small number of garnets could have decorated one or two composite disc pendants, but would have been

insufficient for anything more substantial, such as a disc brooch. Instead, the scrap in the grave is probably best interpreted as a collection of useful odds-and-ends acquired by the craftsman on an *ad hoc* basis and retained for future use, rather than as a primary source of material.

The alternative source of materials is the patron. This is the implication of a seventh-century Merovingian source, the *Vita* of St Eligius, who was probably the most famous named early medieval goldsmith. Eligius' *Vita* records an episode in which he is commissioned by Clothar II (613–29) to make a throne adorned with gold and gems. The required quantity of gold was provided by the king, and the *Vita* presents it as a miracle that Eligius was able to make a second throne 'without any fraud or mixture of *siliquae*, or any other fraudulence' (I.5, transl. McNamara 1997: 142). Clearly, the illicit extension of gold supplies through debasement was a matter of some concern in the seventh-century Merovingian kingdoms, and control of valuable materials like gold seems to have been carefully exercised.

Although this evidence from Merovingian hagiography is not directly applicable to Anglo-Saxon England, there are indications that a similar attitude towards gold as a material did exist. As discussed in the previous chapter (see chapter 2.2.1), the composition of seventh-century gold objects closely mirrored that of the contemporary coinage (an admixture of gold and silver with a consistently low level of copper and other minor elements), despite the evidence for a very intense recycling economy. Even when gold coins (and subsequently objects) became visually identifiable as debased, there is no evidence that copper-alloys were used to deliberately extend the supply of golden metal (Blakelock et al. 2016: 50–1). The composition of Anglo-Saxon gold objects therefore speaks to the same careful control of precious metal supplies as illustrated by Eligius' *Vita*, and surely implies that this material, at least, was typically supplied by the patron. Such a scenario is consistent with the fact that gold is essentially absent from the Tattershall Thorpe grave, apart from small fragments adhering to tools particularly associated with goldworking (Hinton 2000). The wearing of gold jewellery was therefore the prerogative of those with the social capital to control the material and commission its reworking.

A handful of female graves also contain tools and paraphernalia that can potentially be associated with the use and ownership of gold. Potentially the most interesting of these is a touchstone reportedly found in grave 50 at Kingston Down (Kent), a probable female burial with a simple necklace of five glass beads and a chatelaine at the waist. Faussett (1856: 51) reports that the touchstone had 'some stripes or strokes of gold very visible on it when found'. The presence of an object closely connected with testing the quality of gold in a female grave is of particular interest. Only two other touchstones are recorded on the ASKED database: one from a simply

furnished grave at Ozengell and another from a richly furnished male grave at Gilton (both Kent), which attests to the rarity of these objects.

The same male grave at Gilton (grave 66) that produced the touchstone also contained a set of scales and weights. Including this set, scales and weights have been found in twelve Anglo-Saxon graves (Scull 1990; Scull 2012; Hancock and Zeepvat 2018: 91). Of these, two, from grave 76 at St Peter's Tip (Kent) and grave I from Castledyke South (Lincs.), come from probable seventh-century female graves. A single balance pan was also found in a poorly-recorded grave from Desborough (Northants.), probably also that of a female and dating to the seventh-century (Scull 1990: 185–6). A set of scales and collection of weights was also present in the Tattershall Thorpe grave (Hinton 2000: 63–6). In his review of scales and weights in Anglo-Saxon England, Scull (1990) argued against interpreting them as the tools of smiths or jewellers, because the metrical analysis of those sets with weights show a relatively close correspondence with the contemporary Byzantine and Merovingian weight-standards, suggesting these items were primarily used in economic transactions involving coins. While this interpretation seems valid, it is interesting that the two collections of weights that cannot be fitted into the established metrical system are those from the smith's grave at Tattershall Thorpe and the female burial at Castledyke South (Hinton 2000: 66); no weights at all were found with the St Peter's Tip or Desborough balance pans. Might it, therefore, be worth considering these particular examples of scales and weights as tools used in a different context?

Another extremely interesting feature of grave I at Castledyke South is the presence of a bronze patrix die for a Style II bracteate (type PE3-a) among the grave-goods. It is regrettable that this grave was among five disturbed by the construction of an air-raid shelter in 1939 and subsequently hastily excavated: it is possible that there is some confusion as to the exact contents of each grave (see Sheppard 1939b; 1940a). The scales, weights and bracteate die are thought to have been found alongside a copper-alloy hanging bowl, a workbox, a bone comb, a buckle and two beads (Drinkall and Foreman 1998: 95). The bracteate die is assumed to have been reused as a weight, but the object is complete and the design seems relatively unworn. While this grave is not a smith's burial (in the strict sense of the term), the presence of one object inextricably linked with jewellery production, in addition to a set of scales, in this probable female grave is extremely interesting. Tantalizingly, another example of a Style II bracteate die has been found recently in plough-soil near the seventh-century cemetery at Springhead (Kent), where it probably represents a disturbed grave-good (Andrews et al. 2011: 33).[36]

[36] A further example of a cast copper-alloy die probably used to make repousse pendants is a stray find from Berkshire, recorded on the PAS database (object ref.: BERK-8E4641). This is a matrix die, and the design is similar to that on pendants from Wye Down (KE.Wy.00.22) and Camerton (SO.Ca.05.03).

There is also some evidence that control was exercised over other materials represented within the necklace corpus, perhaps with the intention of commissioning finished jewellery items. Of course, such items are only visible when they enter the archaeological record. Nineteen of the 558 necklace graves in database 1 contain at least one sherd of glass cullet (tab. 3.2). These graves are not concentrated in any particular region, suggesting that this represents a wider phenomenon, rather than a micro-tradition specific to a single community. It is probable that the true number of graves containing glass cullet was originally much higher, and that these items have been considered simply residual. Some of the glass has been identified as Roman cullet, while the shapes of other pieces suggest they are fragments of contemporary vessel types. The range of colours present – mainly translucent blue-green, pale green and colourless – are consistent with the identification of the cullet as vessel- or window glass. Most derive from box- and bag-collections. When glass sherds in Anglo-Saxon graves have been discussed previously, they are normally identified as amulets or curios (Meaney 1981: 227–8; Sherlock 2016: 251). However, the presence of similar fragments in the Tattershall Thorpe smith's grave might push us to think about this glass instead as a collection of valuable recyclables, and its presence in the grave an indication of an individual's capacity to control and redeploy such material.

Grave	Description	Colour	References
BE.MD.E2	Four fragments of Roman bottle glass		Matthews (1962: 31)
CA.EH.18	Fragment, maximum dimension 21mm		Malim and Hines (1998: 52)
DE.SL.01	Part of a glass vessel		Ozanne (1962–3: 31)
EY.Ga.07	(1) thick chip of glass; (2–3) roundels of glass	All blue, presumably translucent	Mortimer (1905: 250)
GL.Le.14	Fragment of a claw-beaker claw, length 64mm, max width 36mm	Translucent pale green	Boyle et al. (1998: 59)
HA.Wi.07	Thick fragment of bottle glass, perhaps from a squat jar or pouch bottle	Translucent pale green	Meaney and Hawkes (1970: 11)
KE.Ba.06	Thick fragment, squared on two sides	'Whitish'	Faussett (1856: 136)
KE.Bg.05	Pontil from a glass vessel		Wilkinson (2008)
KE.Fi.07	Fragment from a thin-walled deep bowl, probably Roman; irregular trapezoid shape, 13 x 10mm	Colourless, iridescent, with a single trail	Hawkes and Grainger (2006: 35)
KE.Sa.274	Rim fragment, probably from a palm cup	Translucent blueish glass	Perkins (1988: 293, fig. 2)
KE.Si.27	Small fragment of thin vessel glass, rounded	Blue	Faussett (1856: 107)
KE.SP.56	Fragment, probably Roman, diameter: 34mm	Translucent blue-green	

KE.SP.226	Fragment, probably Roman, perhaps from a vessel base; diameter: 32mm	Translucent blue-green	
KE.SP.293	Five fragments: (1) circular vessel base with applied foot-ring, Roman; diameter: 36mm; (2–4) thin fragments, probably from the same vessel; (5) irregular lump of glass	(1–4) colourless, iridescent glass; (5) translucent blue-green	
KE.SP.323	Two triangular fragments; (1) diameter: 23mm, (2) diameter: 16mm	Both translucent blue-green	
NY.SH.09	Swag fragment from a convex vessel, possibly a palm cup or globular beaker	Translucent blue-green	Price (2012: 68, pl. 3.20)
NY.SH.52	Two fragments of Romano-British vessel glass	Both translucent blue-green	Sherlock (2012: pl. 3.13)
OX.St.08	Nine fragments	Translucent light green	Dickinson (1977)
SF.Ex.08	Two fragments: (1) flat and fairly thick, possibly window glass, (2) a curved fragment, possibly part of a palm cup	(1) deep translucent blue, (2) pale blue translucent	Newton (2020: pl. 31–2)

Table 3.2: Seventh-century necklace graves in database I containing fragments of glass.

Decorative polychrome glass was also retained, potentially for future reworking: necklace graves at Marina Drive (BE.MD.F2) and Shudy Camps (CA.SC.11) both contained broken polychrome beads, the latter a contemporary annular twist (BE1-AnnTw) type (Matthews 1962: 32; Lethbridge 1936: 5), while grave 67 at Street House contained a fragment of Romano-British glass bangle (Sherlock 2012: 39).[37] Grave 306 at Cuxton contained a hemispherical piece of glass, marbled blue, white and yellow in colour, that was described as a mount or counter in the grave catalogue (Blackmore et al. 2006: 17), but which can be more profitably identified as a polychrome glass cabochon. The end of this process of recycling visually arresting polychrome glass can be seen in pendants of type PE9-g (fig. 9.115).

Indeed, glass is not the only kind of 'scrap' material from the Tattershall Thorpe burial to find parallels in other – mainly female – seventh-century graves. Hamerow (2017) has recently drawn attention to the presence of caches of raw and worked garnets in Anglo-Saxon graves. Most date to the seventh century, although the presence of seven roughly shaped garnets from a sixth-century grave at Dover Buckland (Kent) and a single plate garnet from an extremely rich burial at Sarre (Kent), probably also datable to the sixth century, shows this to be a long-standing practice (Parfitt and Anderson 2012: 399; Brent 1863: 320, note 1). A warrior grave in Mound 17 at Sutton Hoo contained a cache of seven roughly polished garnets and one wheel-cut stone

[37] The illustration of the fragment from Marina Drive seems to suggest a large annular bead with applied reticella decoration (Matthews 1962: fig. 5, no. 7); it may also represent an annular twist bead (although is not listed as such by Guido (1999: 338–9)) or alternatively a reused Iron Age bead.

within a purse; a chip of millefiori glass found in association with the garnets supports the suggestion that, in life, these were valuable recyclables retained for future use (Evans 2005: 215).

The other seventh-century graves are those of adult females. The most substantial garnet caches are the 195 small unworked stones from Lechlade (Glos.), grave 91, apparently a homogenous collection weathered out of a single alluvial deposit, and seventeen uncut and two polished garnets from Buttermarket, Ipswich, grave 4275, both deposited in bag-collections (Scull 2009a: 243; Adams 2011b: 86). Some of the larger stones from these graves could have been polished into small cabochons, but the smallest stones can really only have been suitable for crude honeycomb cloisonné, if indeed they were usable at all (Adams 2011b: 87). It is possible, of course, especially if the Lechlade garnets represent a 'packet' from a single source, that larger, potentially more useful stones were considered too valuable not to be retained by the communities burying these individuals. The poorly recorded 'rough garnets' from a barrow near Bloodmoor Hill (Suff.), excavated during the eighteenth century, may represent the same kind of collection as those from Lechlade and Buttermarket. To this list of substantial garnet caches can also be added instances of single garnets. Plate-cut garnets were recovered from rich female graves at Cuxton (KE.Cu.306), Harford Farm (NO.HF.33) and Street House (NY.SH.10), while a polished triangular cabochon garnet was found amongst a bag-collection in a female grave at Castledyke South (LI.CD.11). At Street House, the garnet fragment possibly, although not certainly, derives from a composite disc pendant (NY.SH.10.04) from the same grave, but in the other three cases it is difficult to match the loose garnets to any of the other grave-goods. Of particular interest is the presence of a short length of beaded gold wire found in the same bag-collection as the cabochon garnet in grave 11 at Castledyke South. The garnets in these female graves seem to represent a phenomenon in which women curate such materials to await reworking as jewellery; the individual from Lechlade may even have been involved in the redistribution of garnets within local or regional exchange networks (Adams 2011b). Might we also need to return to the other kinds of objects typically found within box- and bag collections, such as cowrie shells (see tab. 2.4) and animal teeth, and think about them as potential caches of valuable material for reworking?

Drawing together the evidence presented above, the impression is that the relationship between craftsmen and patrons was a fairly close one. The notion that women may have acted as 'makers' of jewellery, in the sense that they exercised agency over its production, perhaps in the role of patron, should be taken seriously. Such a scenario perfectly accommodates the evidence for the micro-histories of particular materials reworked into necklaces, especially those of an esoteric nature (see chapter 2.2.7 and chapter 4.4). Since the availability of materials also partially determines the form of the finished objects, another important question is whether women may have also played an active role as a 'designer' of the jewellery. The composite disc pendants,

although they can be grouped into visually similar subtypes, are all unique, individual, bespoke designs (see figs. 9.87–94). It is interesting to consider whether this degree of individuality might stem from the commissioner of the jewellery as much from the craftworker.

The paucity of evidence for craftworkers during the early Anglo-Saxon period allows little to be said regarding gender, but the pervading stereotype is that the individuals engaged in non-ferrous metalworking and related crafts were male. Women are only regularly discussed in the context of textile production, which is seen as a distinctly feminine activity (Fell 1984: 40–1). There is a much stronger tradition of considering the active role of women as patrons and artisans within Scandinavian archaeology. Nancy Wicker (2012a; 2012b), for example, has considered the evidence for the ways in which women can be understood to have acted as makers of the Scandinavian bracteates, while Unn Pedersen (2014) has explored the role that women played in trade and specialised craft activity at the early Viking Age town of Kaupang. Such studies provide a model for how the same kind of female agency might profitably explored with reference to the evidence from early medieval England.

3.4.3: The nature of the workshops

The identification of evidence for non-ferrous metalworking at sites like Rendlesham, Sutton Courtenay and Coddenham represents an extremely important contribution to our understanding of the types of places at which specialized craft activity took place. It remains to be seen whether these same sites also saw jewellery production in other media, such as bead-making, although the multifarious connections between non-ferrous metalworking, glass-working and other closely related industries (see section 4.4.1) would seem to lend weight to such a hypothesis.[38]

Despite this new evidence, questions still abound regarding the organisation of specialist craft activity in the Early Anglo-Saxon period. Two basic theoretical models tend to predominate: that of the sedentary craftsmen working primarily from an (at least semi-) permanent workshop, and that of the itinerant artisan. For each model it is possible to draw together strands of supporting evidence; in itself this serves to illustrate the important fact that the two models are not mutually exclusive, and that any kind of craft activity is likely to be highly context-dependent (see Ashby 2015).

Since scale and permanency of craft-working activity is impossible to gauge for any site at present, the strongest indicator of a permanent workshop derives from place-name evidence. The name

[38] At Sutton Courtenay the discovery of a probable potter's workshop during excavations at the site in the twentieth century serves as an indicator of multi-craft activity on this site at least (Hamerow et al. 2007: 185).

Faversham incorporates a British loan-word from Latin *faber* and can be translated as 'the homestead of the smith' (Hawkes 1982: 75). Although regrettably poorly-recorded, the cemetery at Faversham has produced more precious metal jewellery than any other contemporary cemetery site in England, and the sheer volume of this material, taken together with the place-name evidence, has been posited as an indicator of a permanent goldsmith's workshop in the area (Hinton 1998: 9). Permanent workshops necessarily imply a fairly close relationship between the sedentary craftsmen and elites, since some degree of administrative control is necessary to support a full-time artisan. The earliest documentary references to smiths from Anglo-Saxon England, the early seventh-century lawcode of Æthelberht of Kent (d. AD616), indicates this kind of scenario, stating that 'if [a person] kills the king's official, smith or his messenger, let him pay an ordinary person-price' (clause13; transl. Oliver 2016: 64–5). From the end of the seventh century, a similar sentiment is echoed in the law code of Ine of Wessex (AD 688–94): 'if a *gesith*-born man moves elsewhere, he may then have with him his reeve and his smith and his children's nurse' (clause 63; transl. Whitelock 1955: 371). The historical evidence suggests, therefore, that at least some smiths were not free men, although of course, we cannot be certain what kind of smiths are being referred to in these texts, and whether such a scenario would apply specifically to precious-metalworkers and jewellers.

The other model is that of the itinerant smith. Certainly, itinerancy seems to fit with the evidence of the Tattershall Thorpe burial on a number of points. While the toolkit in general was fairly minimal, some objects seem to speak directly to a need for portability. The stake anvil found in the grave has a tapering shank so that it can be driven into a block of wood to keep it stable during use. A lack of mineral-preserved wood traces in the heavy corrosion layers implies that it was not mounted when buried, presumably as a measure to reduce the overall weight of the toolkit (Hinton 2000: 23–4). The presence of the iron bell in the grave may also point towards an itinerant smith. A connection has been drawn between this bell and the reference in a law code of AD695 that stipulates 'a man from a distance or a foreigner [who] goes off the track, and… neither shouts nor blows a horn… is assumed to be a thief, to be killed or redeemed' (Wihtred clause 23, ed. Oliver 2002: 163; transl. after Hinton 2000: 45–7). The idea that the individual in the Tattershall Thorpe burial was a stranger to the community who buried him may also be consistent with the very isolated location of the grave. Extensive travel is also suggested by the various 'exotica' among the scrap collection in the grave. A copper-alloy openwork disc and a set of four scabbard studs were almost certainly produced on the continent, and the former saw an extended period of curation before it was deposited in the Tattershall Thorpe grave (Hinton 2000: 54–9). A second-century *sestertius* of Marcus Aurelius, reused as a weight, is also a likely continental find, as these coins are particularly rare in England. An unfree smith based at a semi-permanent workshop

would presumably have had neither the opportunity nor the autonomy to amass such an unusual collection of material.

The practicalities of craft-working are structured by key, inter-dependent variables, including specialisation, scale and freedom (Ashby 2015: 18). A permanent workshop is much more likely to be the domain of a generalist, because the demand for everyday, utilitarian goods is much higher than that for the kind of precious objects produced by specialists. It does not seem unreasonable that a fairly prosperous settlement might support a blacksmith on something approaching a full-time basis to make iron objects. A close relationship between the elites is potentially more likely in the case of a sedentary craftsman, since their full-time craft activity was supported within the administrative framework of the community; a blacksmith might be very highly valued, but not necessarily free. It is much less likely, on the other hand, that a specialist jeweller or precious-metalworker was based primarily in a single community on anything approaching a permanent basis. Instead, a high degree of craft-specialisation would be more compatible with itinerancy, since the craftsman would have access to a broader consumer base. The itinerant model also assumes a higher degree of autonomy on the part of the artisan. Of course, each of these variables is necessarily a spectrum, rather than being mutually exclusive, and so we should expect some variability (Ashby 2015). Nevertheless, it is perhaps encouraging that the Tattershall Thorpe smith, whose tools suggest a fairly high degree of specialisation, seems from the evidence to have been itinerant to some degree.

Although initially it might seem likely that elite sites like Rendlesham, Sutton Courtenay and Coddenham be associated with permanent workshops under direct royal patronage, in reality the itinerant model is a better fit. Each site shows evidence for considerable economic complexity, most notably in the form of a very high number of stray finds of coins of various denominations. As of 2016 Rendlesham had produced twenty-five gold coins (*tremisses* and *thrymsas*), 168 silver *sceattas* and eight Byzantine copper *folles* (Scull et al. 2016: 1603–4). At least fifteen gold *tremisses* and *thrymsas* have been found at Coddenham and over fifty *sceattas*, while more limited metal-detecting at Sutton Courtenay has produced fourteen seventh- and eighth-century *sceattas* (Newman 2003: 104; Metcalf 2007: 180). Such extensive coin use cannot have been restricted to the immediate community, and therefore points to these high-status sites as the locations for gatherings for economic, and undoubtedly also political and social, purposes. In other words, these settlements functioned as markets, fairs and assemblies, drawing in individuals from a fairly wide area, perhaps at particular points during the year. At Rendlesham the metalwork assemblage serves to link the craft-working evidence to these gatherings, since the relatively high number of copper-alloy items indicates production for a larger population than represented by the settlement itself (Scull et al. 2016: 1603).

An important feature of itinerant craftworking is that it cannot exist outside a robust administrative framework (c.f. Ashby 2015: 19).[39] While an artisan might arrive at a site with their collection of tools and perhaps a limited supply of scrap metal and other useful odds-and-ends, requirements such as food and lodging, space to work, fuel for a fire and clay to build a hearth must have been made available. Equally necessary is an existing audience for the kind of objects they produced. Major gatherings at regionally-important central places provide the kind of organizational framework necessary for specialist craftworking to take place. They would also almost certainly accommodate multi-craft activity, and thus provide the stimulus for the kind of cross-craft interactions seen in the present necklace corpus. Crucially, therefore, central places provide the location where craftsmen, materials and consumers are brought together.

3.5: CONCLUSIONS

The evidence for craft-working of the kind represented in the necklace corpus presents many challenges. Surviving objects are numerous but must be examined in detail using a contextual approach to shed light on the nature of their production. Archaeological traces of tools and workshops are vanishingly rare, and the scattered documentary references resist precise interpretation. The jewellers, goldsmiths and bead-makers themselves are extremely elusive figures.

Although the material raises more questions than answers, some tentative conclusions can be offered. Much of the necklace material requires a fairly high degree of specialist knowledge. Even though a variation in skill is evident within the corpus, these jewellery items are undoubtedly the products of specialist artisans. These craftworkers were probably itinerant, although how widely they travelled and for how much of the year remains to be seen. It is difficult to comment specifically on the range of activities any one individual might have undertaken; in all probability this varied from person to person, but it seems likely that the artisans making the female jewellery in the current corpus also regularly made other kinds of comparable material culture (composite disc brooches, linked pins and weapon fittings, for example) that utilised the same range of techniques and skills.

Most importantly, it is clear that women exercised agency in the making of their jewellery. Primarily this seems to have taken the form of women supplying the necessary materials, a model which accommodates both the presence of materials awaiting reworking in a number of the female graves, as well as the absence of evidence for a substantial stock-in-trade in the Tattershall

[39] Indeed, this is a period during which kingship itself is assumed to be largely peripatetic.

Thorpe grave. Such as scenario means that it is possible that the design of some objects may reflect the personal taste of the wearer, commissioning a bespoke item, as much as the preferences and ability of the artisan. This kind of reflexive process of making jewellery, involving both patron and artisan, was probably fostered by the locations at which specialised craftworking can be shown to have taken place, at regionally important central places. Seasonal gatherings at such sites may have provided the necessary administrative framework in which itinerant artisans and the high-status wearers of this jewellery could be brought together.

CHAPTER FOUR: BIOGRAPHICAL INSIGHTS: WEAR, REPAIR AND MODIFICATION

4.1: INTRODUCTION

The purpose of this chapter is to draw together the evidence for the use-lives of the objects that make up necklace collections. Four key forms of evidence are explored: physical traces of wear, instances of repair, object modification and the presence of heirloom items. The first three categories depend on a detailed examination of individual objects, a significant number of which were assessed first-hand by the author during research visits. In other cases, this data is supplemented by the detailed observations noted by various technical reports. The identification of potential heirlooms, by contrast, relies on a contextual approach. The robust chronological frameworks established for many artefact types, coupled with the narrow chronological focus of the present study, allows for the identification of objects that appear markedly earlier than other objects in the same closed context in which they were found. Assessment of wear, repair, modification and chronological displacement is typical of studies structured around an object biographical approach, as it provides crucial evidence for the use-lives of objects between the stages of manufacture and deposition (Joy 2009; Martin 2012).

The nature and affordances of the various materials present in the necklace corpus means that the evidence of wear, repair, modification and extended use is not evenly distributed across all object types. Acknowledging this, this chapter adopts a case-study approach, focusing attention towards those classes of objects most suited to each particular methodology. Hence, gold objects are primarily the focus of the wear-analysis, while the discussion of heirlooms focuses on beads. By drawing together these most promising strands of evidence, it is possible to explore questions related to use-life more broadly as they relate to necklaces: how long were these objects used? How regularly were they used and worn? Is there evidence of use across multiple generations?

4.2: WEAR

Studies assessing the wear patterning of objects are not uncommon in archaeology and have been undertaken using a range of different object types. Correspondingly, evidence of wear-patterning has been mustered in support various hypotheses. On artefacts with an obviously functional purpose, differential wear patterning on a single object can provide valuable clues as to its use. Examples from early medieval archaeology include the identification of asymmetrical wear on sword fixtures (Brunning 2019: 62–77) and brooch head-plates (Leigh 1985), which provide invaluable clues to as to the orientation and display of these objects when used. Similarly,

assessment of the abrasion profiles on the base of cremation urns has recently over-turned long-held assumptions that these were ceramics created exclusively for the funeral (Perry 2011).

Evidence of use-wear has also sometimes been used to address knotty chronological questions, concerning the timespan between the production and deposition of objects. In the case of the late fourth-century Roman hoard from Thetford (Norf.), the apparently unworn condition of many of the gold finger-rings and silver spoons was used to support the interpretation of the hoard as a jeweller's stock-in-trade, while the few heavily worn or fragmented items were thought to be objects destined for recycling (Johns and Potter 1983: 60–1). Other studies of early medieval jewellery items have explored how the wear of particular items should be understood in relation to their typological and contextual dating (Axboe 1975; Hawkes and Pollard 1981).

It is essential to recognise the various methodological implications and challenges inherent to any study of wear as an indicator for the use-life of artefacts. Many materials undergo changes to the surface of the material in the burial environment, in the form of corrosion or decay, both of which have the potential to obscure physical traces of wear. In the case of metal objects, the purity of the alloy is an important factor to consider, since softer metals will abrade at a faster rate than harder ones (Parfitt and Brugmann 1997: 48). Equally, the position in which dress accessories were worn will also have an effect on wear-patterning: items worn against the skill will not wear at the same rate as those worn on top of clothing, for example (Falci et al. 2019: 757). This is not to say that the evidence of wear is not a valuable source of information. Instead, it is important to recognise that the data is necessarily qualitative and can be most useful when set within additional contextual frameworks.

For this study, the assessment of wear has focused on gold objects. Gold is particularly suited to the assessment of wear-patterning for several reasons. Firstly, gold objects are relatively well-represented in the present corpus and so offer a robust data set to examine. Secondly, gold is a relatively stable material, so it can be assumed that the present condition of the object essentially corresponds to its pre-depositional form. Thirdly, there is no reason to think that the gold jewellery present in the necklace corpus was not produced in seventh-century England (see above, chapter 3), and so traces of wear can be assumed to relate to the use of the object in a necklace of the kind examined by the present study. Amethyst beads provide a useful comparison here. Amethyst quartz is also a relatively stable material and often displays traces of thread wear, abrasion of the flat polished perforated faces and scratching to the sides of the bead. However, because amethyst beads were almost certainly imported to Anglo-Saxon England in their finished form, it is possible that some of the observable wear patterning may relate to prior use before the objects arrived in England, especially since the chronology of amethyst beads begins slightly

earlier in Merovingian cemeteries than in Anglo-Saxon ones (Drauschke 2010: 55). Finally, it is important to note that the shape and form of many of the gold objects in the present study facilitates both the assessment of wear and comparison across the corpus. Beaded wire applied to the edges of backplates, pendant frames and suspension loops is a common feature of many pendants, and in these positions it comes into regular contact with stringing materials or underlying costume when worn. The deformation of the regular profile of beaded wire is therefore an extremely useful indicator of wear, especially in cases where it is possible to compare areas that regularly experienced friction with sections of wire that did not, such as those hidden beneath suspension loops (fig. 4.1).

Figure 4.1: An area of beaded wire beneath the suspension loop, showing the original form and shape of the wire. The flattened and smoothed profile of wire to each side are indicative of heavy wear. Inlaid pendant of type PE9-g (LI.SH.68.01). Maximum width of pendant: 15mm. Image by author © North Lincolnshire Museum.

There is no methodology in place to scientifically measure the degree of wear evident on metal artefacts, partly because such a system would need to account for the effects of different alloy compositions. Instead, this project follows previous studies in defining categories of wear, to which objects can be assigned based on close visual examination (see Axboe 1975; Hawkes and Pollard 1981; Parfitt and Brugmann 1997: 48–50; Swift 2014).

Three categories were used to classify the degree of wear observed:

- **Little to no wear**: few obvious changes to the form of the objects attributable to wear. Beaded wire retains its defined, rounded shape. Suspension loops appear crisp and defined.

- **Moderate wear**: some distortion of surface details. Some flattening and blurring evident in the beaded wire, but the profile of the bead still largely intact. Some loss of definition in the shape of reeded strips.
- **Heavy wear**: marked changes to surfaces. In the case of beaded wire, a complete loss of definition between individual beads. Flattening of the profile of reeded strips, and a 'waisted' effect to suspension loops when viewed from above. Filigree, beaded or plaited wire on the surface of the pendant may also show loss of distinction and flattening.

Figures 4.2–4 exemplifies these three categories of wear. This classificatory system is adopted from that used by Axboe (1975: figs. 1–2 and *passim*) to systematically assess the wear of Scandinavian bracteates. With their similar construction and beaded wire surrounds, bracteates are closely comparable to many of the gold objects in the present corpus. Data was gathered for gold objects that were either examined first-hand by the author with the aid of a digital microscope or for which good quality, high-resolution photographic images were available.[40] Data relating to wear is therefore available for 165 gold objects, primarily pendants of classes PE1, PE3, PE9 and beads of type BE2-a.

Figure 4.2: Beaded wire around the diameter of composite disc pendants from (*left*) Uncleby (EY.Un.31.01, diameter of pendant: 26.2mm) and (*right*) Milton Regis (KE.MR.00.04, diameter of pendant: 36mm) showing **little to no** wear. Images by the author © Yorkshire Museum (*left*) and British Museum (*right*).

[40] This allowed for many finds recorded on the PAS database to be assessed.

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Figure 4.3: Beaded wire around the diameters of (*left*) a cabochon pendant from Preshaw (HA.Pr.01.02, diameter of pendant: 9.5mm) and (*right*) a composite disc pendant from Breach Down (KE.Br.01.01, diameter of pendant 22.9mm), showing **moderate** wear, in the form of distortion to the shape of the beaded wire. Images by the author © Cambridge University Museum of Archaeology and Anthropology (*left*) and British Museum (*right*).

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Figure 4.4: Beaded wire elements on (*top left*) a composite disc pendant from Milton Regis (KE.MR.00.06, diameter of pendant: 28.5mm), (*top right*) the suspension loop of a cabochon pendant from Exning (SF.Ex.08.02, width of suspension loop: 5.5mm) and (*bottom*) a biconical

wire bead from Sheffield's Hill (LI.SH.35.01, maximum width of bead: 9.3mm), all displaying **heavy** wear. Images by the author © (*top left*) British Museum, (*top right*) Suffolk Archaeology Service and (*bottom*) North Lincolnshire Museums Service.

Figure 4.4 presents the results of the wear-pattern analysis. Most objects show some degree of wear, and in the majority of cases this was sufficient to cause considerable distortion of the surface details. Objects that show little to no wear are relatively unusual. It is clear therefore that these objects were worn regularly, probably over an extended period of time. Indeed, these necklaces are probably best understood as elements of everyday costume.

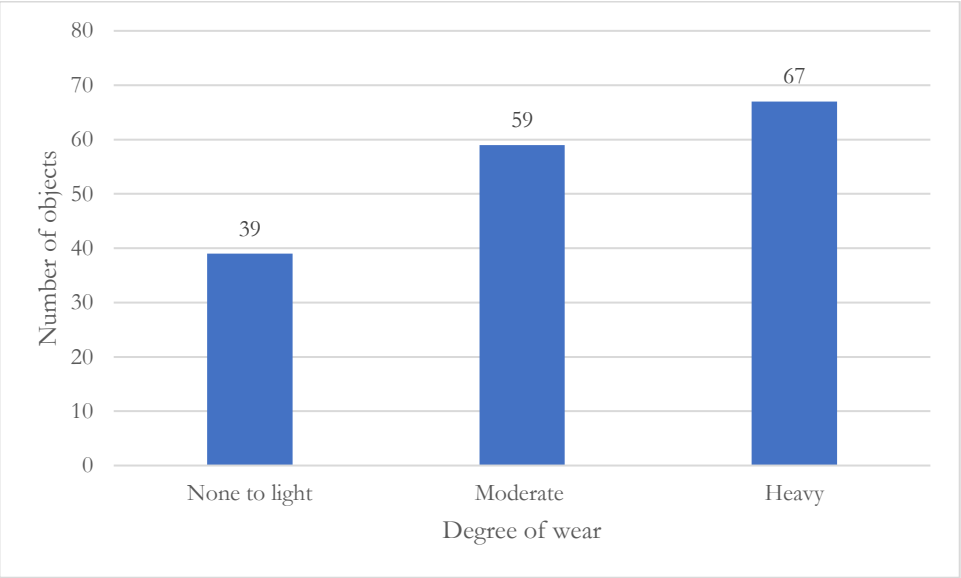

Figure 4.5: The degree of wear recorded for 165 gold objects recorded in database II.

These results can be compared with the wear patterning noted by a detailed study of gold pendants, mostly of seventh-century date, in the Mayer Collection at the Museum of Liverpool, undertaken by Sonia Hawkes (Hawkes et al. 1966). The aims of this study were primarily chronological, in exploring the relationship between gold contents, coinage and jewellery during the seventh century. Wear was assessed primarily for the contribution it could make to dating. While such attempts are likely to be complicated by the extensive recycling of precious metals underway at this period (see above, chapter 2.2.1), the wear-patterning noted by Hawkes for each object, albeit without explicit standardisation of terminology, can be used to draw other, more interesting conclusions. Table 4.1 lists the thirty-two objects in the present database assessed by Hawkes et al. (1966), converted into the system to record wear used here. Figure 4.6 compares the degree of wear noted by this previous study and the present corpus. The results of the wear patterning analysis recorded by Hawkes et al. (1966) are broadly comparable with those of the present study. Only a small proportion of objects examined show little to no evidence of wear.

A small number of the objects assessed by these two studies belong to contextually-related groups of objects, deriving from the same secure grave contexts. The study undertaken by Hawkes et al. (1966) is therefore of particular value because it includes the two largest collections of related pendant types, for which there is also available compositional data. Four garnet cabochon pendants derive from grave 48 at Barfriston (Kent). Two (KE.Ba.48.03 and 04) were judged by Hawkes (et al. 1966: 113) to show 'slight wear', while the remaining two pendants (KE.Ba.48.01 and 02) are simply recorded as 'worn'. The degree of wear seems to relate to the composition; the two pendants that appear to be more heavily worn are composed of softer alloys with a higher gold content. It is possible, therefore, that the objects on this pendant had been gathered together on a necklace as a group and worn for a similar span of time, with the minor variation in their degree of wear resulting from the affordances of the different metals.

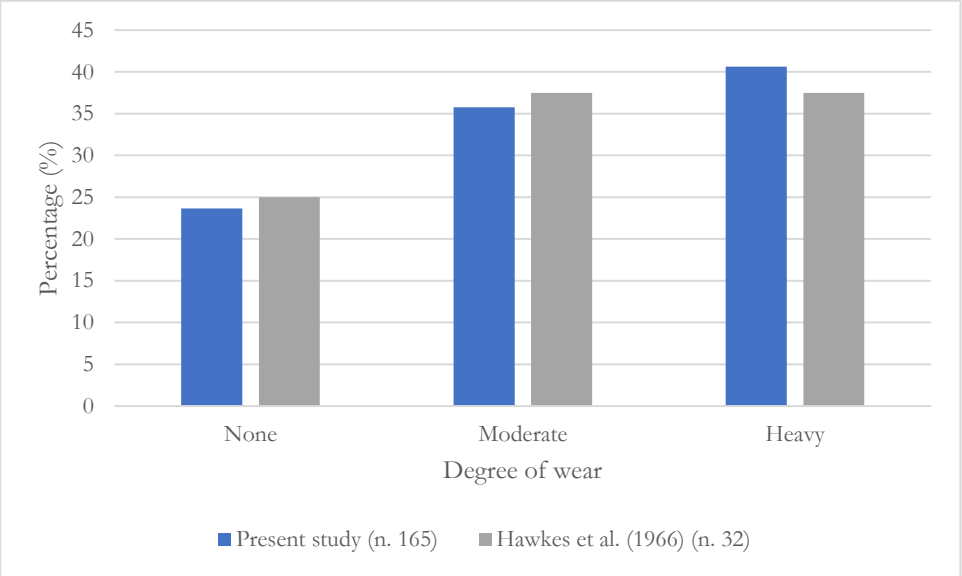

Figure 4.6: Comparison in the degree of wear noted across objects examined by the present study (blue) and Hawkes et al. (1966) (grey), expressed as percentages.

The same is not true of the large and diverse group of pendants from grave 172 at Sibertswold. Within this group of contextually-related material there is considerable variation in the degree of wear present. Some items, including the reticulated glass cabochon pendant (KE.Si.172.04) and the loop of one of the coin pendants (KE.Si.172.01) show very little evidence of wear, while the pendant set with a garnet intaglio (KE.Si.172.05) is assessed as 'heavily worn' (Hawkes et al. 1966: 111). Sitting between these two extremes are a number of other pendants that show more moderate degrees of wear. Interestingly in this case, the degree of wear does not seem to be related to the softness of the alloy; some of the more debased objects are more heavily worn than the pendants made from relatively pure gold. It is possible in this case to interpret this differential use-wear in relation to the individual biographies of each object. The necklace from grave 172 at

Sibertswold was almost certainly a collection of items 'acquired over a period of some years' (Hawkes et al. 1966: 113).

These two case studies from Barfriston and Sibertswold illustrate how detailed examination and scientific analysis of contextually-related gold objects can shed light on the processes of curation underlying these necklaces. It is particularly interesting that two models are revealed: one suggestive of a homogenous and closely related group of materials, perhaps acquired and worn as a kind of 'matching set', and the other a mutable collection, with new items integrated into the necklace at different stages. Undoubtedly both processes are represented in the wider necklace corpus, but it is only in rare cases that this can be demonstrated on the basis of the archaeological evidence. This would be a promising area for future studies to explore, especially as new finds are uncovered.

Another interesting question is whether there was any relationship between the degree of wear present on necklace items and the age of the deceased. Again, this might shed light on questions surrounding curation and circulation of materials. If the most extensively worn items are consistently found with older women, for example, it would be reasonable to assume that this wear developed over the lifetime of the individual. Very worn items in the graves of young infants and children, on the other hand, would provide compelling evidence for more complex patterns of curation, across multiple generations. Such an approach has proved fruitful in examining other types of grave-goods. For example, Parfitt and Brugmann (1997: 48–50) were able to compare the variable wear patterning across related groups of brooches from burials with available osteological data at Mill Hill (Kent), which revealed older women were more commonly interred with heavily abraded items. In terms of the present study, unfortunately there is insufficient data within the current sample to draw any firm conclusions. The relative scarcity of gold items means that only twelve objects, from ten burials, have associated osteological information (tab. 4.2).

Grave ref.	Object type	Wear category	Osteological age
GL.Le.84	PE1-b	Heavy	2.5–3.5 years
GL.Le.172/2	PE9-b(i)	None	2.5–3.5 years
CA.WF.01	PE9-b(i)	Moderate	10–12 years
	PE5-b	None	
SF.Ex.08	PE9-b(i)	Heavy	10–12 years
	BE2-a	Heavy	
HA.SM.5508	PE1-misc	Heavy	16–20 years
KE.SP.76	PE1-a	Heavy	18–25 years
WI.Me.01	PE3-a	Heavy	25–30 years
SF.BH.22	PE9-f	Moderate	25–35 years
GL.Le.95/1	PE1-e	None	35–40 years
GL.Le.179	PE1-f	Heavy	35–40 years

Table 4.2: Objects from the wear-analysis sample with associated osteological data, arranged according to estimated age.

There is little obvious patterning within the small quantity of data available at present. Heavily worn items are found across all age categories represented. This includes a worn composite disc pendant (type PE1-b) found in the grave of a very young child, around three years old, at Lechlade (Glos.). The same cemetery also produced another composite disc pendant, this time associated with a mature adult woman, which shows very little sign of wear. This evidence is an indication of the variability inherent in the entangled relationships of necklace items and the women in whose graves they were buried: older individuals may have acquired newly made pendants shortly before her death, leaving little time for objects to become appreciably worn, while the pendants buried with young children could show evidence of heavy wear, indicating that these pendants had probably already accrued biographical detail before they were passed to their ultimate owner or wearer.

4.3: REPAIR

Repair has occasionally been discussed in relation to various forms of Anglo-Saxon material culture and several recent studies have demonstrated the value of assessing instances of repair systematically within a discrete corpus of early medieval objects (for examples, see Martin 2012, 2015 on cruciform brooches; Felder 2015: 12 on girdle hangers and Brunning 2019: 85–6 on swords). Given that delicacy and fragility are characteristics of many of the items strung on necklaces during the seventh century, it is not surprising that, within the present corpus, it is possible to identify numerous examples of objects that have undergone at least one episode of repair.

The most frequent type of repair noted in the present corpus is the replacement or repair of suspension loops. Table 4.3 presents eleven examples of pendants, of various types, where there is evidence for the repair or replacement of broken suspension loops. Again, this is not surprising, given that this is the element of pendants that undergoes the most stress during use. In some cases, the replacement of an original suspension loop is confirmed either because parts of the original loop remain in place or, in the case of the composite disc pendants from Faversham, Haxey and Street House, because there was disturbance to the filigree designs in the region of the loop. In other cases, the presence of repair patches in association with the loop is evidence of probable repair or replacement.

Object ref.	Description of repair	References
CA.SC.45.01	Present loop is an undecorated type 1 loop; traces of an earlier, wider reeded type 2a loop are visible underneath this. Pendant shows evidence of very heavy wear to beaded wire surfaces; a missing area of the backplate to the right of the replacement loop may represent an area that has abraded away.	Fig. 4.7; Lethbridge 1936: 16
HA.LB.23.02	Reeded suspension loop had broken and was 'repaired at the front by a mass of solder and at the back by crossed reinforcing strips soldered in place' (Hawkes 1990: 628). Pendant is heavily worn, including the repair patches. Original cabochon setting was not found during excavation and may have been missing prior to burial.	Hawkes (1990): fig. 168
IW.Ca.00.01	Original type 2b suspension loop neatly trimmed, so that only the terminal remains attached to backplate. Narrower type 2a loop soldered, slightly off-centre, to remains of the original loop and the upper edge of the pendant frame. Replacement loop is more yellowish in tone, perhaps suggesting an alloy of a different composition. Pendant is moderately worn.	Fig. 9.109viii; PAS: IOW-05E330
KE.Fa.00.04	Repair patches of gold sheet are applied to both front and reverse of the pendant. On the front the repair patch partially covers some of the original applied beaded wire. As both repair patches sit beneath the suspension loop, this is probably a replacement after the original was torn away. Pendant is moderately worn.	Fig. 9.93ii
KE.Fa.00.08	Scar and traces of solder are visible on the face of the coin where the suspension loop has become partially detached.	Fig. 9.102ix
KE.We.00.06	Large repair patch applied to the pendant backplate. Its position beneath the terminal of the suspension loop strongly suggests that the latter is a secondary replacement. Corresponding area of damage to the pendant frame visible on the front where the loop has been attached. Pendant is heavily worn.	Fig.4.8
LI.Hx.00.01	Repair patch applied to reverse of pendant partially covering the suspension loop. Considerable damage to the face of the pendant directly below the loop, including the loss of at least one filigree wire motif. Likely that the loop has either been reattached or represents a secondary replacement. Pendant is heavily worn.	Fig. 9.92v; PAS: LVPL-C2D4CE
NY.SH.42.06	Small area of damage and excess solder beneath the present loop. The loop is slightly offset to one side. There is considerable variability in the gold content of different elements of the pendant, including the loop, which may support the identification of this as a replacement. Pendant is moderately worn.	Sherlock 2012: 49, tab. 3.1.

NY.SH.70.05	Changes to the filigree designs in the area around the loop suggest that the replacement type 3a loop is wider than the original fixture. Two repair strips have been soldered to the backplate to shore up the area around the loop; this process caused slight blistering to the surface of the backplate, caused by overheating during soldering. Gold content of both the loop (71.65%) and repair strip (69.74%) is higher than that of the backplate (64–67%) Pendant is heavily worn.	Sherlock 2012: 47, tab. 3.1.; fig. 9.91v
SF.Bo.93.08	Original suspension loop has been carefully cut away from the backplate. A crude replacement loop, fashioned from wire, was attached the backplate by two rivets, aligned vertically.	Scull 2009a: 18, fig. 2.20
SF.Bl.00.01	Evidence of soldered repair to the pendant frame. A repair patch has been attached to the backplate directly below the suspension loop, partially covering an area where the backplate has become damaged or worn away. This patch and the simple type 1 suspension loop appear to be of a different, more yellow, alloy than the rest of the pendant frame. The loop is therefore a possible secondary replacement. Pendant is heavily worn.	Fig. 9.109xxv; PAS: SF-2C6BC4

Table 4.3: Pendants showing evidence of repaired or replaced suspension loops.

Although numerous examples of repaired or replacement suspension loops can be identified based on close examination of the objects, these probably only represent a proportion of what is a larger group. It is likely that there are other examples of replacement suspension loops within the pendant corpus that have left few easily identifiable physical traces. A good example of this is the composite disc pendant from Westbury-by-Shenley (BU.WS.55280.01), which was subject to a detailed technical study (Turner-Walker et al. 1995). Semi-quantitative analysis of various elements of the pendant showed that the loop was constructed of an alloy with a lower gold content (61.2%) than the backplate or the central bezel (both around 69% Au) (Turner-Walker et al. 1995: tab. 38). This raised the possibility that the loop represents a later addition to the pendant. Certainly, the attachment of the fairly crude loop was the last stage in the making of the pendant, since during the process of soldering it to the backplate the metal became overheated, partially melting the filigree wires immediately adjacent to the loop. This secondary replacement must remain a possibility, however, since there are no *physical* traces of the hypothesised original loop identifiable.

Figure 4.7: Reverse of a glass cabochon pendant from Shudy Camps (CA.SC.45.01), showing traces of an original type 2a reeded suspension loop beneath a replacement type 1 loop. Diameter of pendant: 13.5mm. Image by author © Cambridge University Museum of Archaeology and Anthropology.

Figure 4.8: Repair patch and probable replacement suspension loop on the reverse of a cabochon garnet pendant from Westbere (KE.We.00.06). Maximum width of pendant: 11.1mm. Image by author © Canterbury Museums and Galleries.

Compositional analysis has revealed other examples of pendants with a marked difference in the gold content of the loop compared to other areas. Such results have typically been taken as evidence for the replacement of suspension loops (Hawkes et al. 1966; Brown and Schweizer 1973). One of the most dramatic examples of this is an unprovenanced looped and framed Byzantine *solidus* (Unprov.06), for which there was a difference of twenty-two percentage points in the gold content of the filigree frame (72%) and the loop (50%). Further evidence supporting the repair hypothesis was the extreme wear to all surfaces of the pendant, suggestive of an extended period of use (Hawkes et al. 1966: 106). A similar discrepancy is evident in the compositional results for a cabochon garnet pendant from Barfriston (KE.Ba.44.01): in this case the gold content of the loop (75%) was much higher than that of the backplate (54%) or gemstone collet (56%). These results are particularly interesting because, while a more debased gold alloy might plausibly have been deliberately selected for the loop, an area subject to greater stress during use, there are few obvious practical reasons why a softer alloy with a higher gold content would have been used had the making of all the elements of the pendant occurred contemporaneously. Secondary replacement of the loop using a different stock of source material – perhaps even by a different craftworker – seems to be a more likely explanation.

A second form of repair is the application of patches of thin sheet metal, almost always to the reverse of pendants. Table 4.4 presents examples drawn from the pendant database. The purpose of these repair patches in most cases seems to have been to cover or shore up areas where the backplates were missing, probably either as the result of wear or damage. This is consistent with the frequency with which repair patches were applied around the outer edges of the pendants, areas which are most susceptible to abrasion or damage during wear.

Object ref.	Description	References
GL.Le.179.04	Repair strip soldered to reverse of pendant, immediately adjacent to the suspension loop. One of the repair strip curls over the rim of the pendant and is visible viewed from the front. Pendant is heavily worn.	Boyle et al. 1998: 130, fig. 5.101.
KE.MR.00.05	Semi-circular repair strip attached to the reverse of the pendant at the lower left side. Two edges curl over the rim of the pendant, partially covering the beaded wire surround. Pendant is heavily worn.	Fig. 9.90ii
KE.MR.00.06	Narrow repair strip folded over the edge of the pendant on the upper edge of the suspension loop. Soldered to front and reverse, partially covering a spiral of filigree wire on the front of the pendant. Blistering of the surface of the gold around where the repair strip has been attached. Strip appears to be a more debased, silvery alloy than the rest of the pendant. Pendant is heavily worn.	Fig. 9.89i

KE.Wy.00.01	Large, sub-rectangular repair patch attached to the reverse of the pendant. Repair is not visible from the front. Pendant is heavily worn.	Fig. 9.87vii
LI.BS.00.01	Small repair strip attached to the reverse of the pendant, immediately adjacent to the suspension loop. Repair is not visible from the front. Pendant is moderately worn.	Fig. 9.93v; PAS: NLM-DD07EF
SF.Bo.93.06	Small, sub-rectangular repair patch applied to the face of the pendant at the lower edge.	Scull 2009a: 18, fig. 2.20
WA.CV.00.02	Three repair patches, two oval-shaped and one triangular, joining a break that runs the length of the pendant, from beside the suspension loop to the lower edge. Repair patches are visually more debased than the gold of the pendant itself, with a reddish tinge. These patches appear to have been attached using a silvery solder. Pendant is moderately worn.	Fig. 9.91vi

Table 4.4: Instances of repair patches within the pendant corpus.

It is also worth noting other, more unusual instances of repair. Two cruciform pendants – the cloisonné garnet cross from Ixworth (SF.Ix.00.01) and a sheet silver pendant from Lechlade (GL.Le.187.20) – required repairs to reattach the upper arms to the body of the pendant. In the case of the Ixworth Cross a large trapezoidal repair patch was attached to the reverse of the pendant by four small rivets, hidden beneath the cloisonné cells (MacGregor and Bolick 1993: 159; Webster and Backhouse 1991: 27). The upper arm of the Lechlade pendant is a replacement, rather than a repair, and it is not a particularly close match to the shape of the rest of the pendant (see fig. 3.2). Yet another cruciform pendant, a stray find from Norfolk (NO.Wy.00.01), bears evidence for the reattachment of at least one of its horizontal arms (the other is missing), since the backplate shows evidence of a tear. All of these repaired cruciform pendants can be compared to the St Cuthbert's Cross, an object which had undergone multiple episodes of repair. The suspension loop was a secondary replacement, the original having been fairly forcefully torn away (Bruce-Mitford 1956: 313–4). The lower arm had also broken away and had first been reattached using a small sub-rectangular repair patch, rivetted at each corner to the backplate (Bruce-Mitford 1956: 314–5). This repair was then itself subject to a break, removing the patch and tearing three of the rivet holes. The final corrective before the cross was placed in the tomb involved partially disassembling the cross to allow a silver strip to be rivetted to the inner side of the backplate above the break, onto which the lower arm was then reattached (Bruce-Mitford 1956: 315). The shape of cruciform pendants undoubtedly makes them more susceptible to damage compared to other types of pendant. Nevertheless, it is interesting to see so many instances of repair within a relatively small corpus, especially given that this is an object type assumed to have a particular connection to the religious identify of the wearer.

As is perhaps to be expected, many of the clearest examples of repaired objects derive from the pendant corpus. It is clear, however, that other kinds of objects, in less obviously prestigious materials, were also repaired, often ingeniously, to facilitate their continued suspension as part of a necklace collection. A good illustration of this is the repair of a simple translucent blue annular glass bead, found among other necklace objects in grave 2360 at Wolverton (Bucks.) (Hancock and Zeepvat 2018: fig. 5.2). The bead had, at some point, broken into two halves, and was repaired by means of a collar of sheet silver, cut to give it a decorative, denticulated shape (fig. 9.151i).

The many instances of repair within the necklace corpus provide clear evidence that these objects were worn in life as part of female costume, and with sufficient regularity for some of them to become damaged and require repair. It is not uncommon to find speculation concerning the chronological implications of repaired items. Of course, a logical assumption is that the likelihood of breakage increases with each use, and therefore that there is a correlation between repair and an extended use-life. Certainly, it is interesting to note that many of the repaired items also show evidence of moderate to heavy wear. It is impossible to quantify exactly how long a use-life is implied by repair, however (c.f. Martin 2012: 61). Repairs represent episodes in the individualised trajectories of particular objects, affected by various factors, including the affordances of the material and design and specifics relating to how the object was used. It seems more useful to conceptualise repairs as evidence for biographical complexity: points in the 'life' of an object at which its meaning and significance to the owner or wearer was renegotiated or reified (see Joy 2009).

Few of the repairs in the corpus of necklace objects could have been accomplished without the involvement of a skilled artisan, even if the skill of the repairer did not always match that of the original craftsperson. Implicit in instances of repair, therefore, is the repeated interaction of the owner or wearer with craftworkers (Martin 2015: 139–40). The full significance of repaired objects is revealed when they are contextualised within the complex and intense recycling economy of the seventh century. Many of the materials and component parts of seventh-century necklace elements (precious metals, gemstone settings, glass) are eminently recyclable or reusable; indeed, the refashioning of new jewellery items from old or broken pieces undoubtedly represents one important source of materials in the pool available to the 'makers' (in both its direct and abstract sense) of these objects (see above, chapter 3). Each instance of repair therefore represents an individual, conscious decision to retain a particular object, rather than allow it to re-enter contemporary cycles of making and remaking. There is necessarily a social, rather than economic or practical impetus behind repair (Martin 2012). This is particularly evident in the many cases where repairs necessitated the supply of additional materials: fresh metal to fashion a new suspension loop or a repair patch or loose garnets or reddish glass to replace lost stones. Again,

this represents a conscious investment in an existing piece of jewellery, with emphasis placed on the physical integrity of the original item. Instances of repair are therefore a strong indicator of the sentimental value of necklace items as inalienable possessions.

The frequent decision to repair – rather than recycle – components of seventh-century necklaces is almost certainly not unique to these objects. Among contemporary artefacts from well-furnished female graves, it is possible to cite examples of other repaired objects. The seventh-century composite disc brooch from Harford Farm (Norf.), for example, saw at least two major episodes of repair, which, remarkably, were commemorated in a runic inscription on the reverse, which translates as 'Luda repaired the brooch' (Penn 2000: 45–9; Hines 2000b). The disc brooch from grave 93 at Boss Hall (Suff.) also bears traces of multiple repairs, and the same is probably also true of a brooch from West Hanney (Oxon.) (Hook et al. 2009; Hamerow 2015: 100). There are also examples of repaired workboxes, including those from Burwell (Cambs., grave 42) and Dover Buckland (Kent, grave 107) (Gibson 2015: 153; Evison 1987: 106). Finally, the maple-wood casket from the rich secondary barrow burial on Swallowcliffe Down (Wilts.) also saw sufficient use to necessitate repair of the hasp and the addition of extra brackets to reinforce the corners (Speake 1989: 29). It is likely, therefore, that many of the interpretations regarding the frequency and significance of repair within the necklace corpus are applicable more widely, to other forms of seventh-century objects from well-furnished female graves. Future studies of these artefact types will surely provide valuable additional data with which to contextualise instances of repair of necklace elements.

4.4 Object modification

While wear and repair are familiar concepts, 'object modification' is a more ambiguous term. Here modified objects are defined as those for which there is physical evidence for the secondary recontextualisation of the object, but for which there is a less obviously identifiable practical purpose. This is in contrast with repair, which is understood to be related primarily to function (Martin 2013: 59), such as facilitating the continued suspension of the object.

Some forms of object modification seem to have been motivated by a desire to alter or refine the overall appearance of an artefact. A good example of this is the Wilton cross pendant (NO.Wi.00.01), which has been examined in detail by Marion Archibald (2013b). There is evidence the coin – a Byzantine gold *solidus* of Heraclius and Heraclius Constantine – was originally set into a simpler pendant frame, comprising two beaded wires and a single undecorated wire. An area of damage on the face of the coin identifies the location of the original suspension loop, which was removed, probably immediately prior to the resetting of the coin into the gold

and cloisonné garnet pendant frame (ibid: 59–60). It is clear that the *solidus* had been worn for some time as a coin pendant before its reworking as a cruciform pendant. Archibald suggests that this accrued biographical significance might have prompted the unusual decision not to conceal the obverse of the coin behind a pendant backplate, even at the expense of the pendant's strength (ibid: 60). It is now possible to know whether the obverse or reverse of the coin was originally displayed when worn, but the secondary resetting in the garnet cloisonné frame makes the reverse of the coin, depicting a cross-on-steps, that which is visible when worn.

Some idiosyncratic forms of modified objects are difficult to understand through a broader contextual approach and instead probably relate to specific decisions made by their wearers or makers. The spectacular gold and garnet pendant from Old Westgate Farm, Canterbury (KE.OW.00.01), for example, saw a modification to its central cloisonné garnet stud. Originally this had been soldered to a support projecting from the backplate but at some point in the life of the pendant the stud was pried loose and the support roughly cut away (Webster 1982). This cannot be connected to any obvious episode of repair. Indeed, the recovery of the pendant and stud separately upon excavation suggests that the action of cutting away the support made the object as a whole more fragile and susceptible to breakage. It is intriguing to speculate whether this modification might have transformed the pendant into a tiny reliquary, with the stud temporarily removed to allow for the placement of a small and meaningful substance or object within the body of the pendant. This would fit with both the obvious Christian symbolism of the pendant itself and with other instances of seventh-century objects potentially serving as reliquaries. Perhaps the best known of these are workboxes, found in well-furnished female graves and worn suspended from the waist, which Hills (2015) has identified as reliquaries both on the basis of their size and form and their contents, which can include small objects and fragments of textiles. In relation to the Old Westgate Farm pendant, it is also interesting to note the suggestion by Rollason (1989: 29) that an empty space beneath the central boss of the St Cuthbert's cross might also once have contained a small relic.

A more cohesive group of modified objects are those in which the repurposing of an existing form of material culture is evident. Many of these are elements associated with female costume. In burials at Sheffield's Hill (LI.SH.68) and Mere (WI.Me.01) pendants of type PE9-f had been set with annular twist beads (BE1-AnnTw), a contemporary seventh-century type. In the case of the Sheffield's Hill pendant, the remounting may in part have been a necessary measure to ensure the continued wearability of the bead, since prior to mounting in the pendant frame it had broken in two. There is nothing to suggest that the bead in the Mere pendant could not have been strung as part of a necklace in its unmodified form, however.

Three pendants represent reused elements of seventh-century composite disc brooches. Grave 5 at Winnall (Hants.) contained a pendant fashioned from the central roundel of a brooch of Avent's class 4 (Meaney and Hawkes 1970; Avent 1975: 55). The process of transforming the brooch into a pendant involved attaching a collar of copper-alloy sheet and an additional silver backplate and suspension loop, soldered onto what would have been the reverse of the brooch (Meaney and Hawkes 1970: 10, 39). A very closely comparable pendant, also fashioned from a class 4 brooch, derives from antiquarian excavations at Burwell (Cambs.). This pendant is better preserved, including the central white shell inlay. The modification involved the application of a gold backplate and beaded wire surround, as well as a now-missing suspension loop. Class 4 brooches are thought to be among the latest in the overall series (Avent 1975; Hamerow 2015: 99–100). A final example of a modified composite disc brooch can also be found among unassociated material from Wye Down (Kent). The more complex cloisonne cell-shapes, in this case constructed from gold rather than copper-alloy, identify this as a slightly earlier form, perhaps a crude class 2 or 3 brooch (Avent 1975). A loop and collar, also in gold have been relatively clumsily applied to the existing backplate.

These three instances of reused composite disc brooches are particularly interesting, especially given that the corpus of complete brooches of this class consists of only nineteen examples (Hamerow 2015). As noted, the fashion for wearing brooches declined markedly in the seventh century (Walton Rogers 2007: 188). One interpretation might be, therefore, that the transformation of composite disc brooches into pendants at Winnall, Burwell and Wye Down represents an attempt to convert a valued dress-fastener into an item that could be integrated into a more fashionable necklace. Such a scenario seems incompatible with the typo-chronological evidence, however, which reveals that composite disc brooches continued to be deposited in the very latest female graves, including grave 93 at Boss Hall, coin-dated to the latest decades of the seventh century by a Series B *sceatta* (Scull 2009a). Especially interesting in this context, therefore are the numerous instances of repair within the disc brooch corpus, examples of which have already been noted (see above, chapter 4.3). If the low overall numbers of extant composite disc brooches and the physical evidence of long-use lives is accepted as evidence that these objects were more frequently circulated as heirlooms than deposited as grave-goods, then it is interesting to consider the possibility that the three pendants in the present corpus represent attempts to retain at least a part of treasured brooches that had become damaged to the point of non-functionality as a result of their own complex biographical trajectories.

Finally, it is worth noting three interesting cases where the modified objects integrated into a necklace assemblage are items of an apparently martial or masculine nature. These are a gold-and-garnet sword pyramid from grave 58 at Finglesham (Kent), a detached mount in the form of a

disarticulated moustachioed male head wearing horned headdress with bird's head terminals, also from Finglesham, in grave 138, and a gilt copper-alloy pelta-shaped harness pendant from grave 6 at Exning (Suff.). The sword pyramid has not undergone any physical modification, but its identification as an element of a necklace collection is based on both the position of the object below the jaw upon excavation and its association with a silver wire ring. There is a growing corpus of sword pyramids, including many recorded as stray finds. Relatively few are recorded from Kent; they are a more common find north of the Thames (Stoodley 2015: 33; Menghin 1983: Karte 22). A relatively close comparison to the Finglesham pyramid, apart from its circular base, is a copper-alloy strap-mount from mound 6 at Sutton Hoo, set with panels of green glass and a square flat-cut garnet (Evans 2005: 207, fig. 96). The cast integral suspension loop of the harness pendant from Exning also allowed it to be worn as a necklace fitting without additional modification. This belongs to a wider corpus of harness pendants; closely comparable examples are known from other sites in Suffolk, including Barham and 'near Ipswich' (West 1998: 8, fig. 7.70; Fern 2005: 53, fig. 5.15). There are broader parallels for the transformation of harness equipment into feminine dress accessories, such as brooches or belt-plates (Dickinson et al. 2006: 256). The original function of the horned mount from Finglesham is less clear; two clipped rivets on the underside imply that it was originally affixed to a larger object, perhaps made from an organic material (Hawkes and Grainger 2006: 100). Its interpretation as a masculine object is on the basis of iconographic parallels, chiefly in the Sutton Hoo helmet plaques and the Finglesham warrior buckle (grave 95).[41] Apart from the cutting down of these rivets, there was no additional modification of this object. Instead, the gap formed by the two helmet projections seems to have been utilised to allow the pendant to be strung as part of a necklace. The point at which the two horned terminals meet is much more worn than the rest of the pendant, which confirms the reuse of this mount in a secondary context for an extended period.

The presence of repurposed masculine items within the necklace corpus can be interpreted in two ways. Comparison can be made with the reused antiquities already discussed (see above, chapter 2.2.7), which represent the other major class of existing objects that were integrated into necklace collections. The reuse of these objects seems to have been motivated by their inherent visual and aesthetic appeal. It is important to note, however, as Eckhardt and Williams (2003) emphasise, that reused antiquities are objects without a known biography. In the case of repurposed contemporary material culture, it seems much more likely that the incorporation of this material into a necklace relates to the mnemonic qualities of the items, as a material symbol of a social relationship between the necklace-wearer and the original, likely male owner of the repurposed objects.

[41] Similar horned mounts, also of indeterminate function, are recorded on the PAS database. See NMS-F90626 and SF-F9D919.

4.5: HEIRLOOM ITEMS

Finally, it is possible to examine the presence of 'heirloom' items within seventh-century necklace collections, as revealed by the relative typo-chronological dating of various objects. The identification of heirlooms in early medieval graves is a topic has recently been reviewed by Costello and Williams (2019). They note that curated items of early medieval date have tended to be under-investigated, especially compared to studies of reused antiquities, in part because of the practical issues with identifying objects that are definitely old at the point of burial from those that might have been deliberately made to look archaic, perhaps to imbue a sense of traditionalism or conservatism (ibid: 117; see also Gilchrist 2013: 170). Costello and Williams (2019) also suggest that the importance of heirlooms within the early medieval burial tradition has been under-investigated because the presence of objects of wildly varying date within a single closed burial context is difficult to accommodate within the methodological underpinnings of typo-chronological frameworks.

Far from obscuring the presence of heirloom items, however, relatively tight chronological frameworks actually allow this material to be identified with greater confidence. This is particularly true where the underlying data set is itself constrained by defined chronological boundaries, as is the case with the present study. Focus here is necessarily directed towards beads. As noted (see above, chapter 1.5), many of the object types on seventh-century necklaces represent new introductions during phase AS-FD. Beads are the only class of objects in use in substantial numbers across the Migration Period-Conversion Period transition. There are also methodological advantages of using beads to explore the potential retention of heirlooms into the seventh century. Most fifth- and sixth-century bead types are made of relatively robust and stable materials, meaning that, excepting accidental breakage or extreme wear, they could quite easily have been retained across multiple decades without showing obvious signs of age.

Recent chronological research has also revolutionised our understanding of early medieval beads, allowing diagnostic types to be relatively closely dated. Such typo-chronological dating relies on the *a priori* assumption that particular bead types were produced for a reasonably short period of time, perhaps in large numbers at a relatively small number of bead-making workshops and subsequently became largely unavailable. The identification of beads as potential heirlooms also assumes that, generally, earlier bead types were not consciously imitated on a large scale by later bead-makers. In the context of the present study, support for these assumptions comes from the fact that there are relatively few bead types datable to the seventh century, suggesting that the native glass bead-making traditions were perhaps not as vibrant during this later period as they

had been during the sixth century, and possibly also that there was a reduction in the number of imported bead types. It is also notable that many of the likely heirloom beads identified below are polychrome beads. Since monochrome beads significantly outnumber polychrome types during the seventh century, this seems to be another reliable indicator that the beads discussed below are more likely to be retained heirlooms than rare instances of seventh-century beadmakers consciously recreating earlier bead types.

For the purposes of this study, only beads belonging to earlier phases of the furnished female burial sequence, chiefly phases AS-FB and AS-FC as defined by the *Anglo-Saxon Graves and Grave-Goods* project (Hines and Bayliss 2013: tab. 10.1) and Brugmann's (2004) bead phases A–B1, are examined as potential heirlooms. In terms of absolute chronology, these phases cover the later fifth and sixth centuries (fig. 4.9). Redating of some of the bead types in the *Anglo-Saxon Graves and Grave Goods* project has suggested slightly earlier start dates for the types and phases proposed by Brugmann's chronological framework. The latter is still useful, however, since many of the fifth-century bead types fall outside the scope of the *Anglo-Saxon Graves and Grave Goods* project.

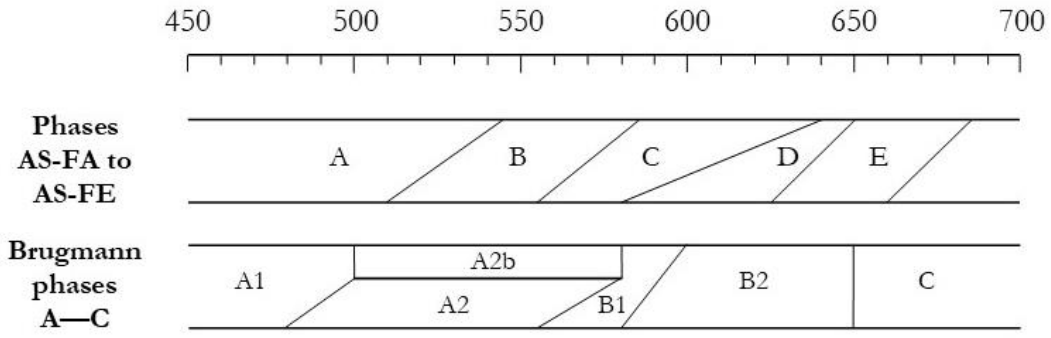

Figure 4.9: A correlation of the chronological frameworks outlined by the *Anglo-Saxon Graves and Grave Goods* project (Hines and Bayliss 2013) and Brugmann's (2004) bead phases.

Table 4.5 lists the bead types identified as probable heirlooms, their phasing according to previous chronological frameworks and the number of examples within the current data sample from secure seventh-century contexts. Glass beads of various types datable to Brugmann's (2004) bead phases A and B are found in small numbers. Often these potential heirloom types show little obvious patterning in their distribution in seventh-century contexts and typically only a single example occurs at each cemetery (see figs. 9.51, 9.53, 9.61, 9.63, 9.65, 9.67 for examples). A relatively large number of beads of type BE1-Mosaic (sometimes also called millefiori beads) are recorded from definite seventh-century contexts, mostly clustered in Kent, although this is consistent with their general distribution pattern (see Brugmann 2004: fig. 55). Brugmann (2004: 38) dates this type to her phase A2b and suggests that there was deliberate retention of these

beads as heirlooms. These highly decorative and complex beads represent long-distance imports, with numerous finds in Merovingian cemeteries along the Rhine (see above, chapter 2.2.6). Potentially the prestige associated with beads of this type, or their unusual method of manufacture compared to other beads, prompted the deliberate retention of this type.

Type	Brugmann phase	ASSGG phase	No.
BE1-Candy	A1	-	2
BE1-Mottled	A	-	3
BE1-Mosaic	A2b	-	10
BE1-TranslMelon	A2b	AS-FB	6
BE1-Koch58	B1	AS-FB	1
BE1-CylPen	B	AS-FB–FC	8
BE1-DotReg	B	AS-FB	3
BE1-Koch20	B	AS-FB–FC	4
BE3 (amber)	A–B	-	34
			71

Table 4.5: Instances of potential heirloom beads from seventh-century necklace contexts.

Amber beads may also represent heirlooms. Although amber beads are not explicitly dated by either the *Anglo-Saxon Graves and Grave Goods* chronological framework (Hines and Bayliss 2013) or Brugmann's (2004) bead phases, of the 429 secure bead groups containing amber beads and examined by Brugmann, seventy-six percent belonged to phase A (mostly phase A2) and thus suggest amber beads date primarily to the middle of the sixth century (Brugmann 2004). Similarly, of the graves from the 1994 excavations at Dover Buckland containing at least one amber bead, over eighty percent could be assigned to phase A, again mostly phase A2 (Brugmann 2012: tab. 4.9). In seventh-century burials amber beads are very often found singly; almost no graves contain more than two amber beads, and no cemetery has produced more than six amber beads in total.

By the time these heirloom beads were deposited in seventh-century graves among other necklace elements, they were probably several decades old. The mostly likely mechanism by which these beads were available for incorporation into necklaces in the seventh century was the retention of these beads as heirlooms, handed down through generations. Other possible sources do not seem to account for the considerable number of instances of individual heirloom beads across a range of cemeteries. Grave-robbing, for example, is a practice largely restricted to Kent during the sixth and seventh centuries, and small objects like beads were rarely the target (see Klevnäs 2013). These heirloom bead types are a particularly valuable indicator of the potential for objects to be retained for an extended period of time, potentially across multiple generations.

4.6: CONCLUSIONS

This chapter has gathered together the evidence that suggests that the items incorporated into seventh-century necklaces could – and indeed, often did – have complex, extended biographies. Many items were worn for a sufficiently long time to have become appreciably worn or to have required repair or reworking. Many of the case studies and examples are discussed here are precious metal items, particularly suited to revealing physical traces of extended use-lives. There are good reasons to think that such biographical complexity was probably not restricted to obviously high-status items, such as pendants and precious metal beads. Here the identification of small numbers of demonstrably earlier bead types within securely dated seventh-century contexts, argued to be heirlooms passed down through generations, probably within the same close family, provides a clear indication that other types of objects frequently possessed complex biographical trajectories.

While wear-patterning and instances of repair cannot independently be used to support any firm conclusions related to the chronological date of objects (such as assessing the timespan between date of manufacture and date of deposition of an artefact), other equally interesting conclusions are on much firmer ground. The frequency of moderate or heavy wear among the pendant corpus, and the numerous instances of repaired objects, strongly suggest that this jewellery was worn regularly, as part of everyday dress, rather than for specific performative contexts. These necklaces are not, for example, bridal jewellery. Neither is there any evidence to suggest that these objects were produced specifically for the funeral.

The evidence that suggests that necklaces were worn regularly is especially important in understanding the processes by which these objects come to accrue the meaning and sentimental value that sometimes prompted their repair or modification, especially when set against a background of relatively intense recycling of comparable artefacts and materials (see chapters 2 and 3). Repeated and intimate association with the body fundamentally connects these objects to the articulation and expression of the social identity of the wearer. The idea that necklaces were particularly central to the construction of high-status female identities in the seventh century finds strong support in the fact that the objects that appear to materialise connections between people (such as stereotypically masculine items reworked to serve as pendant or objects that can be plausibly identified as heirlooms) repeatedly turn up in necklace contexts. Necklaces are the appropriate vehicle for the integration of these kinds of mnemonic objects because they are intimately connected to the expression of identity.

As well as the unique trajectories of individual items, the evidence of wear and repair also sheds some light on the collective biographies of necklaces as assemblages. Even though the osteological data that can be used to contextualise wear-patterning is currently limited, within this small sample there are indications of considerable variety in the processes by which necklaces could be curated. Older individuals could clearly be buried with objects that show few obvious traces of wear, implying that such objects continued to be acquired, perhaps even commissioned into maturity. Equally, the presence of heavily worn items in the graves of children provides a good illustration of the fact that not all items were acquired directly from a craftworker; some objects clearly also circulated through cycles of gift exchange.

The capacity within some particularly elaborate necklaces for comparison of the evidence for the differing use-lives of the individual elements serves as an important reminder that necklace collections were mutable, rather than static. Some collections were demonstrably brought together over an extended period of time, perhaps even several years. There is considerable potential to use similar methodologies, utilising visual examination and compositional analysis, to explore other necklaces. The Desborough (Northants.) would be a particularly interesting case study in this regard, given that it appears, to modern eyes to be a – perhaps deceptively – homogenous and organised collection.

The presence of probable heirlooms among both the pendant and the bead corpus also implies that items could be removed from necklaces to be recirculated through cycles of gift-exchange. The necklaces found in well-furnished female graves therefore represent a crystallisation of what was originally a fluid and carefully curated assemblage at a single point in its collective biography. In this regard, it is important to recognise the potential for the funeral itself to be a key transitional stage at which the necklace as a collection could be reworked or renegotiated.

CHAPTER FIVE: THE WEARING OF NECKLACES

5.1: INTRODUCTION

Previous chapters have focused on the individual elements regularly found in necklace contexts, and the evidence for their individualised biographies. In this chapter, focus is shifted to necklaces as composite objects. As assemblages, the composition of necklaces is the result of deliberate decision-making processes: how many elements to include, what range of items to permit, in what arrangement, and whether individual objects should be retained or replaced. In part, these decisions are constrained by external factors. Only those materials and objects that are both available to and accessible by the maker (here to be understood in the sense of designer) of the necklace can be integrated into the collection. Equally, practicalities of use impose some broad restrictions on the composition of necklaces; too many individual objects would make a necklace either too heavy or too unwieldy to wear comfortably. Within these broad frameworks, however, there is considerable room for a range of possible arrangements and compositions.

This in turn raises two related questions: to what extent do necklaces adhere to general stylistic principles (and what are these) and how homogenous are necklaces as a group? While the former will reveal how necklaces as a general category of objects were understood, the latter reveals how much room there is within the idea of a necklace for the expression of individuality. An understanding of how necklaces were assembled also feeds into a discussion of how necklaces were worn: their method of suspension and attachment, their position on the body and their relationship to wider elements of female costume.

5.2: NECKLACES AS ASSEMBLAGES

5.2.1: NUMBER OF ELEMENTS

The obvious starting point in considering necklaces as assemblages is to explore how many elements are typically present. Figure 5.1 captures the variation in the total number of components in the 575 necklaces recorded in database I. While there is clearly a broad range within the current dataset, a clear trend is that necklaces tend to be composed of a relatively small number of constituent elements. This is reflected in the average number of elements, which sits at 8.49. The upper and lower quartiles are two and eleven items respectively, and these provide an indication of the range in which the majority of necklaces sit. These results are of course influenced by the inclusion of singly-worn elements in the dataset (discussed above, see chapter 1.4), which figure 5.1 reveals to be particularly well represented. If single items are removed from the data sample, the average number of necklace components rises only slightly, to 10.45, with the upper and lower

quartiles sitting at four and twelve elements respectively. One basic observation therefore is that seventh-century necklaces tend to be composed of a restricted number of elements. Previous studies have observed a similar phenomenon: in Geake's (1997) sample of 159 Conversion Period necklaces the average number of component elements was eleven.[42]

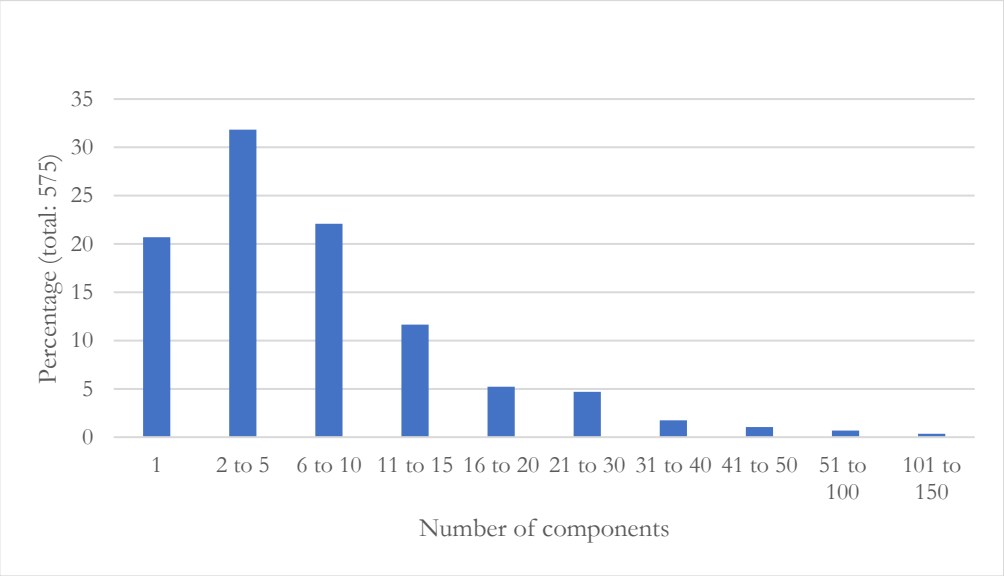

Figure 5.1: The proportion of necklaces in different length categories.

This data can also be broken down further. For example, it is possible to detect some slight regional variation (fig. 5.2). The average number of necklace components is higher within the Kentish data sample compared to that of other regions. Many of the longest necklaces (i.e. those composed of the most elements) are from Kentish graves. Grave 57 at Finglesham (Kent), for example, consists of seventy-nine elements, a mixture of beads of various types and wire rings (Hawkes and Grainger 2006: fig. 2.89).

In part, however, this regional variation is the result of underlying chronological patterning. Of the graves that can be assigned with confidence to phase AS-FD (n. 29) or phase AS-FE (n. 104), the average number of necklace elements is markedly higher among burials of the earlier phase, at 19.28, than those of the later phase, which sits at 11.36. The example of grave 57 from Finglesham already mentioned is one necklace that can be dated to phase AS-FD, on the basis of earlier bead types (such as the two BE1-Dot34 beads) in combination with typically seventh-century types (such as wire rings and BE1-WoundSp beads). Indeed, generally, burials of AS-FD are better represented in Kent than in other regions (Hines and Bayliss 2013: 536), and so the

[42] It is important to note when comparing between studies that Geake did not include singly-worn glass beads in her sample of necklaces, but did include other types of object worn singly, such as pendants (1997: 50–1).

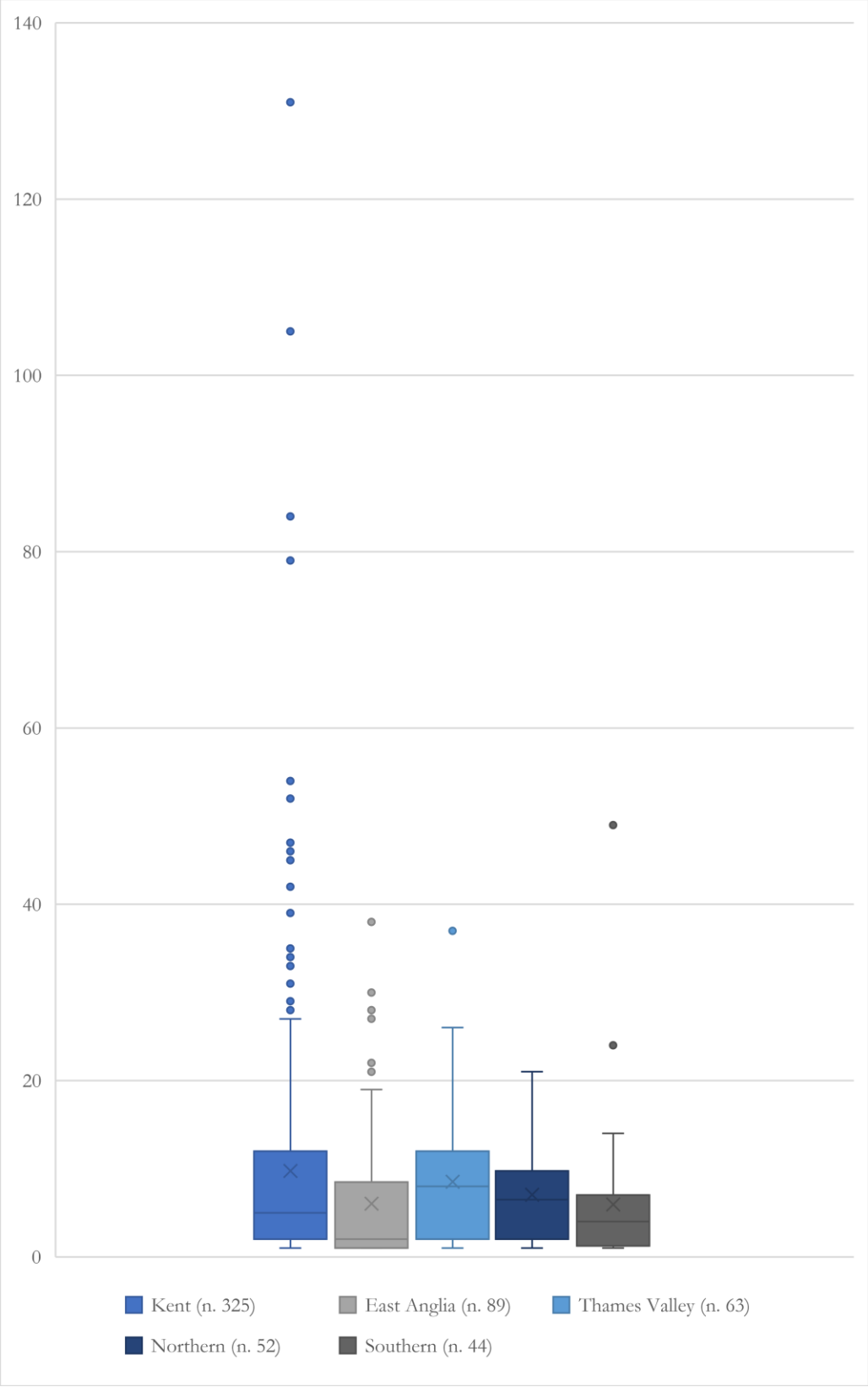

Figure 5.2: Box-and-whisker plot showing the range in the number of component elements of necklaces across the regional samples.

slightly higher average number of necklace elements in Kent may derive in part from underlying chronological patterns.

The chronological patterning also needs to be considered when comparing the average number of elements to rough proxies for wealth and status. For example, it is possible to compare the average length of necklaces containing items made from gold, silver or copper-alloy, to test whether ostensibly richer graves produce generally longer necklaces. The results show a remarkable consistency in the average number of components and the smallest overall range of elements in necklaces featuring at least one gold object (fig. 5.3). It is important to note, however, that many of the objects made from gold, such as composite disc pendants (type PE1) and biconical wire beads (type BE2-a), are those that date specifically to phase AS-FE, a period when necklaces in general seem to be getting shorter. Nevertheless, even taking into account the underlying chronological patterns, it is interesting that there does not seem to be a straightforward connection between the number of necklace elements and the status of the wearer; the status necessary to control and display prestigious materials is not ostentatiously signalled by the wearing of longer or more complex necklaces.

Evident within the data therefore is a general preference for shorter and more delicate necklace festoons, composed of a relatively small number of elements. There is a change over time: necklaces of the latest phase of furnished female burial (AS-FE) are, on average, shorter than those of the preceding phase. It also seems that the length of necklaces is not connected to other factors, such as the status of the wearer or the availability of materials.[43] A trend towards shorter necklaces therefore seems to be one of the underlying stylistic principles among these composite objects, even though there can be a wide range in the number of objects individual assemblages contain. This observation is a useful one, in that it reframes the process of assembling and curating a necklace as a deliberate and considered process of selection, rather than simply the accumulation of every object and material that became available to the wearer.

5.2.2: OBJECTS IN COMBINATION

It is also possible to consider the combination of different object types within necklaces, since there is a wide range of artefact types represented within the corpus as a whole (see appendix I). The combination of different classes and types of objects in a single necklace is a measure of the overall heterogeneity of the assemblages. Focus can initially be directed at the combination of different classes of objects. As well as the total number of necklace elements, database I records

[43] The age of the wearer is another aspect that shows little obvious patterning; this is discussed in more detail in chapter 6 (see below).

the number of elements divided into four classes of object: glass beads, beads of other materials, pendants and wire rings. Figure 5.4 is an attempt to summarise the general patterning evident in the combination of different object classes.

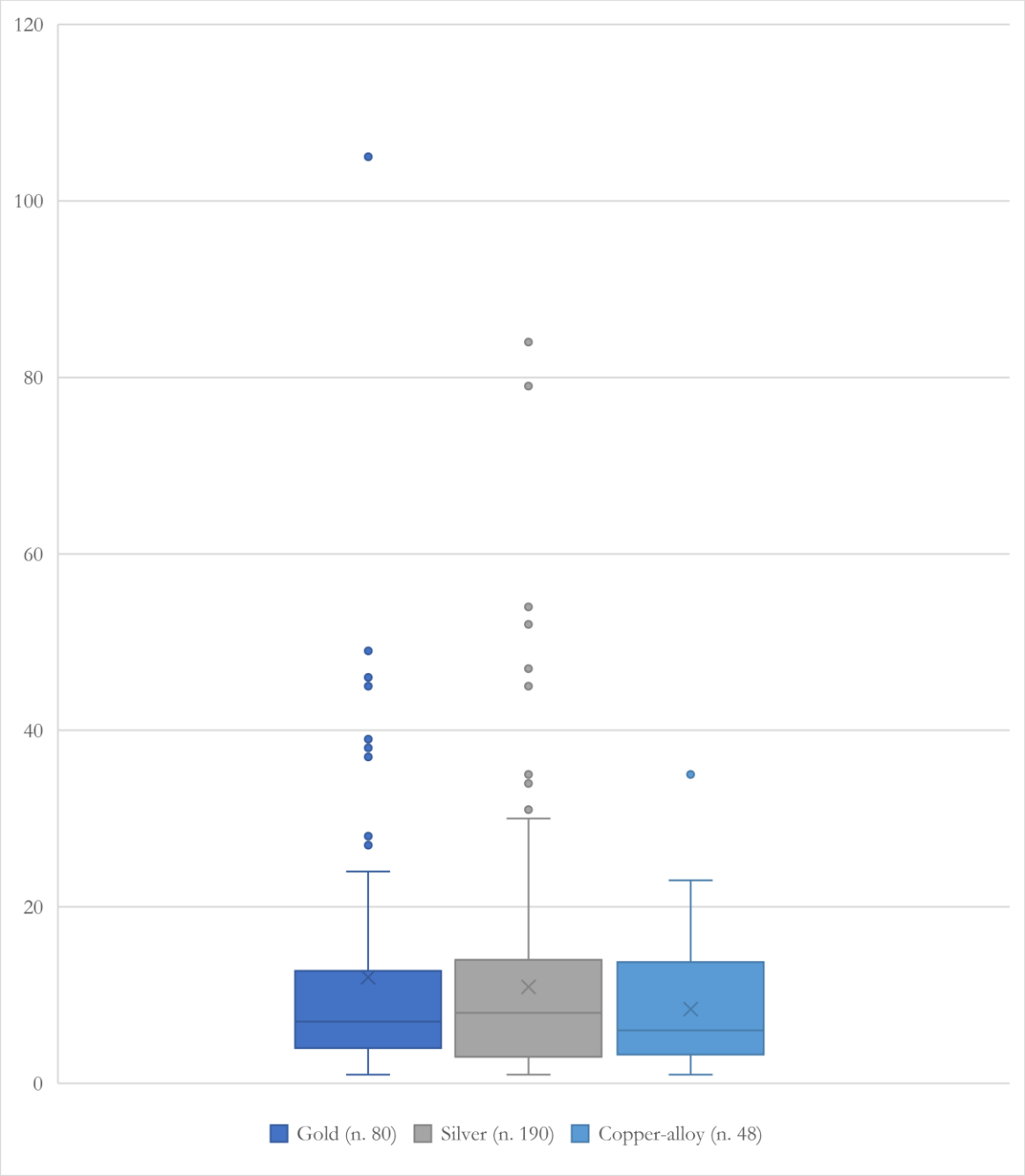

Figure 5.3: Box-and whisker plot showing the range in the number of component elements in necklaces containing at least one object principally made from gold, silver or copper-alloy.

Several basic observations can be made. Firstly, these results emphasise the importance of glass beads as the foundation of necklaces. Of the 128 necklaces featuring only a single class of objects, the vast majority of these are collections of glass beads. Where more classes of objects are present

in a single necklace, such necklaces typically feature glass beads in combination with one or two other classes of objects. Necklaces without glass beads are relatively unusual; less than ten percent of all the necklaces composed of two or more objects feature no glass beads. Of course, this result is not particularly surprising, given that the total number of glass beads recorded in database II is much greater than that of pendants or wire rings (see tab. 1.7).

A more intriguing result of even this straightforward analysis is that most necklaces are composed of a variety of different objects. Over seventy percent of necklaces composed of two or more elements feature at least two classes of object. The most common combinations are glass beads with beads of other materials (n. 64 examples), glass beads with wire rings (n. 61) and necklaces composed of all four object classes, glass beads, non-glass beads, wire rings and pendants (n. 44). Even within relatively short necklace assemblages, therefore, it was common to integrate objects of various types and materials. Very obviously 'organised' and matching necklaces were clearly the exception, rather than the norm.

Another measure of the overall heterogeneity of necklace assemblages can be obtained by dividing the total number of necklace elements by the number of individual types present. The higher the number, the more homogenous the resulting assemblage is. To take grave 11 at Melbourn (Cambs.) as an example: here the necklace was composed of sixteen individual objects, two types of glass beads (BE1-WoundSp and BE1-Dghnt), two types of wire ring (WR-Wrapped and WR-SimTw) and three pendants (PE8-a, PE9-f and an unclassified type) (Wilson 1956). When the total number of elements (16) is divided by the number of object types represented (7), the result is 1.67, a low number that corresponds to a fairly mixed assemblage of objects.

Of course, this approach can only serve as a proxy for understanding the composition of necklaces, since it relies on the modern division of objects into defined typological categories. Whether the original wearers of this jewellery would have drawn the same distinctions between beads of different types, wire rings with varying terminal forms or cabochon pendants set with different materials, to cite a few examples, is impossible to know. Nevertheless, the usefulness of this approach as a measure of heterogeneity stems from the potential to compare across the corpus of necklace assemblages.

Of the 222 necklaces represented in figure 5.5, the results of dividing the total number of items by the number of object types present cluster between the boundaries marking 1 and 3, showing that many necklaces are composed of a variety of different types of objects. More obviously homogenous assemblages stand out as obvious outliers. This includes necklaces composed of an unusually high number of components elements. Such necklaces are particularly well-represented

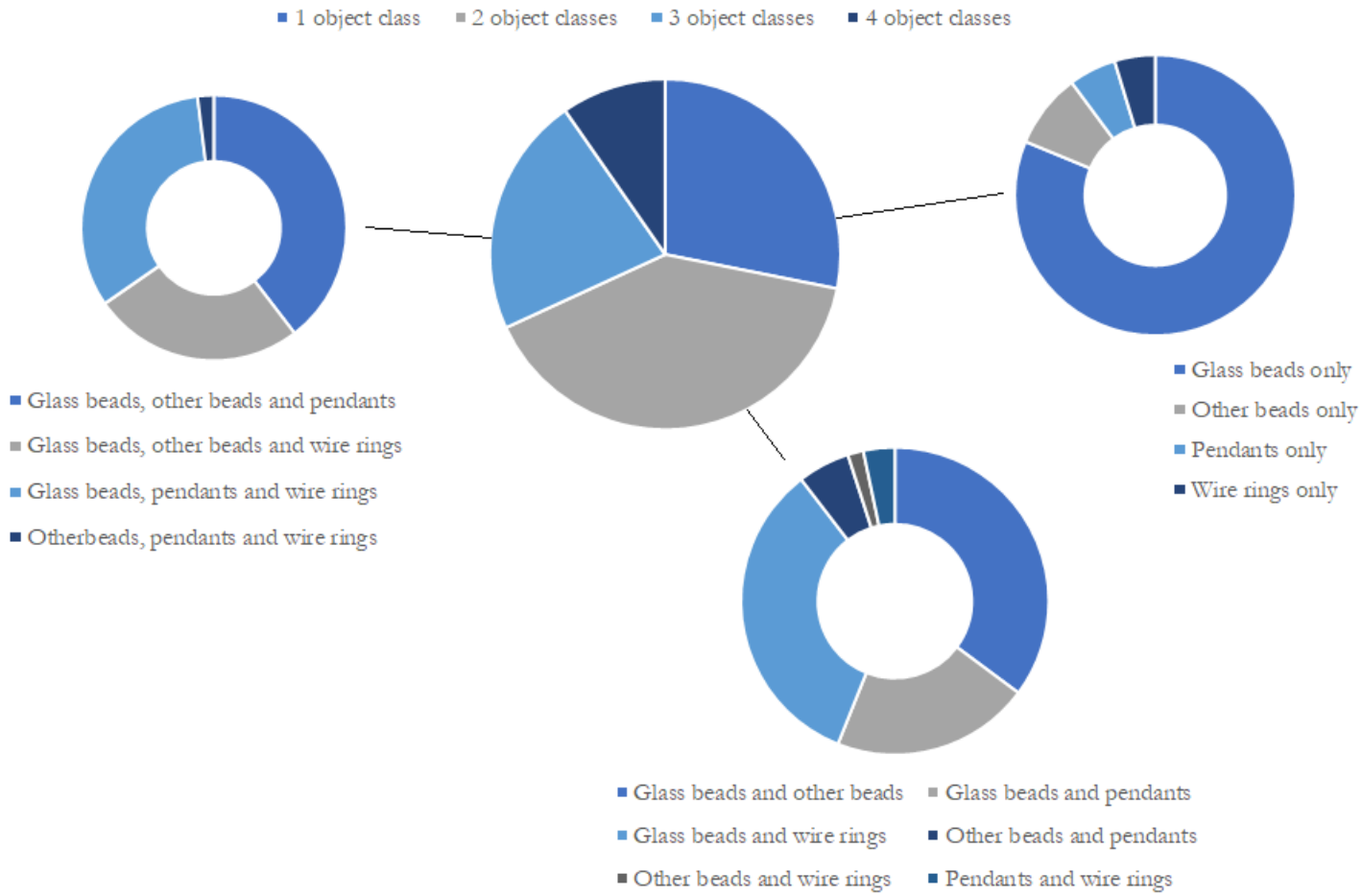

Figure 5.4: The composition of 455 necklaces according to object classes. Note that only necklaces containing two or more items are included.

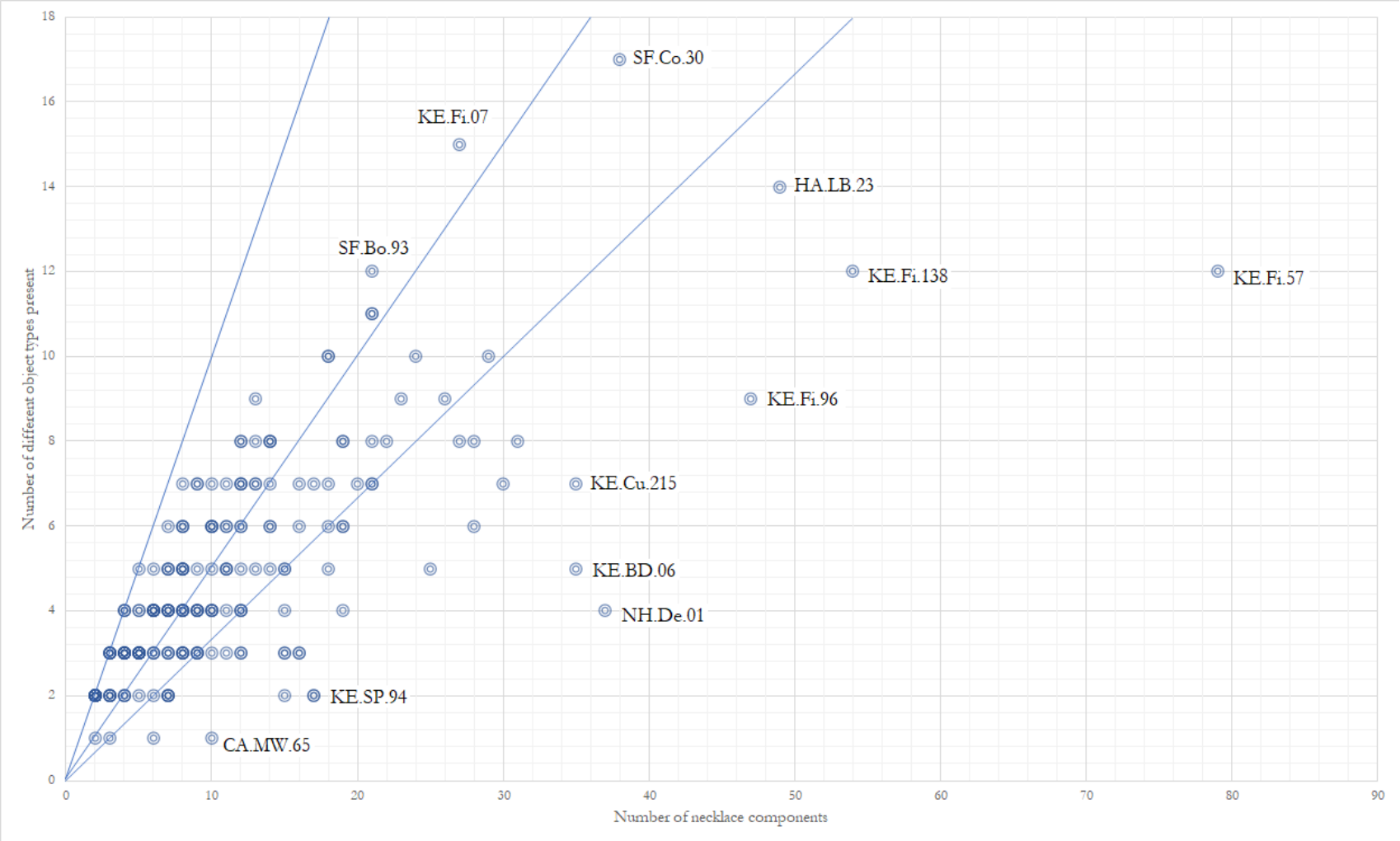

Figure 5.5: Number of elements plotted against the number of object types represented of 222 necklaces from secure contexts.

at Finglesham (such as KE.Fi.57, KE.Fi.138 and KE.Fi.96), which may suggest the persistence of a – perhaps deliberately conservative – tradition within this community for wearing long and complex necklace festoons. Not all of the long necklaces are necessarily outliers to the generally observed pattern, however. Necklaces from Boss Hall (SF.Bo.93) and Coddenham (SF.Co.30) are both examples of assemblages composed of more than twenty individual elements and featuring an array of different object types.

A particularly obvious outlier on the graph is the Desborough necklace (NH.De.01) Although this is perhaps one of the most famous seventh-century necklaces, comparing it against the broader corpus reveals just how unusually homogenous it is as a collection. Necklaces featuring just a few object types, constructed from a restricted range of materials, are the exception, rather than the rule. Similarly, one can also point towards the somewhat peripheral position of unusually homogenous bead collections. Examples include the necklaces from graves at Melbourn (CA.MW.65) and St Peter's Tip (KE.SP.94), both dominated by wound spiral beads (type BE1-WoundSp). In the case of the necklace from Melbourn all the beads were opaque green in colour, while at St Peter's Tip an equal proportion of opaque green and opaque red beads were found. Again, the position of these beads on the graph reveals that such collections of apparently matching elements are relatively unusual, even where there is only a single class of objects represented.

The impression therefore is one of variety and heterogeneity. The majority of necklaces feature multiple classes of objects in combination and a broad range of different object types within collections that are generally composed of a relatively restricted number of elements. These general trends result in necklaces that are very individualised; indeed, it is difficult to point to examples where necklaces appear to be adhering to an established template or model in terms of the range of objects contained. The possible exception here are the pendant necklaces of the type represented at Desborough, but even in these cases, the unusually homogenous nature of the collections might equally have lent them an air of individuality and uniqueness. Overall, the stylistic rules governing the composition of seventh-century necklaces appear to be fairly loose; there is a clear preference for shorter necklaces and a familiar repertoire of object types that appear frequently in all regions, but whether this there is clear flexibility for necklaces of innumerable forms. A final illustration of the inherent flexibility in the composition of necklaces is demonstrated by the results of correspondence analysis[44] (fig. 5.6), again applied to a sub-sample of necklaces from secure contexts (n. 207). The marked clustering of most of the points close to the axes reveals that there is little within the data to distinguish particular related groups

[44] This utilised the CAPCA add-in to Microsoft Excel, version 3.1 © Torsten Madsen, 2016, available at https://www.archaeoinfo.dk/.

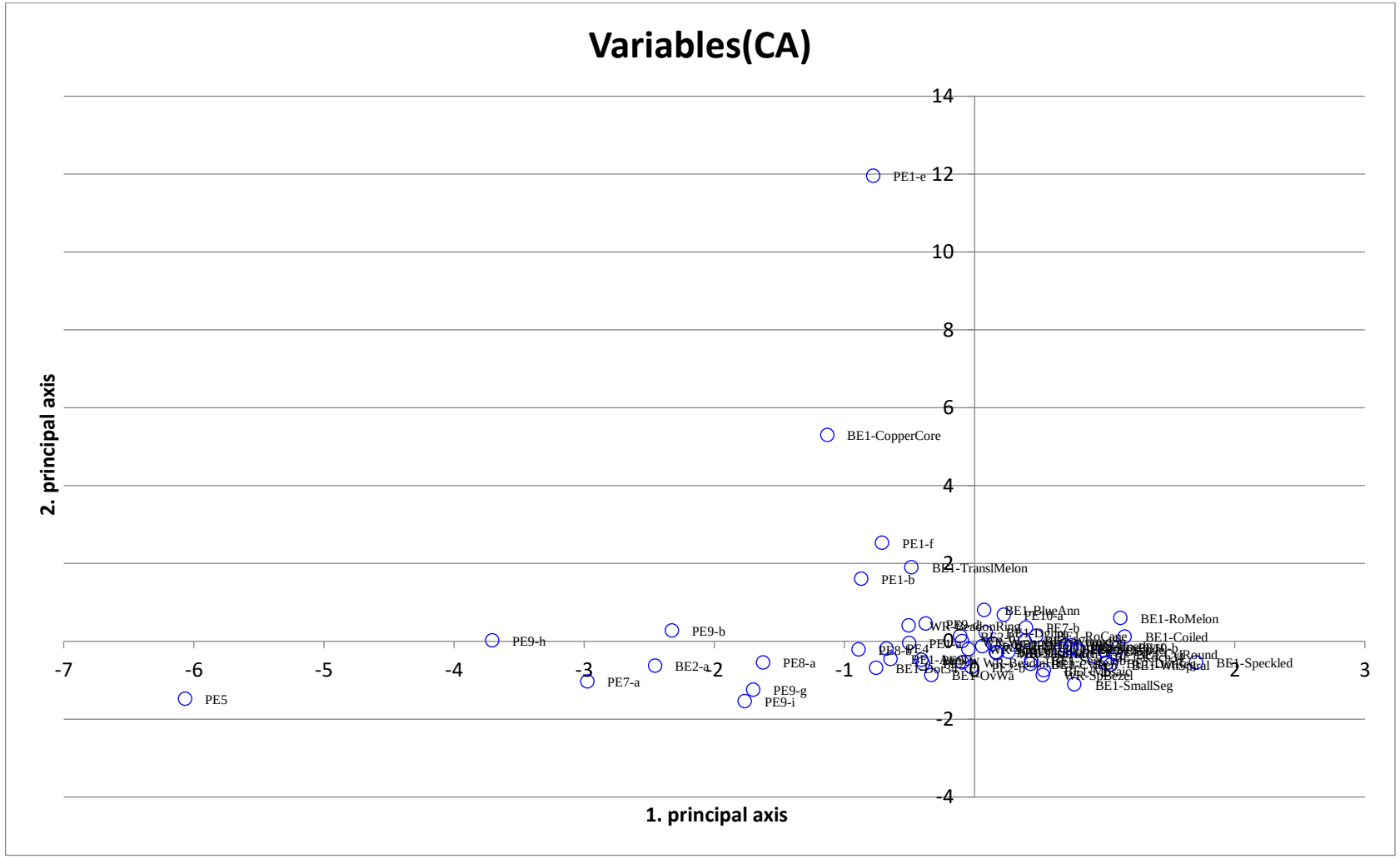

Figure 5.6: The results of correspondence analysis applied to the objects from 207 necklaces from secure grave contexts.

of objects. Indeed, there seem to be no obvious rules or patterns governing the combination of certain object types at all; all types could be, and regularly were, brought together in various combinations. Geake (1997: 50) came to a similar conclusion based on her sample of 159 necklaces. The absence of any obvious patterning also serves to confirm that all of the objects in the present sample are broadly contemporary.

Chapter 3 discussed the likelihood that women acted as makers of their jewellery in the role of patron, exercising control over the supply of materials (see above, chapter 3.4.2). The heterogenous nature of necklaces as collections must surely also speak to the role of women as makers in the sense that they designed assemblages that were highly individualised in their overall composition. While we can trace the general idea of what a seventh-century necklace should be in a broad sense, the absence of identifiable patterns underlying the composition of these assemblages is a clear indicator of the role personal taste played in the process of curating these necklaces.

5.2.3: LAYOUT AND ORGANISATION

One particularly interesting aspect of necklaces as composite objects is their underlying organisational principles. Was there, for example, a favoured layout or order in which objects were combined, especially given the presence of diverse materials and objects within many necklace collections? Unfortunately, a detailed exploration of the organisation of necklaces as composite objects faces a major methodological challenge, in that frequently archaeological evidence for the arrangement of necklaces does not survive the processes of burial, decomposition and recovery. Evidence can be lost at various stages. For objects discovered during antiquarian digging campaigns, rarely was any attempt made to record the spatial relationships of grave-goods to one another or to elements of the skeleton. Even in the case of more recent excavations, taphonomic factors can hamper attempts to understand the layout of necklaces as composite objects. As decomposition sets in, there can be considerable movement in the region of the upper body, affecting the mandible, vertebrae, clavicles and the first sets of ribs, with these elements collapsing into cavities created as soft tissue decays (Duday 2009). Coupled with the disintegration of the stringing material, this can result in considerable disturbance of the necklace, either scattering individual elements or causing a clustering of items in a single area (for an example of the latter, see grave 57 at Finglesham; Hawkes and Grainger 2006: fig. 2.13). The movement of burrowing animals can also cause single elements to become displaced. A clear illustration of such minor post-depositional disturbance are the relative positions of the gold frame and polychrome glass setting of a single pendant (SF.BH.22.01) from grave 22 at Bloodmoor Hill recorded upon excavation: while the former was found along with

the other necklace elements close to the skull, the latter was recovered in the region of the right knee (Scull 2009b: 398).

Therefore, to explore how necklaces could be arranged, it is necessary to focus on a small number of case studies. These are the necklaces from the cemetery at Finglesham (Kent), excavated and published by Sonia Hawkes (Hawkes and Grainger 2006). The benefits of focusing on this site are twofold. Firstly, most of the necklaces published in the grave catalogue are presented in reconstructed arrangements that reflect the relative positions of the individual elements upon excavation. These positions are noted both in the descriptive catalogue and the grave plans, where necklaces in the region of the upper chest are frequently published as zoomed-in details. This is a welcome contrast to the conventional publication of grave plans at 1:20 or 1:24 scale, which inevitably compresses the detail of assemblages of small items like necklaces. Focus is therefore directed towards the necklaces from Finglesham, supplemented by evidence from other sites where available. Figures 5.7–17 present a selection of reconstructed necklaces from graves at Finglesham. Colour has been added digitally to aid interpretation but should not be understood as replicating the tone or hue of the original elements. Colour has not been added to polychrome beads, metal elements, miscellaneous beads or opaque white glass beads.

Symmetry is a striking feature of many of the reconstructed necklaces. In the more complex necklaces pairs of pendants or wire rings are positioned opposite one another on the necklace string to create symmetrical arrangements (for examples; figs. 5.12, 5.15; see also the proposed reconstruction of the necklace from grave 57: Hawkes and Grainger 2006: fig. 2.89). In grave 124, two bulla pendants appear to have served as the terminals of a small necklet (fig. 5.13). Even in more simple necklaces, colour is used to achieve the same effect. The necklace from grave 187 at Finglesham pairs a single opaque orange and two opaque green beads at either side of a central pendant to create a symmetrical design (fig. 5.17), while beads in a greater range of colours are utilised in the same way in the small bead festoon from grave 8 (fig. 5.7). In more complex necklaces, groups of beads paired by colour are also used to create symmetrical arrangements: two opaque red beads are positioned either side of a central scutiform pendant in the necklace in grave 174 (fig. 5.16), while groups of colour-matched beads (opaque orange, red, greenish-blue and green) are found in the two almost-symmetrical halves of the necklace from grave 138 (fig. 5.15).

An interesting observation that can be made regarding the longer and more complex necklaces is that symmetry seems to be foregrounded towards the centre of the necklace. The necklaces from graves 68 and 174 at Finglesham, for example, show carefully arranged symmetrical elements at the centre of the pendant, expressed through the pairing of particular object types and beads of

a similar colour (figs. 5.12, 5.16). Towards the edges of the necklace, however, the organisation breaks down somewhat. There is not the same careful pairing of items at opposite sides of the arrangement, and the ends of the necklace are also the areas where more unusual elements seem to be placed. A good example of this is the necklace from grave 7 at Finglesham, in which the central region of the necklace seems to feature deliberately alternating wire-mounted beads and biconical wire beads, with more unusual, singular elements, such as an unmounted polychrome bead (type BE1-Mosaic) and a looped *thrymsa* positioned towards the ends of the festoon (Hawkes and Grainger 2006: fig. 2.73). In the necklace from grave 138 an annular bead mounted in a silver wire hitch takes the place of a wire ring, distributing a generally symmetrical assemblage. As with the other necklaces from Finglesham, this more unusual element is located towards the end of the necklace. While, of course, each necklace is a unique collection of elements, the placement of particular objects towards the centre to create a symmetrical layout may reflect the fact that this area of the necklace was most visible to onlookers when worn. More unusual elements that could not be so easily paired were still clearly valued and meaningful but seem to have been deliberately placed on the peripheries of the necklace, so as not to disrupt the overall visual appeal.

Connected to the construction of symmetrical assemblages is use of a single item as a centrepiece. This is evident across many of the different reconstructions of necklaces from Finglesham. Various types of objects could serve as centrepieces: cabochon-, coin-, disc- and scutiform pendants (see figs. 5.12, 5.15, 5.16, 5.17; see also the necklace from grave 7, Hawkes and Grainger 2006: fig. 2.73), wire rings, especially when worn singly (see figs. 5.10, 5.11, 5.12) and, in the case of some simpler collections, beads that may have been deliberately selected for their larger size (fig. 5.7) or exotic material (see fig. 5.8). Again, the central placement of these objects is probably best interpreted as a desire to highlight individual elements considered particularly prestigious or aesthetically appealing, in a position which would be most visible.

It is also worth considering the use of colour across the Finglesham necklaces, which reveals two general trends. The first, more evident in the smaller collections, is the restricted use of only a few colours. Most common is the combination of opaque red and opaque green beads (figs. 5.9, 5.13) (or in the case of grave 187, opaque orange and opaque green; see fig. 5.17). The necklace from grave 61 is composed of opaque yellow and opaque white beads in combination (fig. 5.10). Other necklaces include a much greater range of colours. As might be expected, this is particularly evident in the longer festoons, which obviously are inherently more likely to contain a broader range of items and materials, but it is important to note that smaller or more simpler festoons can also consist of beads of several colours.

A general survey of the broader corpus suggests that the trends evident in the arrangement of necklaces at Finglesham are not unique to that particular community. Although the relative positions of necklace elements are rarely recorded to the same level of detail, within many necklace collections there is often the capacity for symmetry and for a particular item to have acted as a centrepiece. In necklaces composed of wire rings, often these seem to have been graduated by size, and there is sometimes a selection of beads of a particular colour or type within a single collection. Not all necklaces are necessarily structured around a symmetrical layout, however. This is particularly true of smaller assemblages. Among the less obviously 'organised' necklaces from Finglesham are the small collection of beads in grave 16 (fig. 5.8) and the more substantial necklace from grave 62b (fig. 5.11). Geake (1997: 50) memorably captured the variability inherent within seventh-century necklaces as a corpus:

> 'some necklaces – both of rare and commonplace materials – appear to have been very carefully put together and symmetrical and well-matched. Others look like rag-bags of haphazardly arranged old junk'.

Again, the impression here is one of a set of shared structuring principles (a preference for aesthetically appealing symmetrical layouts and a tendency to place more prestigious items towards the centre of the necklace) underlying the *idea* of seventh-century necklaces and within these considerable flexibility for necklaces as collections to be highly individualised. As curated collections, necklaces are shaped both by the personal taste of the owner and wearer and her social capital to acquire particular objects and materials. Possibly symmetrical necklaces may have been specifically valued because they spoke to the capacity of the wearer to commission or acquire items that could be paired as part of an aesthetically appealing design. Overall, it is clear that the process of curating a necklace represented a significant investment in terms of care, time and personal agency.

5.3: WAYS OF WEARING

Attention can now be directed towards an examination of how necklaces were worn: how they were suspended and fastened and their position on the body. Across the corpus of material there are a number of different ways in which necklaces could be worn.

5.3.1: MEANS OF SUSPENSION

One of the most distinctive elements within the seventh-century necklace corpus are the wire rings, and these objects raise the most questions regarding their possible methods of suspension.

Only the small group of wire rings featuring a suspension hitch (type WR-SuspHitch) can be straightforwardly strung on a necklace, by threading the cord through the loop formed by the spiralling terminals of the ring. Rings of this type can be found amongst other elements as part of complex necklaces, such as that from grave 138 at Finglesham, already discussed (see fig. 5.15). There is also an unusual necklace from grave 28 at Harford Farm (Norf.) that is composed almost exclusively of wire rings of type WR-SuspHitch. Here the position of the objects in the grave provides clear evidence for how rings of this type were suspended. Although preservation of skeletal remains was extremely poor at this site, extensive body stains were recorded upon excavation (Penn 2000: 74). The wire rings in grave 28 were found in a roughly semi-circular layout, in the region of the upper body. The orientation of the suspension hitch of each wire ring closely corresponds that of its neighbours, demonstrating that the same necklace cord passed through the terminal of each ring (fig. 5.18). There has been slight peri-depositional movement of some of the rings (objects b–e and o–p on the annotated excavation plan), with the result that the body of these rings sits 'above' the necklace string, rather than below. An experimental replica of the ring festoon from grave 28 has revealed that there would be considerable overlap of each ring when worn (fig. 5.19), which is consistent with the overlapping position of rings i–l recorded upon excavation.

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Figure 5.18: Plan of the position of wire rings (objects a–p) and a bucket pendant (q) *in situ* in grave 28 at Harford Farm (Norf.) (after Penn 2000: fig. 38, p. 28).

Wire rings of other types lack an obvious means of suspension. An important contribution to our understanding of how these items were integrated into necklaces was provided by the excavations at Chamberlains Barn (Beds.), a Final Phase type-site where preservation of textiles was extremely good (Hyslop 1963). Substantial fragments of necklace cords adhering to wire rings in graves 9

and 57 demonstrated that the rings were placed edge-to-edge and knotted together, allowing them to lie flat when worn (figs. 5.20–1). In theory, rings with simple terminals (such as types WR-Wrapped or WR-SimTw) could be orientated in any direction when fastened this way, as the two reconstructions of the wire ring necklace from grave 91 at Edix Hill (Cambs.) show (fig. 5.22). The evidence at Chamberlains Barn, at least, would suggest that, generally, wire rings were oriented so that the terminals – the most obviously decorative part – remained visible (i.e. not covered by the knotted necklace string); certainly, this must have been the case where necklaces include rings with larger or more complex terminals (such as rings of type WR-SpBezel and WR-HookLoop).

Figure 5.19: Replica of the necklace of wire rings from grave 28 at Harford Farm, strung as if worn. Length of the string: c. 30cm.

As the combined diameter of wire rings contributes to the overall length of the necklace, festoons composed of rings knotted edge-to-edge often feature a restricted number of elements. The upper limit seems to be around fifteen or sixteen rings, as seen in necklaces from Lechlade (GL.Le.187) and Harford Farm (NO.HF.11). A reconstruction of the necklace from grave 2203 at Wolverton (Bucks.) provides an indication of the overall length of a necklace of knotted wire rings, in this case comprising of eleven (fig. 5.23). This almost certainly reflects the general preference for shorter, more delicate necklace collections already noted.

In unusual cases where a higher number of wire rings are present, it seems likely that the method of suspension varies slightly. Certainly, this seems to have been the case for an elaborate necklace from grave 23 at Lower Brook Street, Winchester (Hants.), which was composed of at least thirty

Figure 5.20: Fragmentary remains of the necklace cord adhering to wire rings from grave 9 at Chamberlains Barn, Leighton Buzzard (Beds.) (after Hyslop 1963: fig. 9).

Figure 5.21: Fragmentary remains of the necklace cord adhering to wire rings from grave 57 at Chamberlains Barn, Leighton Buzzard (Beds.) (after Hyslop 1963: fig. 17).

Figure 5.22: Reconstruction of two possible stringing arrangements of a necklace of wire rings (type WR-Wrapped) from grave 91 at Edix Hill (Cambs.) (after Malim and Hines 1998: fig. 3.60).

wire rings, plus a small number of beads and pendants. In this case a detailed plan of the necklace items in relation to the skeleton showed considerable overlap of the wire rings (fig. 5.24). Hawkes noted that this compressed arrangement was almost certainly necessitated by the large number of rings, which, had they been knotted in the more familiar edge-to-edge arrangement, would have formed a necklace that was 'unfashionably long' by seventh-century standards (1990: 662). Another necklace, this time from grave 108 at Bottledump Corner (Bucks.), provides evidence for how this overlapping effect could be achieved. X-rays of the fragmentary necklace festoon *in situ* within a soil block showed considerable overlap of neighbouring rings (Parkhouse and Smith 1994). Fragmentary remains of stringing material suggested the use of a single knot at the apex of each ring to attach it to the necklace (fig. 5.25). This hypothesised stringing arrangement finds an interesting visual correlate in the wire rings with terminals formed into suspension hitches.

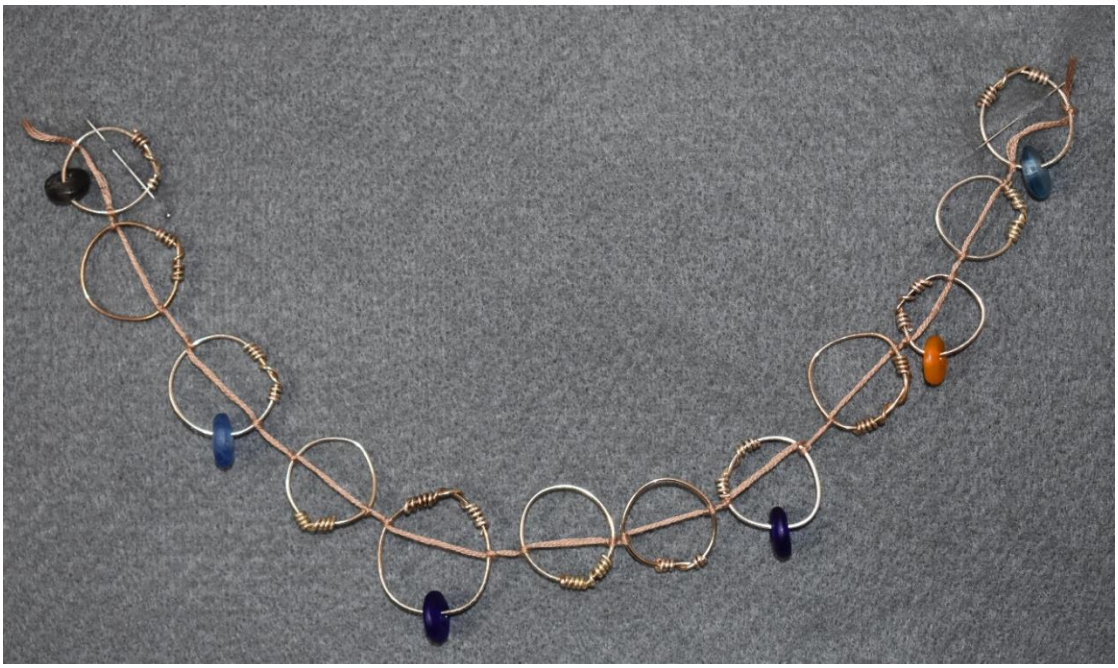

Figure 5.23: Reconstruction of a necklace of wire rings and glass beads from grave 2203 at Wolverton (Bucks.), strung as if worn. Length of the string: c. 31cm.

The method of suspension of other necklace elements are more self-evident. Most pendant types are furnished with loops through which necklace cords can be passed, although a small number are simply perforated for suspension. Good examples of the latter category include pierced coin pendants (type PE7-c) and shell pendants (type PE10-a). In a small number of cases pendants are fashioned with a miniature wire ring to allow them to be attached to a necklace string (for examples, see figs. 9.99iii, 9.121v). Most beads were probably also simply threaded onto necklace cords. The exception are the beads suspended from wire rings (type WR-BeadonRing) or those fastened with a hitch formed from wire (type WR-BeadinHitch). The latter treatment seems to have been reserved for larger or more obviously decorative beads. On the basis of analogy with

these wire-mounted beads, it is possible that some of the larger beads in the present corpus might also have been suspended in the same way, in a hitch formed from the necklace cord, in order to display their decorated perforated faces. A further possible combination of beads and wire rings involved threading the bead onto the necklace string between the knots in wire rings, suspending

Figure 5.24: Plan of the position of wire rings, pendants and glass beads in relation to the skeleton in grave 23 at Lower Brook Street, Winchester (Hants.) (after Hawkes 1990: fig. 167).

the bead inside the ring (see figs. 5.20, 5.22). This hypothetical reconstruction is supported by numerous instances of beads found inside rings upon excavation, and it seems to have been the favoured arrangement in necklaces where the number of beads is less than or equal to the number of rings.

It is not clear whether beads and pendants were typically strung loosely, or whether knots in the necklace cord were used to separate these items. The demonstrable use of knots to secure wire rings shows that the latter is at least plausible. This arrangement would be particularly suited to necklaces composed of a small number of elements, which would otherwise cluster at the lowest point of the string if they were strung loosely. Knotting each element in place is unlikely to have been a universal practice, however, especially in necklaces composed of a larger number of components. Physical traces of use, such as thread wear of suspension loops and battering of the edge of glass beads, suggests that, at least in some cases, some movement of individual elements was possible.

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Figure 5.25: Reconstruction of the overlapping arrangement of wire rings and a scutiform pendant from grave 108 at Bottledump Corner (Bucks.) (after Parkhouse and Smith 1994: fig. 6).

5.3.2: STRINGING MATERIAL

There is little physical evidence for the strings or cords onto which necklace elements were arranged. Preserved or mineral-replaced textile fragments survive most frequently in the corrosion products of copper-alloys and iron, neither of which are present in seventh-century necklaces in any meaningful quantity. This situation can be contrasted with the evidence from the fifth and sixth centuries, when a common practice was the suspension of bead festoons from the pin-catches of copper-alloy brooches (Walton Rogers 2007: 99; Walton Rogers 2012: 202). These

earlier necklace strings are often simple cords of two, three or four Z-spun yarns plied together (Walton Rogers 2007: 98–99). Partially processed flax or hemp fibres seem to have been the favoured material, although there are also examples of wool threads. The advantage of leaving plant fibres only partially processed is that it results in a stronger, stiffer cord that is easier to thread (Walton Rogers 2012: 202–3).

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Figure 5.26: Two views of a short section of six-strand necklace cord preserved within the copper-alloy tube of a BE1-CopperCore bead from Lechlade (GL.Le.172/2.02). Diameter of bead: 8.6mm. Image by author © Corinium Museum.

What little evidence survives from the seventh century largely confirms these general observations. Partially processed hemp fibres, between 1.5 – 2.0mm in diameter, were preserved within a copper-alloy wire bead (SF.Co.30.11) and the suspension hitch of a wire-mounted bead (SF.Co.30.16) in grave 30 at Coddenham (Suff.) (Penn 2011: 29). Fragments of a cord made from three Z-twisted three-ply wool strands were noted in association with elements of the necklace of wire rings in grave 108 at Bottledump Corner (Bucks.) (Pritchard 1994; see fig. 5.25). Neatly plied wool strands were also used to knot together the festoon of wire rings in grave 33 at Harford Farm (Norf.) (Crowfoot 2000: 90). A particularly well-preserved necklace string also survives within the copper-alloy sleeve of a glass bead from grave 172/2 at Lechlade (Glos.) (Weightman 2011: 98; see fig. 5.26). Exceptionally, there is also evidence for the use of S-twisted silk cord being used to suspend the rich necklace of pendants and beads in grave 93 at Boss Hall, Ipswich (Suff.) (Scull 2009a: 99; Shearman 1993: 30). Silk is an exceptionally rare find in early medieval graves and must represent an import (Bender Jørgensen 1992: 145). The closest parallels from Anglo-Saxon graves are scraps of silk threads found within a copper-alloy workbox in a seventh-century grave at Eastry (Kent), probably originally intended for embroidery, and similar silk fibres tentatively identified in a sixth-century tablet-weave from Norton-on-Tees (Co. Durham) (Crowfoot 2008; Walton Rogers 2007: 86).[45] The use of silk fibres as a necklace cord at Boss Hall

[45] Two other early Anglo-Saxon graves have produced evidence of silk, although in these cases as a woven textile, rather than threads. These include a small square of silk wrapped around a copper-alloy globule in

is extremely surprising and must speak to both the high status of the wearer and the importance of her necklace as an element of costume.

5.3.3: LENGTH WHEN WORN

The generally restricted number of elements that typically make up a seventh-century necklace also reveals something about how they were worn. Of course, there is not a direct relationship between the total number of elements and the overall length of a necklace, in part because of the variation in the dimensions of different objects. It is clear, however, that almost none of the necklaces would have been long enough to completely encircle the neck, in the way that modern bead-strings do. A good illustration of this is provided by one of the longest necklaces in the present corpus, that from grave 138 at Finglesham (Kent). The reconstruction of this necklace presented in the excavation report implies that this was a continuous string (fig. 5.15). However, the total length of the necklace if all elements were arranged edge-to-edge is just over 356mm, a measurement that corresponds to the length of modern choker-style necklaces, which sit snugly around the throat. It seems unlikely that the necklace from grave 138 could have been comfortably worn in the manner that the reconstruction illustration seems to suggest by the adult woman with whom the necklace was buried.

Other substantial necklace collections are also reconstructed in an edge-to-edge arrangement. The pendant necklace from Desborough (Northants.), for example, is presented for museum display in an arrangement that forms almost a complete circle (fig. 5.27). The total length of the necklace as strung measures just 255mm. The circular layout of the necklace cannot reflect the way in which the necklace was originally worn, especially if the wearer was an adult (*contra* Walton Rogers 2007: 196). Another pendant necklace also restrung edge-to-edge for museum display, although not in this case in a circular layout, is that from Galley Low (Derbs.). The combined length of all the elements measures just 115mm. It seems extremely likely, therefore, that all seventh-century necklaces were worn so that all elements were visible against the upper body. This is also consistent with the position of necklace elements upon excavation, since very few can be conclusively shown to have been found beneath the skeleton, a position that would suggest necklace festoons completely encircled the neck.

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the smith's grave at Tattershall Thorpe (Lincs.), a particularly enigmatic object of uncertain function (Hinton 2000: 63; Walton Rogers 2007: 86) and a very fine mineral-preserved textile from a sixth-century grave at Dover Buckland, which had a sufficiently high thread-count as to be plausibly identified as silk (Walton Rogers 2012: 198).

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Figure 5.27: Pendant necklace from Desborough (Northants.) as strung for museum display. Image © British Museum.

5.3.4: POSITION ON THE BODY

Since the number of elements worn and their combined diameters is clearly not a reliable indicator for the length of necklaces and therefore how they were worn, the question of where on the body necklaces were worn persists. After all, a short festoon composed of only a small number of items could, in theory, hang as low as the waist if strung on a sufficiently long cord. It is instructive, therefore, to examine the position of necklaces in relation to skeletal remains as an indicator for how these objects were worn. Figure 5.28 shows the proportion of necklaces found in different positions on the body, based on 244 examples. These are mainly drawn from recently excavated cemeteries, for which annotated grave plans are available. Although older publications sometimes note the position of grave-goods in relation to elements of the skeleton, in the case of necklaces this tends to be a fairly unspecific 'at the neck' or 'on the chest', a description which helps to identify the general function of the objects but is otherwise of limited use.

Necklaces in database I were recorded as sitting at the neck in cases where elements were found close or sometimes beneath the skull, typically sitting above the clavicles. Unsurprisingly, the majority of necklaces were found in this position. In some cases, necklace items appear to one side of the body, atop or sometimes in the space just above the left or right shoulder; at least some of these are likely to be necklaces that have shifted during burial or due to decomposition (see above, section 5.2.3). Occasionally, elements of the necklace are found lower down on the body, typically in and among the ribs; these are recorded as being found in the region of the chest.

Again, it may be that minor disturbance accounts for at least some of these instances. Necklaces in other positions (located alongside other parts of the skeleton, in containers or in the space around the body) are more unusual; these non-worn necklaces are discussed below (see section 5.3.6). Figures 5.29–41 present a series of grave plans for burials from database I, showing the relative positions of necklace elements in each.

The combined evidence of the grave plans demonstrates that it was customary to wear necklaces high up on the body during the seventh century. Most necklace elements are found in a zone between the mandible and the first pair of ribs. The only necklaces positioned lower on the body are those composed of the highest number of elements, including the more substantial necklaces at Finglesham, such as that in grave 57 (see fig. 5.36) and the complex necklace from Lower Brook Street, Winchester (see fig. 5.24). In these cases, the lowest elements of the festoon seem to have reached the upper chest, perhaps in the region of the third or fourth rib. There is a clear preference, therefore, for necklaces worn close to the base of the neck. For small assemblages composed of few elements, the position of the objects was determined by the length of the necklace cord, sections of which would surely have been visible either side of the beads, pendants and rings (c.f. fig. 5.19). In the case of larger necklace collections, the length of the cord also seems to have been cut so that all elements were visible against the upper body, with the position of the lowest hanging items determined by the overall size of the assemblage.

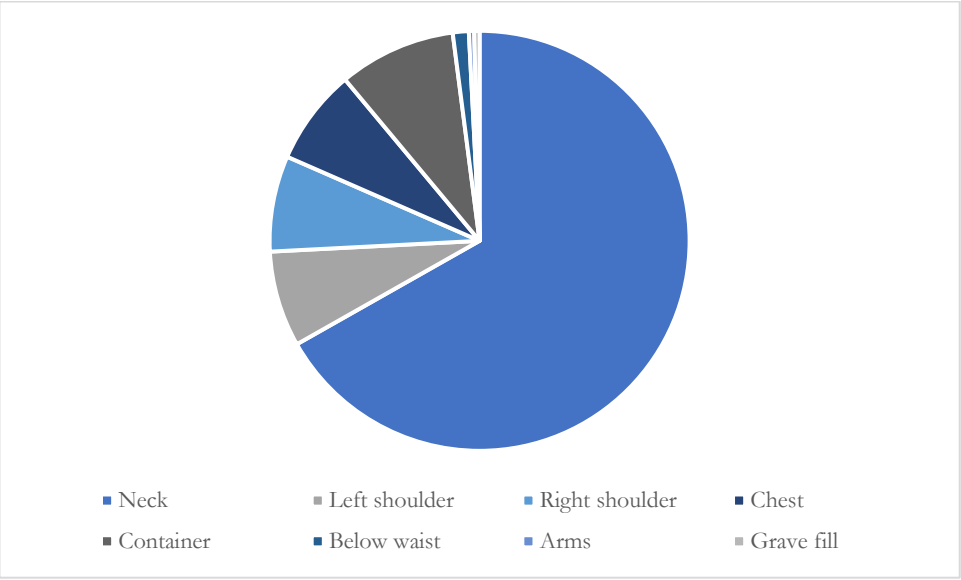

Figure 5.28: The percentage of necklaces found in different locations relative to the skeletal elements.

5.3.5: FASTENING MECHANISMS

The simplest – and, archaeologically-speaking, least visible – method of securing a necklace would be knotting the organic string at the nape of the neck. Although there is no physical evidence for simple knotted closures, their use can be inferred based on examination of the position of necklace items *in situ* in the grave. At Westfield Farm (Cambs.) the close-fitting pendant necklace in grave 1 was found above the left clavicle and partially below the skull (Lucy et al. 2009: fig. 3). The individual pendants were found in a linear and symmetrical arrangement that almost certainly reflects the position of the objects as worn (see above, section 5.2.3). Therefore, the movement of this necklace collection as a group must be peri-depositional, occurring prior to the decay and fragmentation of the organic cord or string. Perhaps movement during the lowering of the body or the backfilling of the grave cause the whole necklace to slide sideways as a group, coming to rest in the empty space above the left shoulder? Such movement would only have been possible if the necklace was secured as a closed loop but not otherwise affixed to other elements of costume.

The same kind of displacement seems to have affected the wire ring festoon in grave 28 at Harford Farm (Norf.), where minor peri-depositional movement is also suggested by the position of the individual objects themselves (see above, section 5.3.1). Although, as noted, only body stains survived in the acidic soils at this site, in grave 28 the region of the head is easily distinguishable. Again, in this case, the ring festoon appears to have slid sideways towards the left side of the body as a group, coming to rest partially beneath the skull (Penn 2000: fig. 37). This provides clear evidence for the suspension of the rings and pendant from a cord knotted to form a closed circle. Since there is little evidence that necklaces of the seventh-century would have been long enough to have been simply slipped over the head as a closed string, repeated fastening and unfastening of these items is likely to have been part of everyday rituals of dressing. The familiar processes of knotting and unknotting these necklace strings would also have facilitated relatively straightforward modification of the assemblage, in adding or removing individual elements or making changes to the overall layout or order of components.

Not all necklace strings were fastened in this manner, however. For many examples it is clear that the two ends of the necklace string were secured by attaching them to underlying garments, almost certainly on the front of the body. Perhaps the best-known example of this style of attachment is the use of paired wire rings, usually simple wrapped forms, to serve as anchor points for the two ends of a necklace. This distinctive type of necklace was first recognised by T. C. Lethbridge (1931: 51, fig. 25), during his excavations at Burwell (Cambs.). In proposing this reconstruction, Lethbridge was correcting a common misconception that wire rings must have been worn as

earrings, because in this arrangement the two rings were inevitably found at either side of the jaw (Geake 1997: 113; for examples of this pervasive but erroneous interpretation see Faussett 1856; Mortimer 1905: 248; Smith 1912: 153). Setting aside the general impracticality of a permanently closed earring of solid construction, experiments undertaken by the author reproducing wire rings with various terminal shapes (see above, chapter 3.2.12) have shown that the range of movement needed to twist the terminals securely around the apex of the ring would simply not have been possible had the wire been passed part-way through a pierced earlobe.

An alternative interpretation of paired wire rings has been proposed by Walton Rogers (2007: 159; 2012: 210), who suggests that they served to anchor ties or thin tablet-weaves to a veil or coif, perhaps at the point at which such bands separated from the main veil to become a tie-fastening at the nape of the neck. While this reconstruction fits with other evidence for the importance of the veil in the seventh century (see below, section 5.4), it is worth noting that the two examples cited in support of this interpretation – grave 160 at Castledyke South (Lincs.) and grave 413 at Dover Buckland (Kent) – were found closely associated with other, certain necklace elements (glass beads and a fragmentary silver pendant in the former case and an inlaid pendant and metal beads in the latter). Given that wire rings are mostly associated with necklaces and can be worn in a variety of ways, it seems much more likely that paired wire rings served to anchor the necklace, rather than fastening a veil. Indeed, there are only two cases in the present databases in which a pair of wire rings represents the only necklace fittings recovered (HA.Wi.10 and SF.Bu.4251), and in both cases there is evidence that the graves were disturbed, possibly with the loss of other elements of the necklace (Meaney and Hawkes 1970: 12; Scull 2009a: 241).

For necklaces arranged between paired wire rings, it seems plausible that the rings themselves were either sewn or tied to underlying garments. This can be inferred from the position of the necklace items in grave 413 at Dover Buckland (fig. 5.34). In this grave the necklace objects, including two wire rings, were found in a roughly straight line beneath the fragmentary remains of the skull, towards the right side of the body. This position seems to reflect a necklace string attached to an underlying garment that has become detached at the left side, coming to rest naturally in a 'vertical' arrangement. Again, the linear alignment of the pendants, rings and beads suggests that this displacement was peri-depositional, occurring before the disintegration of the necklace string, perhaps as the body was being positioned in the grave. It may also imply that, in this case, the necklace elements were individually knotted in place, since there was not a more dramatic scattering of the elements.

A variation on this can be seen in grave 4275 at Buttermarket, Ipswich (Suff.), where the necklace of bulla pendants and two wire rings was found in association with two small pins, one iron and

one copper-alloy (Scull 2009a: 153, fig. 3.57). As these items were deposited in a small organic bag or textile wrapping (discussed in more detail below, see section 5.3.6), unfortunately the position of these items in the grave cannot reveal how they were used in life. However, the presence of two pins within the same bag-collection as the necklace lends weight to the idea that they were related in a functional sense, with the pins perhaps used to secure the paired wire rings to an underlying garment (see fig. 5.23 for a reconstruction of how small pins can be used to fasten wire rings to underlying garments).[46] There is an interesting visual echo in the use of wire rings as necklace terminals with the earlier fifth- and sixth-century fashion for suspending bead strings between the brooches that secured a peplos dress at the shoulders (Walton Rogers 2007: 193).

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Figure 5.42: Broken silver quoit brooch from grave 32 at Chamberlains Barn (Beds.) with preserved textiles adhering to the face of the brooch. After Hyslop 1963: fig. 12a.

Both on the basis of analogy with the paired wire rings and the possible development of this fashion from earlier models, it is interesting to consider instances where other, more unusual items might have served as necklace terminals. In grave 32 at Chamberlains Barn (Beds.) a silver quoit brooch was found in the region of the upper body; unfortunately, its exact position in relation to the necklace is not made clear (Hyslop 1963). This brooch was almost certainly an heirloom, several decades old when buried. Typologically it is earlier in date than the seventh century-context in which it was deposited (Ager 1985: 24; Geake 1997: 54), and it shows physical traces of an extended biography. The pin mechanism on the reverse had broken, been repaired

[46] The only other surviving contents of the bag were nineteen small garnet, both raw and polished stones, which have been discussed in chapter 4 (see above, section 3.4.2), and which arguably also have a connection to the necklace in a more abstract sense.

and broken away a second time, and was then not replaced. Thus, the brooch was none functional when buried, and Hyslop (1963: 179) suggests it was sewn to an underlying garment. Of course, the necklaces themselves provide a clear illustration that not all dress accessories necessarily have to be functional elements of costume, but in the case of the broken quoit brooch associated textile remains can be cited in support of the argument that this item was more than simply decorative. Substantial areas of mineralised textiles were found adhering to the front of the brooch, including a length of cord that might plausibly represent a necklace string (fig. 5.42). One interpretation of this repurposed brooch might be that it served as a decorative terminal onto which a necklace could be attached. Certainly, the occasional incorporation of unusual elements and possible heirlooms would not be inconsistent with other evidence for the generally idiosyncratic, and probably personal, nature of seventh-century necklaces.

A similar function might also be inferred for two openwork silver discs from grave 28 at Harford Farm (Penn 2000: figs. 94.6 and 94.7). The function of these two discs was left undetermined in the excavation report, although attention was drawn to small perforations around the circumference of the discs, possibly attachment holes for sewing onto textiles (Penn 2000: 54). As this is another example of an unworn necklace (see below, section 5.3.6), the position of the discs among elements of the necklace can only be used to imply a related function, rather than providing conclusive evidence. Nevertheless, it remains a plausible hypothesis that these discs served as the decorative terminals for the pendant necklace. Support for this argument also comes from the similarities in shape, size and material between these discs and elements of the pendant corpus. Parallels for the iconography of the equal-armed cross with flaring terminals from the necklace corpus include the repousse pendants from Wye Down (Kent) and Camerton (Som.) (see figs. 9.97iv and v) as well as the openwork gold pendant from Winfarthing (NO.Wi.01.03).

In some cases, it seems likely that pins were used to secure the ends of necklace strings. This suggestion was first proposed by Evison (1987: 66), who noted the presence of pins in the region of the upper body in several graves at Dover Buckland (Kent). Within the present corpus there are a number of graves in which pins have been found amongst or closely associated with elements of the necklace (see tab. 5.1 and figs. 5.29, 5.32, 5.33, 5.35, 5.38; for a reconstruction of how pins might have been used to secure the ends of necklace strings, see figure 5.19). Of particular interest are pins with a perforated vertical disc-head (type PI1-f), a type only found in female graves (Høilund-Nielsen 2013: 225). Examples of pins of this type from Finglesham (KE.Fi.182) and Melbourn (Ca.Me.07) were found with wire rings passing through the perforated eye of the pin, which might speak to a connection with necklaces. At Bottledump Corner (Bucks.) another pin of this type from grave 108 had unmineralised spun fibres preserved within the eye

and mineralised woven textiles adhering to the shaft (Parkhouse and Smith 1994: 110), which plausibly represent both the necklace cord and the garment to which it was pinned.

A possible prototype for pin used in this way is the elaborate two-strand bead and pendant necklace from a later sixth-century burial at Finglesham, grave 203 (Hawkes and Grainger 2006: 138). Two silver pins with narrow perforated heads were found either side of the jaw, in a position that corresponds to the ends of the necklace. Hawkes suggested that extra loops of thread might have been used to prevent the pins from slipping out of place once secured (Hawkes and Grainger 2006: 138; Hawkes and Pollard 1981: 333). It is also worth noting here the interesting visual echo between short necklaces suspended between pins and linked pin-suites, a contemporary element within the otherwise restricted repertoire of seventh-century female jewellery (for an overview, see Hilgner 2019).

Some caution must be exercised here, however, since pins found in the region of the upper body can fulfil various functions, including closing the vertical neckline of a gown or securing an overlying garment, such as a veil or shawl (Walton Rogers 2007: 159–61), all of which could be plausible interpretations of this pins found alongside necklace items in the present corpus. The exact use of pins and their relationship to necklaces is a topic that will almost certainly benefit from the insights of future excavations.

5.3.6: NON-WORN NECKLACES

In twenty-seven graves within the present corpus elements of necklaces were found in positions inconsistent with their use as part of funerary costume (table 5.2). Most appear to have been deposited in box- or bag collections. While the former can be securely identified through the presence of their metal fittings, the presence of other organic containers can be more difficult to determine. In some cases, as in grave 2 at Westfield Farm (Cambs.) and grave 33 at Harford Farm (Norf.), bags survive as recognisable 'shadows' with the grave fill. At Buttermarket, Ipswich two copper-alloy strap ends in grave 4275 probably represent fittings for the bag or purse that contained the necklace. The majority of bag collections, however, are identified as such by the close and sometimes jumbled association of the objects they contain, a hypothetical interpretation sometimes strengthened by the position of the bag in the region of the waist.

Rarely does there seem to have been a practical explanation for the deposition of necklaces in positions inconsistent with wear. The only possible exception to this is a reticulated glass pendant placed in a bag collection at the waist of the deceased in grave 215 at Cuxton (Kent), which may have been missing its suspension loop when buried, thus rendering it unwearable among the glass

beads at the neck. In this case, however, the same bag-collection contained two complete amethyst beads, both capable of being worn on the necklace, and so even here the selection of certain elements for alternative treatment is more complex and potentially symbolic than might otherwise have been assumed.

Some necklaces and elements of necklaces appear to have been placed within bag collections that also contained other objects, such as workboxes, glass vessels, combs, shears, firesteels, suspension complexes, spindle whorls, keys, chatelaines and toilet sets. Other necklaces appear to have been the only items deposited in possible containers, usually in a position away from the neck and chest. Sitting between these two categories are cases where necklaces have been deposited in containers with related objects, such as other elements of jewellery or with the kind of valuable recyclable materials that this study has argued should be understood as materials awaiting reworking as jewellery (see above, chapter 3.4.2).

Of the twenty-seven graves containing a necklace deposited within a container, or in a similar non-worn position, only thirteen have associated osteological data (see table. 5.2). Nevertheless, within this restricted sample, it is possible to note some interesting age-related patterning. While there are examples of non-worn necklaces in the graves of children (e.g. LI.CD.76) and adolescents (e.g. CA.WF.02 and KE.SP.73b), they are much more common in the graves of older individuals, above the age of twenty-five. For example, among the wider corpus of burials containing a necklace, just over twenty percent of individuals are aged between twenty-five and thirty-five ('middle adult I' cohort, see chapter 6.4). Among the burials containing a necklace in an apparently non-worn position, however, individuals of the same age cohort represent almost a third of the sample (30.77 percent). The apparent association of non-worn necklaces with older women may relate to broader patterns in the acquisition and circulation of necklaces across the lifecourse of the wearer (see chapter 6.4.1).

Whether the placement of all necklaces in containers were motivated by the same decision-making processes among mourners or carried the same symbolic resonances is not clear. The concealment of grave-goods within bag- or box-collections has been interpreted in various ways. One particularly persistent idea is that containment of objects in boxes and bags reflects contemporary tensions between traditional forms of furnished burial practice and the ideal Christian unaccompanied rite (Webster 1985; see also Scull 2013: 548). Such suggestions are influenced by wider hypotheses concerning the presence of potentially amuletic or magical objects in early medieval graves, although this often results in a circular argument, since the concealment of artefacts is a characteristic used to identify them as amulets (Meaney 1981; see above chapter 2.3.2). This model is a poor fit for the necklaces and other objects placed within containers that

are the focus of the present study. Frequently in these graves necklaces elements within containers are deposited alongside other grave-goods that would have been visible within the mortuary tableau. Additionally, the present study makes it clear that many of the concealed and contained objects are exactly those types that are frequently deposited as costume adjuncts or in similarly visible positions in the grave.

Other arguments regarding the motivations behind concealed objects are more promising. Discussing a locked wooden casket from grave 15 at Bloodmoor Hill (Suff.), Scull (2009b: 408) suggested that containment symbolised ownership and control over moveable wealth. This argument resonates with the re-interpretation of items like glass fragments, shells and loose garnets, often deposited within bags or purses, as valuable materials over which high-status women exercised direct agency (see above, chapter 3.4.2). Where necklaces are carefully deposited in closed contexts within the grave, sometimes alongside these kinds of recyclables or amongst other elements of jewellery, it is plausible that this practice served to underline a woman's ownership and possession of items considered particularly inalienable. Noting the evidence that suggests older women were more frequently buried with contained or concealed necklaces, it may be that concepts of possession and ownership changed subtly according to age.

A small number of necklaces are found in positions not suggestive of containment (see table 5.2). The pendant necklace from grave 28 at Harford Farm and the possibly associated perforated silver discs has already been mentioned. The necklace items, alongside two spindle whorls and the fragmentary remains of an antler comb, were found in a spread of objects to the left of the deceased and outside the coffin (fig. 5.43). In another burial at Harford Farm, grave 18, a composite disc pendant (the only necklace object in the grave) was also placed to the left side of the body, approximately level with the waist, alongside other objects, including a copper-alloy bracelet, a pair of shears, a firesteel, a workbox and an unusual suspension complex. This collection of items appears to have been placed on the base of the coffin (Penn 2000: 18, fig. 25). Finally, we can also point to grave 19 at Garton Green Lane Crossing (E. Yorks.), where a bead necklace had been carefully placed by the lower legs during the funeral. The excavator, Mortimer (1905: 252), was careful to note that 'the beads had been strung when buried, as they were found in a line with their axes in one direction'.

The deposition of necklaces in the space around the body, even outside the coffin, are suggestive of grave-side performances. Discussing the wealthy female graves from Harford Farm, Howard Williams (2010: 33) has suggested that the various rituals involved in the placement of jewellery (and other objects) in positions inconsistent with wear – both in containers and in the space around the body – should be understood as 'intimate engagement[s] between the living and the

dead through gift-giving', a process which served to materialise mnemonic connections between the deceased and the mourners (see also Hamerow 2016: 434). Such a hypothesis is perfectly consistent with the observations of the present study, which proposes that necklaces are composed of items that circulate extensively through cycles of gift-exchange, and thus can materialise and commemorate the social relationships underlying this exchange, while also being central to the articulation of individual identity and personhood of the wearer.

Figure 5.43: Objects, including remains of a necklace (2–3), deposited close to the edge of the grave cut in burial 28 at Harford Farm (Norf.), alongside spindle whorls (4–5) and fragmentary remains of a comb (8). After Penn 2000: fig. 39.

5.4: WIDER COSTUME DEVELOPMENTS

It is important to contextualise the shifting necklace fashions of the seventh century within the broader contemporary transitions evident in female dress. The most obvious change in the seventh century is the marked decline in the use of metallic dress accessories as an element of costume (Walton Rogers 2007: Marzinzik 2003). Figure 5.43 illustrates the frequency of other types of grave-goods found alongside necklaces in the current data sample; only objects which

are found in more than one percent of graves are listed. Items that can be considered as dress accessories in the true sense – in that they fasten or secure garments – are present in only a small proportion of graves. This category includes brooches (mostly composite disc- and small annular types) and buckles (mostly simple BU7 and BU8 types; see Høilund-Nielsen 2013). Only pins continue to be found with some regularity. Much better represented are objects that might be considered adjuncts of costume, particularly those suspended from the waist. Knives are present in almost half of graves, and around a third of the burials also contained some kind of girdle assemblage, whether a chatelaine or other suspension complex.

The situation in the seventh century can be contrasted with that of the sixth, where the primary forms of feminine dress accessories (brooches and buckles) fastened and secured various layered garments (Walton Rogers 2007; Martin 2015). It is tempting to see the marked decline in the number of such functional dress accessories as straightforwardly reflecting improvements to the cut, fit and construction of garments, allowing them to be worn without the need for additional metallic fasteners. The evidence to examine these changes is complicated by the funerary context from which it derives, however. There are also clearly broader ideological changes shaping the furnished burial rite during the seventh century, and the frequent presence of non-worn items in these well-furnished female graves (such as combs, wooden boxes and textile processing equipment) make it clear that there are more complex decisions made at the funeral than simply the burial of individuals with the objects that directly correspond to their everyday dress. In this same light one might also consider the evidence discussed in the previous chapter (see above, chapter 4.4) that suggested composite disc brooches – a generally rare seventh-century object type – might have been worn as an element of high-status female dress with more regularity than the funerary record now implies, being deliberately retained and exchanged among the living more often than they were deposited alongside the dead.

The general absence of metallic dress accessories in seventh-century graves also impacts our understanding of costume in the sense that there is much less surviving evidence for the garments themselves. As noted (see above, section 5.3.2), much of the evidence from the earlier period derives from textile fragments preserved in association with corroding copper-alloy objects. A paucity of physical evidence can, in part, be remedied by the availability of written sources covering the later part of the seventh century, a few of which shed some oblique light on high-status female dress during this period. Reference can also made to a small number of depictions in surviving visual culture, also of late seventh- or eighth-century date, which show women wearing a version of contemporary costume. The following discussion synthesises the evidence as it relates to the wearing of necklaces; attention is therefore directed towards the garments and dress accessories worn on the upper body only.

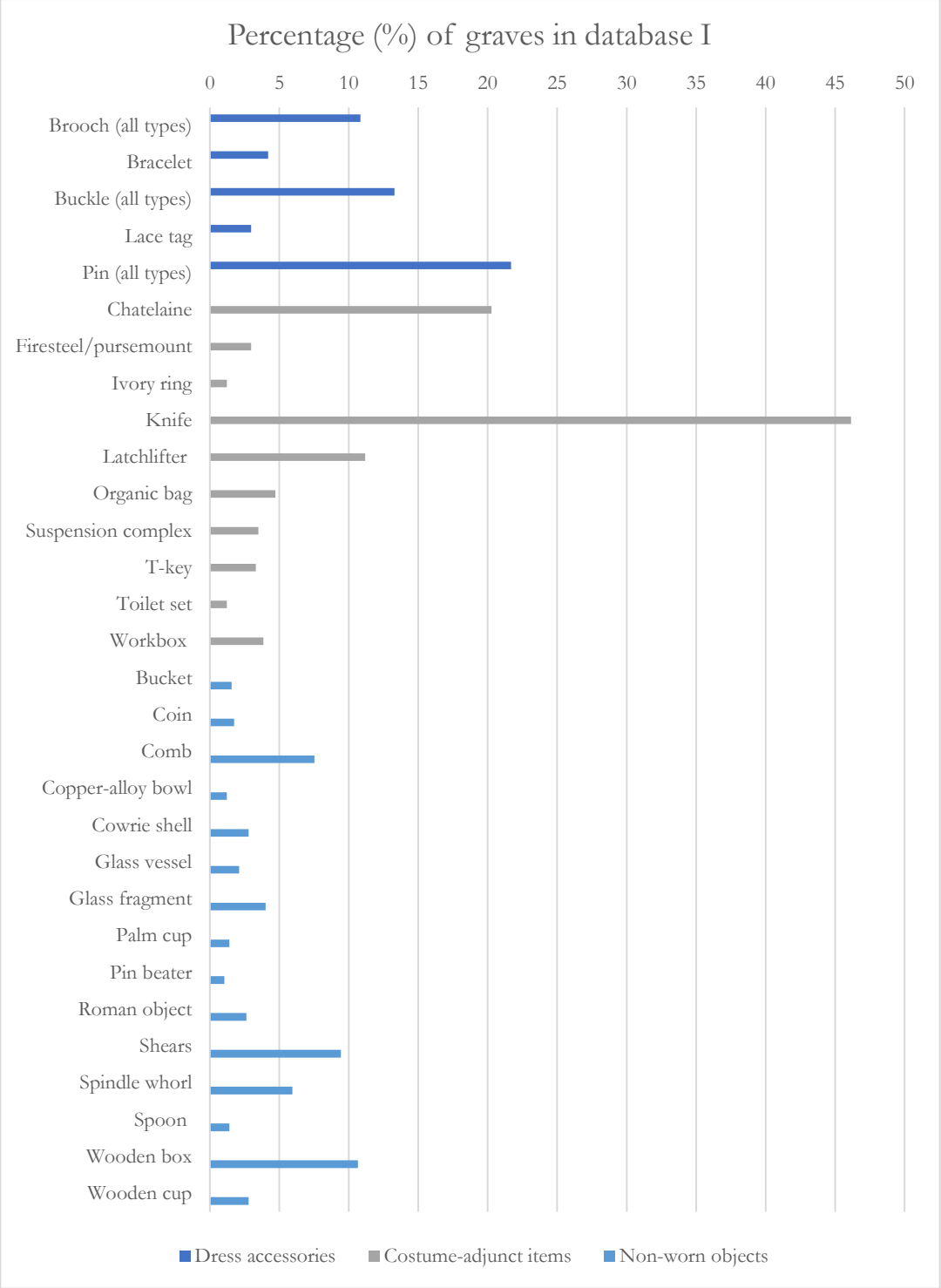

Fig. 5.44: Frequency of other grave goods found in the burials containing a necklace in database I, expressed as percentages. Note that only classes of grave-goods present in more than one percent of graves are included.

The evidence of the necklaces themselves shows that they were typically worn high on the body, in the region of the upper chest. Some necklaces at least seem to have been attached to an underlying textile, either by pinning or knotting (see above, section 5.3.5), and this observation provides a useful starting point in considering how the wearing of these necklaces related to wider

elements of costume. It seems logical to assume that delicate and aesthetically appealing jewellery like necklaces were worn on top of the outermost garment,[47] rather than hidden from view, sandwiched between layers of inner and outer gowns.

The outermost garment covering the body worn by women in seventh-century England can be identified as a sleeved gown, constructed and fitted so as to allow closure without the need for additional dress accessories (see Walton Rogers 2007: 187–9). It is possible that this garment developed from the inner gown worn beneath the fifth- and sixth-century peplos dress worn in Anglian regions, as Owen-Crocker (2004: 150) has suggested. The presence of wrist-clasps in the same graves producing the brooches that fastened the peplos at the shoulders suggests that this inner gown had tight fitting, wrist-length sleeves (Walton Rogers 2007: 154–5). Comparison can also be made with the garments worn by the women of East Kent in the later sixth century. In these graves a single brooch worn at the throat seems to have closed the vertical-opening neckline of a gown, which at this point was still regularly cinched at the waist by a buckled belt (Walton Rogers 2007: 193; Walton Rogers 2012: 187–188). Again, a connection with earlier dress fashions can be traced. Earlier in the sixth century small brooches located on the upper chest fulfilled the same function, but in this case fastened the neckline of an inner gown worn beneath a front-opening coat or jacket, the edges of which were clasped by larger brooches positioned lower on the body (Walton Rogers 2007: 190–1; Walton Rogers 2012: 207). This *Vierfibeltracht* is indicative of the imitation of Frankish dress fashions by the women of East Kent. By time Kentish dress style V became popular in the later sixth century the front-opening coat had ceased to be worn and the inner gown seems to have developed into the outermost garment (Walton Rogers 2007: 193). It is possible that this in turn served as a prototype for the gowns worn largely without brooches or buckles in the seventh century.

Gowns with tight-fitting sleeves and reaching to the ankles worn as the outermost garments are depicted in slightly later pictorial sources, notably the Stuttgart Psalter and the ivory Genoels-Elderen diptych, both datable to the second half of the eighth century (Neuman de Vegvar 1990; Webster and Backhouse 1991: 180–2). In the context of the present study, it is interesting to note that the necklines of these gowns all sit relatively high, towards the base of the neck. Such rare survivals of pictorial sources also provide a useful indicator of the kind of elaboration almost certainly present in the now-lost Anglo-Saxon garments against which necklaces were worn. Embroidery, tablet woven borders, fine pleating and use of rich, sometimes contrasting colours are all decorative elements suggested by the surviving depictions.

[47] The exception here being, of course, very heavy outerwear worn during colder weather.

The other garment worn on the upper body that should be discussed in the context of necklaces is the head-covering. Various terms are used to describe this garment, none of which are entirely satisfactory. 'Veil' is a useful descriptor in that it connotes a fairly lightweight, fine garment, although it can erroneously imply that this garment covered the face, rather than just the hair. Terms like 'shawl' or '*pallium*' are less helpful because they suggest a garment primarily wrapped around the shoulders and upper body. Owen-Crocker (2004: 148–50) also subsumes some of the relevant pictorial evidence into her discussion of 'open-fronted cloaks'. This equation with the cloak is problematic because of the association of the latter with heavier textiles.

Like gowns, veils also seem to have undergone a transformation from the Migration Period to the Conversion Period. During the fifth and earlier sixth centuries the evidence of textiles adhering to the outward-facing front of brooches suggests that veils hung down only as far as the shoulders and upper chest (Walton Rogers 2007: 158). The veil can be shown to lengthen gradually across the sixth century. The use of gold brocade to decorate a veil worn by an adult woman in grave 105 at Mill Hill (Kent) provides a particularly clear illustration of the dimensions of this garment, the lowest edges of which reach the waist (Parfitt and Brugmann 1997: 31–2, fig. 76). By the seventh century the scanty archaeological evidence suggests that fine, lightweight textiles probably representative of the veil are found in the region of the thigh, typically adhering to iron or copper-alloy objects suspended from the waist (Walton Rogers 2007: 158–9).

Evidence of such lightweight fabrics adhering to elements of the chatelaine have been identified in a number of the necklace graves in the present sample from recently excavated cemeteries.[48] The textiles identified as the veils are typically fine, lightweight linen tabbies, often with loose open weaves. At Finglesham (KE.Fi.35) and Westfield Farm (CA.WF.01) the preserved fabrics suggested soft loose folds (Crowfoot 2006; Walton Rogers 2009a: 129), while at Buttermarket, Ipswich (SF.Bu.2962 and 4275) and Harford Farm (NO.HF.22 and 28) the linen had been narrowly pleated to produce a gathered effect (Crowfoot 2009: 231; Crowfoot 2000: 89), a technique known as plissé.[49] Traces of decorative fringing on the lower edge of the veil were recorded at Eastry (KE.Ea.76:36) (Crowfoot 2008: 57) and Dover Buckland (KE.BD.413) (Walton Rogers 2012: 202). Often the elements of the chatelaine against which these lightweight fabrics are preserved have traces of coarser textiles adhering to their undersides, which are typically identified as woollen gowns (Walton Rogers 2009: 129).

[48] In addition to the examples mentioned, traces of long veils have also been noted at Bloodmoor Hill (SF.BH.11 and 22), Lechlade (GL.Le.138 and 187) and an additional burial at Finglesham (KE.Fi.157) (Walton Rogers 2009b; Weightman 2011; Crowfoot 2006).
[49] Traces of a further example of a plissé pleated veil was identified adhering to iron objects deposited in a wooden casket in a seventh-century female burial (grave 15) at Bloodmoor Hill, Suffolk (Walton Rogers 2009b: table 7.2).

Figure 5.45: One panel of the eighth-century Genoels-Elderen ivory, depicting the Annunciation and Visitation. In the collections of the Musées Royaux de l'Art et d'Histoire, Brussels. After Webster and Backhouse 1991: fig. 141.

There are depictions of veils of a similar length in near-contemporary pictorial sources. Both Walton Rogers (2007: 163) and Owen-Crocker (2004: 158) note the remarkable similarity of the veils worn by saints Mary and Elizabeth on the Genoels-Elderen diptych to the (mostly East Anglian) evidence for the wearing of long, tightly pleated veils (fig. 5.45). The carver of the diptych depicts the front upper edge of the veils as draping loosely in folds around the face. Other near-contemporary depictions of veiled women also suggest that the edge of the veil was sometimes positioned so as to leave the hairline partially visible. These include a female figure on an eighth-century standing cross from Rothbury (Northumb.) and the female bust on the Sutton Hoo whetstone (Owen-Crocker 2004: 159). Other long, draped head-coverings are worn by female figures depicted on the Franks Casket and in the Stuttgart Psalter. While these are often described as cloaks (Owen-Crocker 2004: 148–50), they might equally be identified as veils (Ross 1991: 406). By this period, it is difficult to distinguish between long veils and lightweight mantles (Walton Rogers 2007: 163); possibly women alternated between which garment was worn to cover the head as was appropriate to context, such as indoor versus outdoor wear.

These observations regarding the length and positioning of veils find intriguing echoes in the famous description of female dress given by Aldhelm at the end of the seventh century, addressed to the nuns of Barking Abbey:

> '…the hair of their forelocks and the curls at their temples are crimped with a curling iron; dark-grey veils for the head give way to bright and coloured head-dresses, which are sewn with interlacings of ribbons and hang down as far as the ankles…' (Aldhelm, *De Virginitate*, LVIII, transl. Lapidge and Herren 1979: 128; for possible alternatives translations of particular words and phrases, see Owen-Crocker 2004: 134–7).

Since the description of veils immediately follows references to curled hair at the temples, it is reasonable to assumed that this carefully styled hair would be remain visible when the former was worn. Aldhelm's description of ankle-grazing veils closely parallels in the archaeological evidence for the lengthening of the veil in the later sixth and seventh centuries. Also of interest is the mention of fillets or ribbons (*vittae*) used to secure veils.

There are other casual references to the wearing of veils in seventh- and early eighth-century written sources: Bede, for example, mentions that a girl cured of paralysis by the holy ground on which Oswald of Northumbria was killed at the battle of *Maserfelth* washed her face, arranged her hair and covered her head with a linen veil after her miraculous recovery (*Historia ecclesiastica* III.9; transl. McClure and Collins 1994: 125). The ubiquity of veils in contemporary and near-contemporary documentary and pictorial sources, coupled with the archaeological evidence for

veils from a number of cemeteries during a period when traces of costume are generally very scarce, suggest that by the seventh century the longer head-covering had become a part of regular part of female costume, probably worn across the social spectrum. There is a temptation to connect veils to Christian ideals of modesty, but in all likelihood the wearing of this garment probably also cut across religious boundaries also, worn by women whether they considered themselves nominally Christian or not. Certainly, a precursor to the longer veils of the seventh-century was regularly worn in the fifth and sixth centuries, and Aldhelm deliberately contrasts the colourful and highly decorative veils apparently worn by the sisters of Barking Abbey with a more appropriate head-covering in a muted dark grey tone.

Linked pin-suites (type PI2-a) are often discussed in relation to veils. Thirteen burials in the current corpus of necklace-graves have produced pin suites. These are identified as fasteners for the two edges of the veil on several grounds. Firstly, they are almost always found in the region of the upper chest (Ross 1991: 403). The only exception is an elaborate pin suite with animal-headed terminals buried inside a copper-alloy workbox in grave 18 at Harford Farm (Penn 2000: 19, fig. 88). The pins themselves are also typically short and fairly delicate, suggested they fastened lightweight, fine fabrics (Ross 1991: 403). This use also seems to fit with the evidence observed during the excavation of the linked pins in grave 39 at Chamberlains Barn (Beds.), a site where preservation of textiles was extremely good. In this case the pin suite was described as 'fasten[ing] two layers of fine fabric, and were covered by a third, coarser layer, either a shroud or a cloak' (Hyslop 1963: 181). The two layers of the fabric through which the pins passed can be identified as the outermost gown and the overlying edge of the veil (Ross 1991: 403–5; *contra* Hyslop 1963: 198).

In most of the recently excavated graves containing both a necklace and a linked-pin suite, it is clear that the pins were positioned lower down on the chest than the necklace (see GL.Le.14 and GL.Le.138, figs. 5.30 and 5.31; also Lucy et al. 2009: fig. 3; Scull 2009b: fig. 7.18; Newton 2020: fig. 9). The delicate chains that connect linked pins are particularly susceptible to fragmentation, and so only a few examples provide an indication of the overall length of the originals. The gold pin suite from the rich barrow grave on Roundway Down (Wilts.) is around 130mm long (Baldwin 1915: 387). The silver example from Harford Farm (Norf.) has been estimated to be around 200mm in length (Hilgner 2016: 12). The chain fastening the gold-and-garnet pin suite in the bed burial (grave 1) from Trumpington (Cambs.) measures just 40mm long (Evans et al. 2018: 311). These examples provide an indication of the space between the two edges of the veil (for a reconstruction of how linked pins fastened the veil to underlying costume see Hilgner 2019: fig. 7). It is possible that single pins sometimes fulfilled a similar function, fastening the two edges of the veil to underlying garments, in cases where they are found in the same position as linked

pin-suites, towards the middle of the chest.[50] Assuming that linked pins did fasten the veil, the presence of these objects in graves of children at Westfield Farm (CA.WF.01) and Exning (SF.Ex.02) and adolescents at Lechlade (GL.Le.14) and Trumpington (CA.Tr.01) strongly suggests that the veil was worn by females of all age cohorts.

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Figure 5.46: Reconstruction of the longer veils of the seventh century, worn loosely draped across the shoulders. After Walton Rogers 2007: fig. 5.30.

Accepting the evidence that suggests veils had become a regular part of female dress by the seventh century, it seems that in most cases they – like other elements of female costume – were mostly worn without additional fasteners. Linked pin-suites may have been more decorative than necessarily functional. In all likelihood veils were probably hung loosely over the front of the body, draped over the shoulders, especially if they were originally secured in place with fillets or

[50] Examples of graves in the present corpus where this seems to have been the case includes grave 65 at Shudy Camps (Cambs.), graves 157 and 160 at Dover Buckland, grave 76:26 at Eastry, graves 16, 31 and 35 at Finglesham and grave 02:03 at Polhill (all Kent), and grave 79 at Camerton (Som.).

ribbons tied at the nape of the neck or secured to an underlying band wrapped around the head. This is suggested by the reconstructions proposed by Walton Rogers (2007; see fig. 5.46).

It is therefore possible to consider the development of seventh-century necklace styles as they related to broader changes in female costume, specifically the development of a longer and more voluminous veil. In the fifth and sixth centuries longer bead strings tended to be worn lower down on the chest, typically strung between or from brooches, presumably where they would be most prominent (Walton Rogers 2007: fig. 5.49). As the brooch fashion was abandoned in the later sixth century, and veils increased in length, covering more the upper body beneath folds of fluttering material, necklaces became correspondingly shorter so as to remain visible in the gap between the two edges of the veil, close to the base of the throat (Ross 1991: 405). This also helps to explain the general absence of any concrete evidence that necklaces ever completely encircled the neck: only those elements positioned against the front of the body would have been visible when the veil was worn. The two edges of the veil probably partially obscured the sections necklace strings fastened to garments or tied at the nape of the neck. A better understanding of how necklaces interacted with other elements of costume also helps to contextualise the observation, already noted, that emphasis seems to have been placed on the centre of the festoon, where the most prestigious or obviously decorative elements would be placed, since here they would be most visible.

5.5: CONCLUSIONS

A consideration of the evidence for the composition, layout and ways of wearing necklaces during the seventh century reveals two crucial and related observations. The first is that necklaces were clearly structured by a set of shared stylistic preferences and a relatively coherent idea of what a necklace *should* be. There was a demonstrable preference for shorter necklaces, a feature considered characteristic of these distinctively seventh-century objects. Necklaces drew on a shared repertoire of objects and the incorporation of multiple different types and materials in a single necklace seems to have been favoured, potentially because this was an indicator of the capacity of the wearer to possess and display objects from different sources and carrying different symbolic resonances. There were also similarities in how necklaces were laid out, with symmetry and the presence of obvious centrepieces being a shared feature of many necklaces, and how necklaces were suspended and attached to costume.

Within this conceptual framework there was considerable room for the expression of individuality and personal taste, to the extent that each necklace represents a unique assemblage. A further indicator of this is the fact that there seem to have been no obvious restrictions on the

combination of different object types and materials. These results feed into the observation, taking shape across each chapter, that women acted as makers of their jewellery, in the sense that each necklace was deeply personal, reflective of individual decision-making on the part of the wearer.

This chapter has also emphasised the importance of exploring how necklaces were shaped by and related to broader changes to female dress during the seventh century. The dramatic changes in the styles of necklaces worn across the sixth- to seventh-century transition clearly did not occur in sterile isolation. Instead, shorter necklaces developed contemporaneously with the gradual lengthening of the veil, prompted in part by a desire for all elements of the necklace to have remained more or less visible between the two edges of the loosely-draped garment. This also resulted in a shift in the placement of necklaces, higher up the body, in the region of the collarbones.

It is also interesting to note how the combination of shorter necklaces featuring lustrous metallic objects, polished gemstones and brightly coloured opaque beads, served to direct the attention of the viewer towards the face, while the body was increasingly shrouded beneath a longer, more voluminous veil. These shifts are undoubtedly indicative of changing attitudes to the female body; set against the context of the wider Conversion Period, it is tempting to draw a connection to new ideals of modesty in female dress. The broader argument developed throughout this thesis, that necklaces were central to the construction of female identity during the seventh century, should also be considered in light of how necklaces were worn and how they were manipulated to direct the gaze towards the face of the wearer, given that necklaces seem to be intrinsically connected to the expression of individuality and personhood.

CHAPTER SIX: WEARERS AND OWNERS? NECKLACES, GENDER AND THE LIFECOURSE

6.1: INTRODUCTION

This chapter examines the osteological data associated with seventh-century necklaces, as a means to understand the wearers of this jewellery. The strength of the feminine gender associations of necklaces are first assessed, given that these objects are generally agreed to have been worn exclusively by women (Stoodley 1999: 39; Geake 1997: tab. 6.3).[51] The small number of burials where this does not seem to have been the case are considered. An exploration of the gender symbolism of necklaces also contextualises subsequent discussion of the age-associations of these objects, a topic which has seen less discussion, but which in the context of the present study is of greater interest. Here attention is directed towards the intersection between age and composition of necklaces as assemblages as a means to explore how necklaces developed across the life-course.

As this chapter draws on a sample of graves with associated osteological data and relies on a specific methodology, it is necessary to briefly outline the collection of data. A review of previous studies of sex, gender and age in Anglo-Saxon mortuary archaeology also provides an important contextual framework against which the results of the present study can be examined.

6.1.1: SEX AND GENDER IN ANGLO-SAXON MORTUARY ARCHAEOLOGY

Sex and gender are subjects which have long been discussed in relation to Anglo-Saxon burials. Some of the earliest antiquarian excavators recognised that certain burials contained stereotypically feminine assemblages of grave-goods (primarily jewellery) and others stereotypically masculine items (chiefly weapons), and because the two kits fitted neatly into contemporary Victorian attitudes towards binary genders, gendered grave-goods became a convenient means by which to sex the individual (Lucy 1997: 152). Indeed, even after osteological assessment of skeletal remains became routine, the practice of sexing burials according to the grave-goods persisted within Anglo-Saxon archaeology (e.g. Hirst 1985: 33; Evison 1987: 123; see Henderson 1989 for an early criticism). It was not until the late 1980s that new, theoretically-sensitive inquiry into sex and gender began in Anglo-Saxon archaeology, influenced both by the development of feminist archaeology in the preceding decade (e.g. Conkey and Spector 1984; Bertelsen et al 1987; Dommasnes 1982) and by post-processualism.

[51] Indeed, the division of grave-goods into two distinct gendered 'kits' is a factor that underpins the separate chronological frameworks developed for the seventh-century, since few objects are found in the graves of both sexes (Hines and Bayliss 2013: 473–6).

Stoodley's (1999) doctoral research remains the most important study of sex and gender within the Anglo-Saxon funerary rite. Statistical analysis of a large national sample of fifth- to seventh-century burials confirmed the existence of two distinct gendered assemblages of grave-goods, one composed primarily of weapons (swords, spears, shields and seaxes, along with equestrian equipment and musical instruments) and the other of various types of jewellery (brooches, rings, pins, bracelets and necklaces, in addition to combs, toilet equipment and workboxes) (Stoodley 1999: figs. 20–2). While objects from each group are regularly found together, very rarely are they mixed in a single grave. Comparison with osteological data revealed that these two 'kits' correspond very closely to biological sex, and Stoodley (1999: 29–35) therefore argued that these particular objects were central to the construction and performance of gender identities. As viewed through the lens of the funerary ritual, therefore, Anglo-Saxon gender identities seem to be grounded in attitudes to the body and the classification of sexual difference (see Gilchrist 1997: 42).

Another important contribution to gender archaeology in Anglo-Saxon studies were Lucy's (1997, 1998) analyses of East Yorkshire cemeteries. She drew attention to the significant proportion of the population buried without gender-signaling objects. This category includes both unfurnished burials and those with objects regularly found with both genders (Lucy 1997: 162). These 'gender-neutral' objects include the ubiquitous knives and buckles, as well as tweezers, various vessel types and animal remains (Stoodley 1999: fig. 21). Lucy (1997; 1998) used these 'neutral' or unfurnished burials to challenge the notion that gender identities were primarily binary. While this may be the case, it remains to be seen whether the archaeological burial record preserves sufficient contextual information to fully unpack the complexity and nuance of fifth- to seventh-century gender identities. Instead, the importance of Lucy's critique is that is draws attention to two major methodological challenges in using the burial record to explore gender. The first is that no object is inherently gendered, as the many categories of 'neutral' grave goods illustrate. Rather, gender symbolism is created through practice, and the repeated interaction of people and objects. It is not surprising, therefore, that there is a performative aspect to the most strongly gendered grave goods, in the accessorising of the feminine body and the masculine associations of martial activity, even if this performance is symbolic and idealised (Härke 1990).

Secondly, is important to recognise that the symbolic meanings of the funeral are expressed by the complete burial tableau, which is often only partially preserved in the archaeological record (Lucy 1997: 163). As relates to the exploration of gender identities, the almost complete absence of organic materials presents perhaps the greatest interpretative challenge. It is assumed that, in most early Anglo-Saxon funerals, the corpse was clothed for burial; the use of shrouds seems

restricted to the Middle and Late Anglo-Saxon periods (Mui 2015: 150–1). There is, of course, a danger of constructing a circular argument here, since the main evidence for clothed burials are the (typically gendered) dress fittings and the fragments of preserved textiles adhering to them. However, near-contemporary pictorial representations do confirm the existence of distinct masculine and feminine modes of dress. It seems most likely, therefore, that individuals that now appear to have been buried without grave-goods were in fact dressed in a manner which signaled their gender identity (Walton Rogers 2007: 249). Indeed, clothing may have been the most visually impactful signifier of gender in the whole burial tableau. Without this evidence, we should be cautious of assuming that any early Anglo-Saxon burials are without gender symbolism. In the small number of cases where the gender symbolism of grave goods is apparently at odds with the biological sex of the deceased, the absence of organic costume elements also complicates the interpretation of these burials; did clothing reinforce or challenge the symbolic messages communicated by the surviving material culture in these burials? For example, biologically male individual buried in full feminine costume communicates a very different message than the same individual wearing masculine clothing interred with a single feminine dress accessory.

We are therefore on firmer ground examining the gender associations of specific types of grave-goods than attempting to unpick the wider patterns governing the expression of gender identities in the Anglo-Saxon funerary rite. Even so, there are still some important factors to bear in mind. The first is that gender is never the only symbolic message communicated by an object or assemblage of objects; as both Stoodley (1999) and Lucy (1997) note, gender is one of several nested identities, mediated by age, social position, lineage and physical attributes. Equally, it is important to recognise that implicit in many studies of gender based on grave-goods is the potentially problematic assumption that all the objects in the grave are the personal possessions of the deceased, worn or used in life. For many grave-goods, including the seventh-century necklaces at the heart of the present study, this is likely to have been the case, with objects drawing much of their meaning and agency from the repeated interactions of people and things. Where this is not the case, this specific contextual use would mediate the gendered symbolism of objects deposited as gifts or offerings during the funeral (c.f. King 2004).

The discussion above therefore lays out, in brief, the broad theoretical framework within which new studies of gender, material culture and funerary practices in Early Anglo-Saxon England sit. Previous studies have also, of course, drawn specific observations and conclusions of immediate relevance to the current thesis. Stoodley's (1999) study used a large national sample, covering the whole period of furnished burial, including a number of seventh-century cemeteries, and so is useful for examining broad patterns. Problems do emerge from the somewhat vague classification of object types; it is not made clear how the categories of 'necklace', 'beads', 'pendants', 'jewellery

rings' and, at one point, 'necklet' are defined and relate to one another (Stoodley 1999: 20–1, 78). Stoodley (1999: fig. 30) concludes that necklaces, jewellery rings and pendants are very strongly associated with biological females, and beads (of unspecified function) mostly associated with females. When the data is broken down chronologically, the association of jewellery rings and necklaces with females persists into the seventh century, and beads become even more strongly associated with females than males than in preceding centuries (Stoodley 1999: fig. 34). Also of relevance to the current study is Geake's (1997) analysis of seventh-century graves. Since the focus of Geake's research was primarily typological and chronological, the definition of object types is consequently much more applicable to the present study. For each object type the social meaning is briefly discussed, and many pendant-, bead- and ring-types, as well as necklaces as a distinct category, are identified as being found primarily in the graves of females (Geake 1997: tab. 6.3 and *passim*). However, detailed discussion of the gender associations of these objects falls outside the remit of Geake's study.

6.1.2: Age and the lifecycle in Anglo-Saxon mortuary archaeology

Studies of age and the lifecourse within Anglo-Saxon archaeology have developed in tandem with theoretically-sensitive explorations of gender. The earliest studies focused primarily on children and childhood (Crawford 1999; Lucy 1994), influenced by feminist archaeology's call to include groups which had previously been under-theorised and under-represented (see Sofaer Derevinski 1994). Subsequent studies, primarily those undertaken by Stoodley (1999; 2000) and Gowland (2002; 2006), considered age and age-related identities more broadly.

As with gender, few studies of age and the lifecourse have focused specifically on the seventh century. Gowland's (2006) sensitive analysis of age-related patterning based on reexamination of skeletal material from cemeteries in Hampshire and Oxfordshire focused almost exclusively on fifth- and sixth-century cemeteries.[52] Crawford's (1999) discussion of the furnishing of children's graves is based on a national sample of fifth- to seventh-century burials but there is no attempt to differentiate on the basis of chronology. It is not made clear, for example, that the burials of children that Crawford (1999: 29–31, see also 1993: 85–6) singles out as anomalously richly furnished (graves 7 and 132 at Finglesham and grave 7 at Polhill) are all seventh century in date, and interestingly in each case a necklace is one of the grave-goods that marks the burial as well-furnished. Geake's (1997: 128–9) survey of Conversion period burials does consider age briefly, but only distinguishes between the burials of children and adults, taking twelve as the threshold at which adult status is attained. In her discussion, Geake (ibid) draws attention to the increasing investment in children's graves in the seventh century, which primarily seems to affect girls, since

[52] The seventh-century cemetery at Winnall (Hants.) is the only exception.

masculine signifiers like weapons are rarely found with children, a practice that represents continuity from the sixth century. Stoodley's (1999: 113) large national database revealed much the same shift in the furnishing of children's graves in the seventh century. The following summary therefore sketches the patterns that typify the age-related provisioning of grave goods in the funeral rite across the period of furnished burial, if only to outline the framework against which the evidence from the seventh century can be compared.

It is assumed that children are underrepresented in Anglo-Saxon cemetery populations, although the degree to which this is the case is debatable and depends on which modern estimates of infant and juvenile mortality are used for comparison (Sayer 2014; Crawford 2011; 1993). When infants are present, their graves are typically unfurnished (Stoodley 2000: 458). Objects that are buried with infants tend to be simple, non-gendered items, and the average number of objects per grave is very low (Gowland 2002: 293; Stoodley 2000: tab. 4). These two factors – the absence of many infants from cemetery populations and the generally poor furnishing of their graves – suggests that children under a year old occupied a somewhat liminal position within society (Gowland 2002: 295).

In general, the graves of children also tend to contain fewer grave goods than those of adults (Crawford 1999: 27–8). A gendered burial rite seems to have been conferred on children around the age of four or five, with spears and some articles of female dress, especially small simple brooch types, being placed in the grave (Gowland 2002: 296; Stoodley 2000: 461–2). An important age threshold seems to have been reached around the age of ten, at which point females in particular were buried in a much more elaborate and complete feminine costume, often with two brooches, mirroring that worn by adult women (Stoodley 2000: 463; Crawford 1999: 47–8). This threshold has been connected to the biological changes associated with puberty.

Certain artefacts are very strongly age-linked, however, at it is likely that these objects served to reinforce a distinction between adolescents and adult women. The largest and most complex brooch types, including saucer-, cruciform- and great square-headed brooches, are almost never found with individuals under the age of eighteen (Stoodley 2000: 463; Martin 2015). The same patterning is true of swords and shields within the masculine burial rite (Stoodley 2000: 461; Härke 1990: 36). The burials of adults between the ages of twenty and forty are also marked by the highest average number of grave goods and the highest number of object types, and are much more likely than any other age group to contain an object made of precious metals (Stoodley 2000: tabs. 4 and 6).

For the purposes of the present study, it is interesting to note that, in the fifth and sixth centuries, necklaces and beads are not age-restricted, being one of the few gendered object types found in the burials of children (Stoodley 2000: 462). However, beads do play an important role as a signifier of age; the average number of beads in the burials of children between one and seven years old is 11.42, rising to 14.29 between the ages of seven and fifteen, 32.09 in adolescence and 68.83 between the ages of twenty and forty (Stoodley 2000: tab. 7). Similarly, Gowland (2002: 301) found that the highest overall number of beads were found with individuals aged between eighteen and twenty-four in her regional sample.

There is a slight reduction in the average number of grave-goods buried with women over the age of forty (Stoodley 2000: tab. 4). Older women are preferentially buried with gender-neutral artefacts, rather than a 'feminine' assemblage composed primarily of elements of personal adornment (Gowland 2006: 150). This reduction is also seen in the average number of beads, which declines from 68.83 with younger adult women to 42.87 with women over the age of forty (Stoodley 2000: tab. 7; Gowland 2006: 150).

To summarise, the provisioning of grave-goods in fifth- and sixth-century cemeteries is strongly age-linked. This is most evident in the provisioning of items of personal adornment: brooches, girdle assemblages and necklaces. This evidence suggests that there were ages at which females were accorded a slightly different costume, with the most complex feminine assemblage being reached between the age of eighteen and forty. The underlying assumption, of course, is that these patterns reflect the realities of everyday dress, rather than simply a constructed identity at the funeral. This young- to middle-adult group is also the age at which the most material wealth is expended in the grave, in the form of the highest average number of grave goods. Children and older adult women are, materially-speaking, less wealthy.

6.2: METHODOLOGICAL OVERVIEW

Any investigation of the age associations and gender symbolism of grave-goods requires a certain level of contextual information, in the form of osteological data. For many of the objects in the present corpus, this osteological data is simply not available. Skeletal material was of little interest to the antiquarians who uncovered many large Conversion Period cemeteries in the nineteenth and early twentieth centuries, even if the grave and its contents were otherwise carefully recorded. It is therefore impossible to use the evidence from important cemeteries like Chamberlain's Barn (Beds.), Garton Green Lane Crossing, Uncleby (both E. Yorks.), Breach Downs, Kingston Down, Sibertswold (all Kent) and Camerton (Som.) to explore key questions about sex, gender and

material culture in this period.[53] Even in the case of more recently excavated cemeteries, good osteological data depends on reasonable preservation of skeletal remains. At cemeteries like Harford Farm (Norf.), Street House (N. Yorks.) and Buttermarket, Ipswich (Suff.) very little skeletal material survived the aggressive soil conditions, and so osteological data is similarly unavailable for these sites. Despite these limitations, it has been possible to collect information related to age and sex from forty-six cemeteries. Of the 574 of relatively secure grave contexts recorded in database I, 273 (47.6 percent) can be used to explore the gender and age associations of necklaces (see table 6.1). This sample of 273 burials can be considered representative of the larger phenomenon of necklace graves. Geographically the sampled cemeteries correspond fairly closely to the general spread of seventh-century necklace graves (compare fig. 6.1 to figure 1.3). The only areas not represented in the osteological sample are East and North Yorkshire and the Peak District. In terms of absolute numbers, the greatest proportion of the sample derives from Kentish cemeteries.

Site name	**Number of necklace graves**
Marina Drive (Beds.)*	9
Bottledump Corner (Bucks.)*	1
Boveney (Bucks.)	1
Westbury-by-Shenley (Bucks.)*	1
Wolverton (Bucks.)*	5
Edix Hill (Cambs.)	4
King's Garden Hostel (Cambs.)*	1
Melbourn, Water Lane (Cambs.)*	11
Trumpington (Cambs.)*	1
Westfield Farm (Cambs.)*	4
Bradford Peverell (Dor.)	1
Lechlade (Glos.)	14
Kemble (Glos.)	2
Lower Brook Street, Winchester (Hants.)	1
St Mary's Stadium, Southampton (Hants.)	3
Twyford (Hants.)	1
Winnall (Hants.)*	3
Worthy Park (Hants.)	1
Cuxton (Kent)	8
Dover Buckland (Kent)	20
Eastry (Kent)*	18
Finglesham (Kent)*	33
Monkton (Kent)	2
Polhill (Kent)*	21
Pilgrim's Way (Kent)	2
Saltwood (Kent)	14
St Peter's Tip (Kent)*	45
Thorne Farm (Kent)	1
Castledyke South (Lincs.)	9
Cleatham (Lincs.)	1

[53] The same is true of many other smaller cemeteries and single burials.

Oundle (Northants)*	1
Wakerley (Northants.)*	1
Wootton Fields (Northants.)	1
West Heslerton (N. Yorks.)	1
Didcot Power Station (Oxon.)	4
Ducklington (Oxon.)	2
Stanton Harcourt (Oxon.)	1
Bloodmoor Hill (Suff.)*	3
Coddenham (Suff.)	7
Exning (Suff.)*	5
Cannington (Som).	2
Goblin Works (Surr.)*	1
Abbeymeads (Wilts.)	1
Collingbourne Ducis (Wilts.)	2
Mere (Wilts.)	1
Old Dairy, Amesbury (Wilts.)*	2
Total:	273

Table 6.1: Cemeteries sampled for osteological data.

Biological sex is one of the key osteological variables recorded. Humans are fairly strongly sexually diamorphic; on the skeleton this is most visible in the pelvis, which in females is broader and flatter to facilitate childbirth, and the skull and mandible, which tend to be more gracile in females and more robust in males. The sex of adult individuals can usually be determined to a high degree of confidence; tests using reference samples of known populations have suggested a level of accuracy in excess of ninety percent. Poor preservation of skeletal material can have a dramatic effect on the accuracy of skeletal sexing, however, especially where key diagnostic elements are affected (Henderson 1989: 79). It is also important to recognise that sex, although strongly bimodal, is a spectrum, with a small number of individuals displaying either few features diagnostic of either sex or a mixture of features. This can be influenced by a range of factors, including age, genes and environmental pressures (Geller 2008: 125). In post-menopausal women, for example, the ageing process can make key diagnostic features like the angle of the sciatic notch and cranial robustness appear increasingly masculine (Geller 2008: 125; Mays and Cox 2000: 125–6), meaning that older women may potentially be under-represented in any archaeological sample. Given the uncertainties introduced by taphonomic processes and by the spectrum of biological sex, it is common practice in osteological reports to record biological sex as certain (e.g. 'female'), probable (e.g. '?male') and sometimes also as possible (e.g. '??female'). This categorisation is retained here, although probable and possible are subsumed into a single category.

In many specialist reports, osteologists make no attempt to determine the sex of subadult individuals. The features diagnostic of biological sex develop primarily during puberty and, although there is some degree of sexual diamorphism in pre-pubescent children, this is very rarely sufficient to reliably determine sex (Scheuer and Black 2000: 12; Mays and Cox 2000: 121–3). In

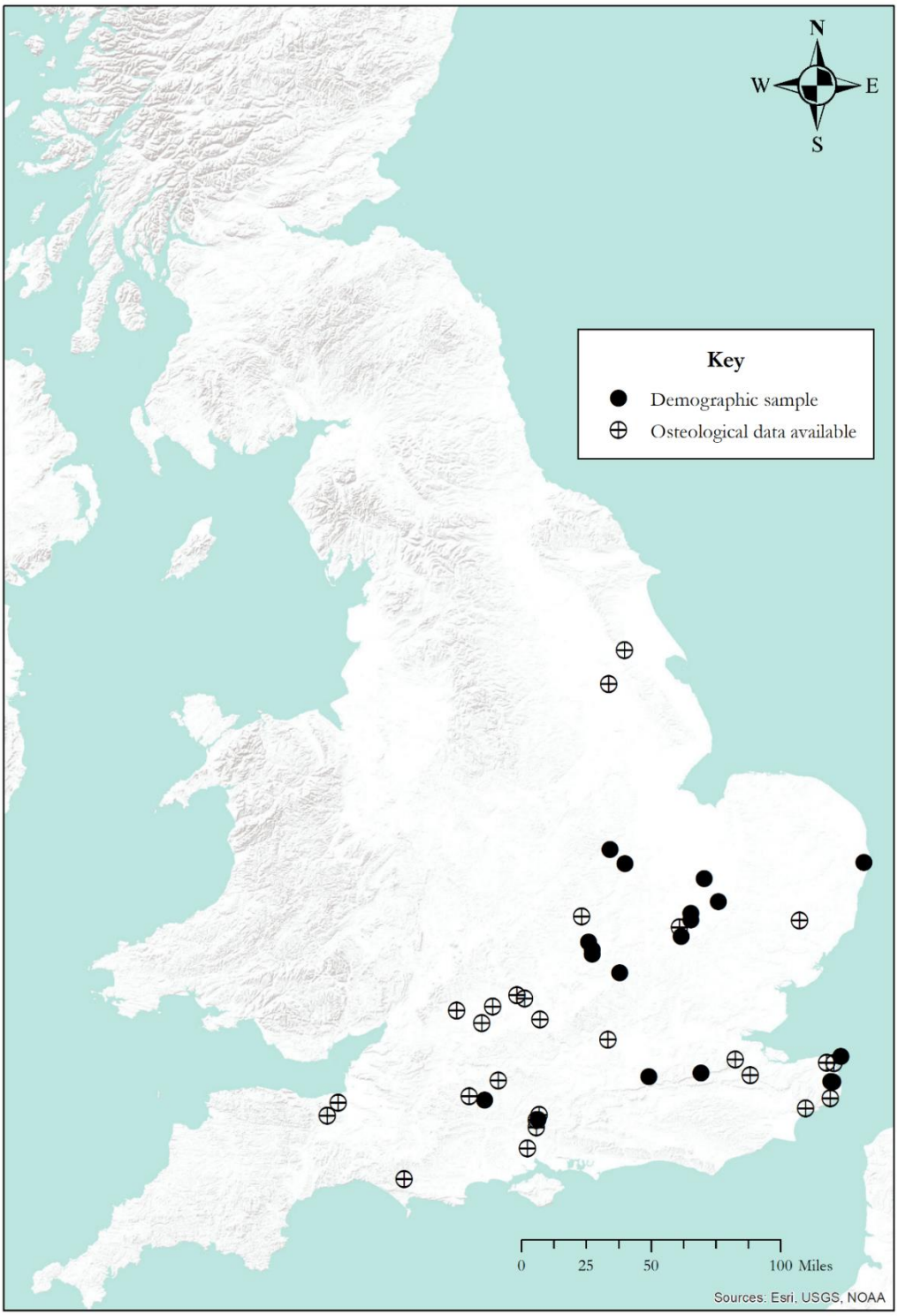


Fig. 6.1: Distribution of cemeteries sampled for osteological data.

the present catalogue the sex of subadult individuals is recorded as 'indeterminate'. The same category is used for adult individuals that could not be reliably sexed.

The other key osteological variable recorded is age. A number of skeletal features, often in combination, can be used to determine age, including the growth, development and wear of the teeth, the fusion of epiphyses and the closure of cranial sutures (Scheuer and Black 2000). Age can more reliably and closely be determined for younger individuals, since tooth development and epiphyseal fusion at specific and well-understood stages. After the age of forty-five, epiphyseal fusion is typically complete, and so it is necessary to estimate the age of mature individuals based on degenerative processes, which can be affected by genes, diet, health and various environmental factors (Cox 2000: 64). As such, it is often necessary to group older individuals into a single age category, telescoping what is probably a much more diverse elderly population (although see Cave and Oxenham 2017).

In addition to the challenges associated with determining the age of skeletal remains, issues also arise when comparing a large sample of osteological data gathered from specialist reports. Published data frequently lacks standardisation, both in methodology and terminology (Buckberry 2015; Falys and Lewis 2011). Indeed, some specialist reports do not even make clear which ageing techniques were used. However, while caution must be exercised when using data compiled from numerous primary sources, this evidence represents a valuable area for research; here, it is hoped that the relatively large sample size serves to compensate for any methodological variability.

Category	**Chronological age**
Infant II	7–11 months
Child I	1–5 years
Child II	6–11 years
Adolescent	12–17 years
Young adult	18–25 years
Middle adult I	26–35 years
Middle adult II	36–45 years
Mature adult	≥46 years
Subadult	< 18 years
Adult	> 18 years
Indeterminate	

Table 6.2: Age categories utilised in the present study and their corresponding chronological ages.

In order to standardise the data as far as possible, age has been recorded as one of twelve categories (table 6.2), which are based on the Museum of London's guidelines for recording human remains (Powers 2012). Where the chronological age range in the published osteological report does not correspond to these categories, the mean value is used.

Like gender, age is a concept that must be approached with theoretical sensitivity. As Gowland (2006: 143) points out, age can be understood in three senses: biological age, chronological age and social age. These are necessarily interlinked; while biological age can be directly assessed by an osteologist, this information needs to be quantified using chronological age brackets in order to be usable and meaningful. Chronological age bands are often discussed using terminology like 'child', 'juvenile' and 'adult', but these descriptors correspond to social ages, which are more nebulous and culturally-loaded categories (Gowland 2006: 144). Eighteen or twenty-one marks the age of transition from childhood to adulthood in modern society, but other social age boundaries are less clearly defined. The stages of 'infant', 'adolescent', 'middle-age' and 'elderly', for instance, do not closely correspond to a specific chronological age span. Instead the meaning of such descriptions is context-specific, and can be influenced by an individual's physiology, behavior, status and importantly, by contemporary attitudes towards the ageing process (Fahlander 2011). There is a danger, therefore, when using social age categories, of projecting modern preconceptions onto archaeological populations (Gowland 2006: 144).

6.3: NECKLACES: A GENDERED OBJECT

Figure 6.2 shows the sex of individuals buried with necklaces. The largest group represented, just over half of the total sample, are individuals of indeterminate sex. In many cases, this is the result of poor skeletal preservation. A significant proportion (37%) of this indeterminate group consists of individuals belonging to the 'infant II', 'child I' and 'child II' age cohorts (i.e. under the age of twelve). Given that osteological sex cannot reliably be determined in pre-pubescent individuals (see above, chapter 6.2), the size of this indeterminate category is therefore artificially large. Of the burials which could be osteologically sexed, the majority, in excess of ninety percent, are those of biological females or probable females. There are also a small number of males or probable males.

It is also possible to compare this data across regional sub-samples (see chapter 1.4). In terms of the available osteological data, only the Kentish, East Anglian and Thames Valley regional samples were sufficient to allow for meaningful comparison. When these regional samples are compared, they reveal much the same pattern as the national sample (fig. 6.3), suggesting that there is no marked regional variability in the gender associations of necklaces.

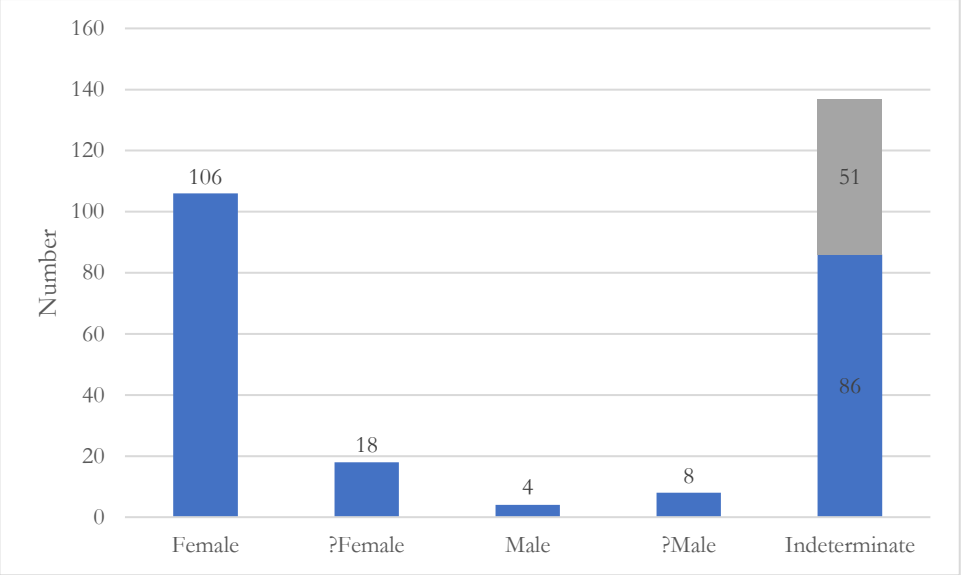


Fig. 6.2: Biological sex of individuals buried with necklaces. The grey bar in the 'indeterminate' category indicates the proportion of these individuals who were below the age of 12, and therefore unable to be reliably sexed using traditional methods.

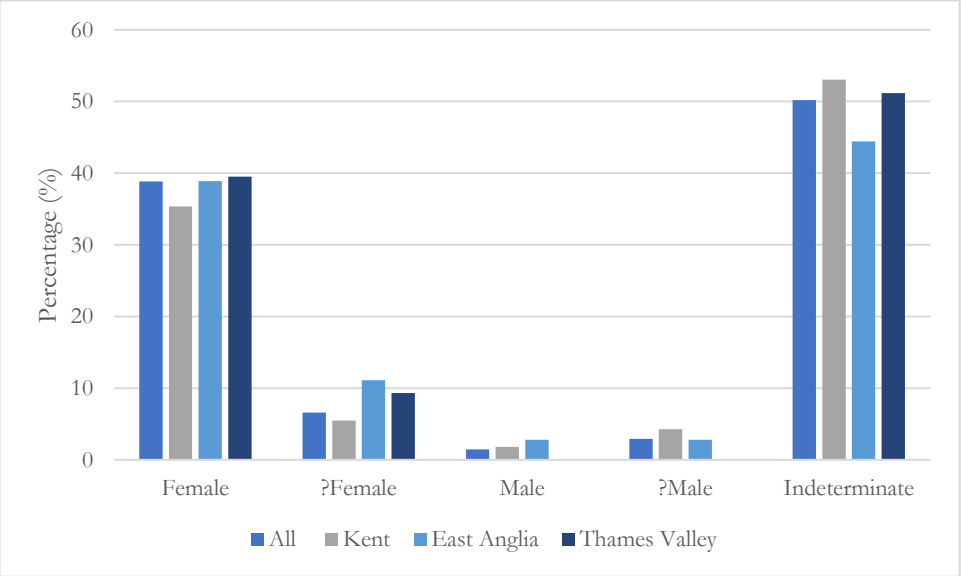


Fig. 6.3: Biological sex of individuals buried with necklaces by region.

These results are not particularly surprising, and they confirm the strong association of necklaces with biological females in instances where osteological sex could be determined. It is because the association of necklaces with women is so marked that the importance of gender as a theme can be brought to bear on other aspects of necklaces, such as what they reveal about seventh-century economic trends (see above, chapter 4) or the expression of dynastic power (see below, chapter 7). A logical assumption based on the strength of this gendered association would be that the individuals too young to be reliably osteologically sexed are also very likely female, and that necklaces are therefore worn by women and girls. Additional scientific analysis, testing DNA or

peptides in tooth enamel (see Stewart et al. 2017), would be required to confirm this hypothesis beyond doubt, however.

Given these strong gender associations of necklaces, the twelve males or possible males in the current sample are particularly interesting. Within this group, there is little internal consistency that would suggest necklaces were only buried with males belonging to a specific age cohort, or that any particular type of necklace or necklace object was specifically associated with males (table 6.3).

Burial ID	**No. of necklace elements**	**Sex**	**Age**	**Other grave goods**
CA.MW.72	1	Male	Middle adult II	Buckle (BU7), knife
KE.BD.75	10	?Male	Adult	Chatelaine, ivory ring, pin-beater, shears
KE.BD.107	3	?Male	?	Comb, latchlifer, pin (type PI1-c), tweezers, workbox
KE.BD.141	4	?Male	Young adult	Bracelet, knife, pin (type PI1-misc), wooden box
KE.Cu.194	1	?Male	Middle adult II	Knife, lace tag
KE.Ea.89:05	1	?Male	Middle adult II	Buckle (BU7), chatelaine, knife, pin (type PI1-g), shears, wooden box, wooden vessel
KE.SP.27	1	Male	Young adult	Chatelaine, knife, pin (type PI1-misc)
KE.SP.51	1	Male	Young adult	
KE.SP.62	10	Male	Middle adult I	
KE.Sw.C4699	8	?Male	Young adult	Chatelaine, shears
KE.Sw.W3080	3	?Male	Adolescent	Knife
SF.BH.22	9	?Male	Middle adult I	Chatelaine, comb, knife, lace tag, latchlifter, linked pins (type PI2-a)

Table 6.3: Instances of biological males or probable males buried with necklaces within the osteological sample.

Five of the twelve male or probable male burials contain only a single necklace element, in three cases a glass bead (KE.Cu.194, KE.Ea.89:05 and KE.SP.27), in another an amethyst bead (KE.SP.51) and in another a copper-alloy wire ring (CA.MW.72). It has sometimes been suggested

that beads, when found singly, do not share the same strongly feminine gender associations of necklaces or larger bead collections (Stoodley 1999: 35; Lucy 1998: 41; Geake 1997: 108). Of course, these studies subsume all single beads into a single category to facilitate analysis, regardless of context, and so undoubtedly reflect the variety in the uses of beads, which could also be buttons, fasteners, sword-beads, amulets, keepsakes or other adjuncts of costume (Owen-Crocker 2004: 65; Meaney 1981: 195–202; see chapter 1.4). As the previous chapter noted, single items, including singly-worn beads, are not unusual among the wider corpus of seventh-century necklaces. Nineteen burials with associated osteological data had a necklace composed of a single bead; of these fifteen (78.9 percent) were those of biological females.

The remaining male or probable male burials contained more substantial necklace collections, ranging from three to ten items in total. In each case, the types and range of objects present is consistent with the kinds of assemblages regularly found in female graves. All but one of these necklace collections was found in the expected position on the upper chest. The only exception to this pattern is a grave from Dover Buckland (KE.BD.141), where a perforated coin pendant, cowrie shell pendant and two glass beads were found at the left waist, in a probable bag group (Evison 1987: 248). Again, however, necklaces in box- or bag-collections are not unknown among the wider corpus (see above, chapter 5.3.6).

In the majority of the male or probable male burials with necklaces, there are other grave-goods present that seem to indicate a feminine gender identity. These include chatelaines, shears, workboxes, bracelets and linked pins, all items that previous studies have shown to have very strong gender associations (Geake 1997: 35, 36, 56, 57 and 97). In several of these potentially male burials, the necklace appears to be only one element of a larger feminine costume 'package'. The other five graves are either unfurnished or contain objects regularly found with both sexes, such as knives, lace tags and simple buckle types. Again, it should be noted that the simply furnished or otherwise unfurnished burial rite does not mark these male graves as unusual, given the high proportion of simply furnished or unfurnished burials in seventh-century cemeteries (Geake 1997: 31).

Apart from their biological sex, there is little to distinguish these male burials from other necklace-graves. The range of necklace-elements and other grave-goods are fairly representative of a standardised feminine costume, there is an expected range of ages present (see chapter 5.4) and nothing about the burial ritual to suggest deviancy or otherness. One notable feature, however, is the presence of multiple 'misgendered' necklace graves in a single cemetery, at Dover Buckland, Saltwood and St Peter's Tip (all Kent). This therefore raises a crucial question: do these male burials represent a 'real' pattern within the data? It is possible that some of these burials have

been incorrectly sexed. Indeed, the sexing of the skeletal as male is probable in the majority of cases (eight of eleven).[54] Poor preservation of skeletal material, which can affect the accuracy with which skeletons can be sexed (Henderson 1989), was a factor noted in the publications of both Dover Buckland and Bloodmoor Hill (Suff.) (Evison 1987: 8; Scull 2009b: 388).

It seems unwise, however, to dismiss all of the male burials with necklaces as the results of incorrect sexing. During the seventh century the apparent mismatch between biological sex and gendered grave goods is by no means restricted to necklaces; Stoodley (1999: 49) found that the frequency of 'cross-gendered' burials (males with jewellery, females with weapons) peaks during this period. Seventh-century female graves with weaponry, particularly spearheads, are not uncommon (Andrew Welton *pers. comm.*); indeed, spearheads were found in four of the necklace graves in the present corpus. Dover Buckland in particular is noted for having a relatively high number of female weapon graves, most of them dating to the later sixth and seventh centuries (Stoodley 1999: 29–30; Evison 1987: 123–5).

Burials in which there is an apparent mismatch of biological sex and gendered grave-goods in early medieval cemeteries have sometimes been identified as individuals fulfilling a specific societal role, such as ritual specialists (see, for example, Knüsel and Ripley 2000). However, complicating interpretations of such graves is the difficulty in understanding how the complete burial tableau, and specifically clothing, would have modified and mediated the apparently mis-gendered material culture elements. If the sexing of the twelve males buried with necklaces is correct, these individuals would fit into a wider phenomenon of cross-gendered burials in the seventh century, at a period where the rules governing the deposition of gendered grave-goods seem not to have been so strictly enforced as in preceding centuries. It is tempting to speculate as to whether the so-called misgendered grave goods, such as necklace collections in the graves of biological males and spearheads in female graves, might have served an alternative function, perhaps materialising a link between the deceased and another individual or serving as a vehicle for memory and commemoration. The restricted number of cemeteries at which these burials have been found might also point towards this being a funerary tradition specific to these communities.

6.4: AGE ASSOCIATIONS

Figure 6.4 shows the age associations of necklaces in the sample. Again, there is a significant proportion of burials which fall into the indeterminate category, as well as several individuals for

[54] The three definite burials are all from the cemetery at St Peter's Tip. At the time of writing, the material from St Peter's Tip is in the process of being prepared for publication, and so the conclusions presented here are necessarily preliminary and should be checked against the final published report.

whom it was not possible to categorise their age beyond subadult (<18 years) or adult (>18 years). The burials that can be assigned to an age cohort show a peak in the 'young adult' and 'middle adult I' categories, suggesting that necklaces are mostly commonly found with individuals between the ages of eighteen and thirty-five. Generally, however, the spread of burials across the age categories is relatively broad, with both individuals below the age of eighteen and older women over the age of thirty-five reasonably well-represented in the national sample. The youngest individual buried with a necklace is an infant of around eight months old from Marina Drive (BE.MD.A1), interred with a necklace of two glass beads, an amethyst bead and a beaver tooth pendant (Matthews 1962). With the exception of the very youngest children (below the age of six months), no age cohort is seemingly restricted from being buried with necklaces.

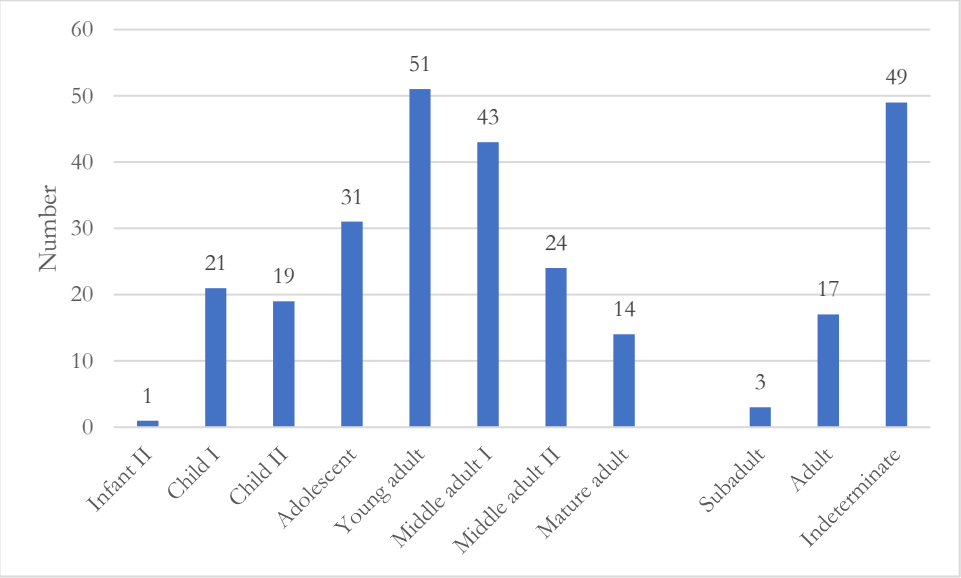


Fig. 6.4: Osteological age of individuals buried with necklaces.

Unlike the gender associations of necklaces, which show little regional variation, there is some intriguing variability in the age patterning across the Kentish, East Anglian and Thames Valley datasets (figs. 6.5–7). The peak in the 'young adult' and 'middle adult I' categories is particularly evident in the Kentish dataset, which illustrates the effect of the large number of Kentish burials on the overall profile of the national sample. Interestingly, the profile of the distribution curves for both the East Anglian and particularly the Thames Valley sample is much flatter, suggesting that necklaces are more regularly buried with all age groups within these regions. Of course, the total number of burials these samples is much lower than in Kent, and these smaller regional samples may partly reflect the influence of a particular cemetery with an unusual demographic profile. For example, children under the age of twelve buried with necklaces are particularly well

represented at Marina Drive (Beds.) and Exning (Suff.).[55] There may be a chronological aspect to this patterning; burials datable to phase AS-FD are more readily identifiable in the Kentish sample, and so here there may be more continuity with practices of the sixth century, where stricter age-related restrictions governed both dress fashions and grave furnishing. It is also intriguing to note other evidence for greater conservatism in Kentish burial practices. In a study of body positioning across early Anglo-Saxon cemeteries, Sian Mui (2018: 106) revealed marked homogeneity in Kentish burials, with over eighty percent of graves conforming to the standard supine extended position.

It is important to contextualise this osteological age patterning against wider demographic trends (for a similar approach, see Martin 2015: 219–22). To do this, osteological age and sex data was collected from the same cemeteries that produced the necklace graves. Of this group, it is necessary to exclude long-lasting cemeteries, to avoid including a significant proportion of unfurnished or poorly furnished fifth- and sixth-century graves. Important sites like Lechlade (Glos.), Dover Buckland, Saltwood (both Kent) and Castledyke South (Lincs.) are therefore excluded. In addition, some sites, like Kemble (Glos.), Wootton Fields (Northants.) and Ducklington (Oxon.), consist only of one or two isolated necklace graves, and thus it is impossible to use these sites as a proxy for the wider population.

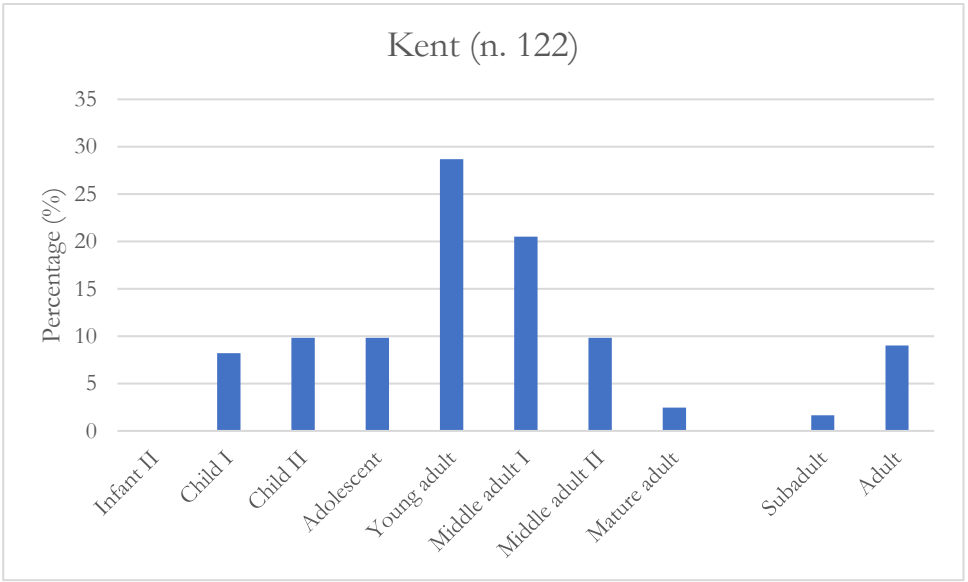


Figure 6.5: Osteological age of individuals buried with necklaces in the Kentish data sample.

[55] Interestingly, at Marina Drive the overall number of children within the cemetery population is quite low, but almost all of the children were buried with necklace items, while at Exning children are particularly well represented in the sample as a whole, and the provisioning of necklaces therefore reflects the overall population demography (see fig. 6.8).

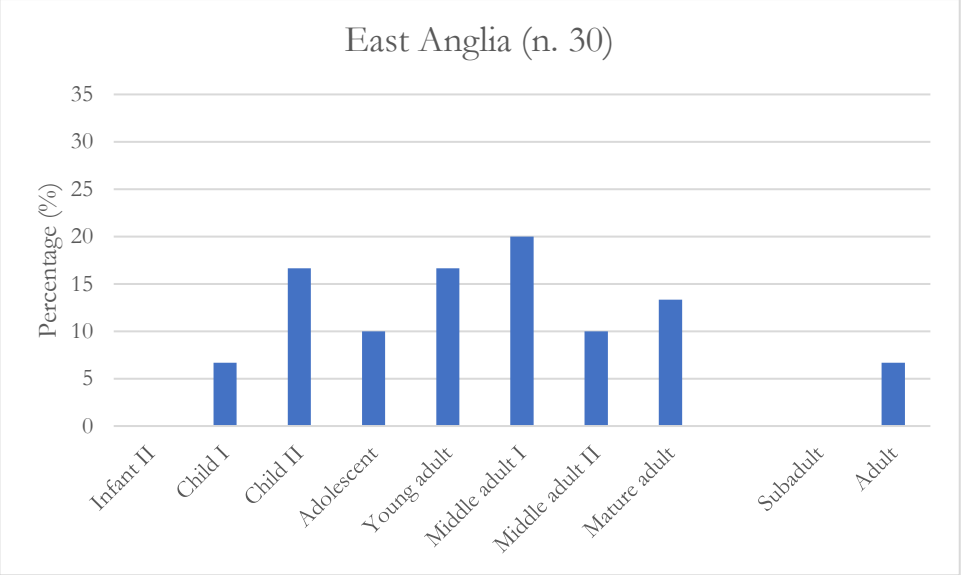


Figure 6.6: Osteological age of individuals buried with necklaces in the East Anglian data sample.

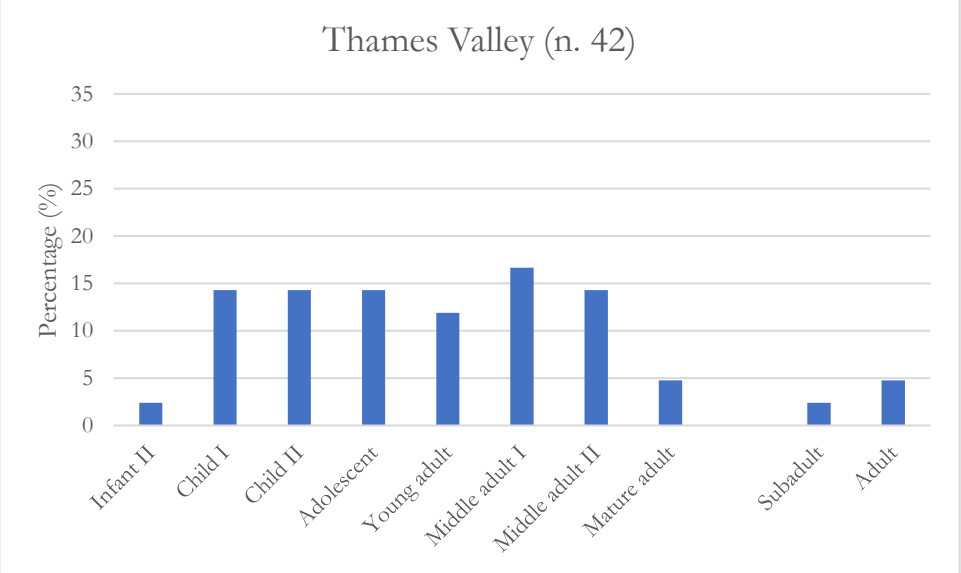
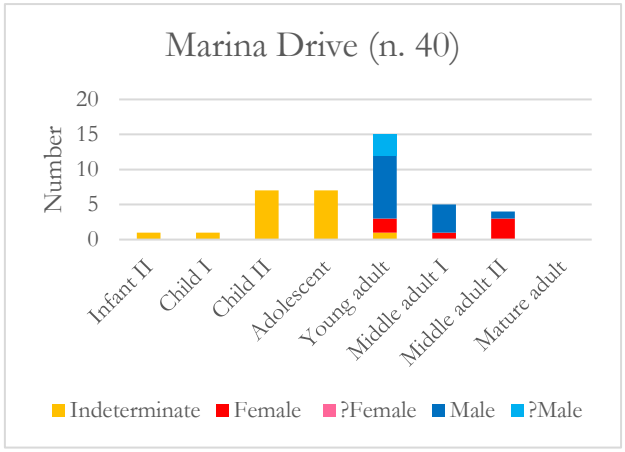
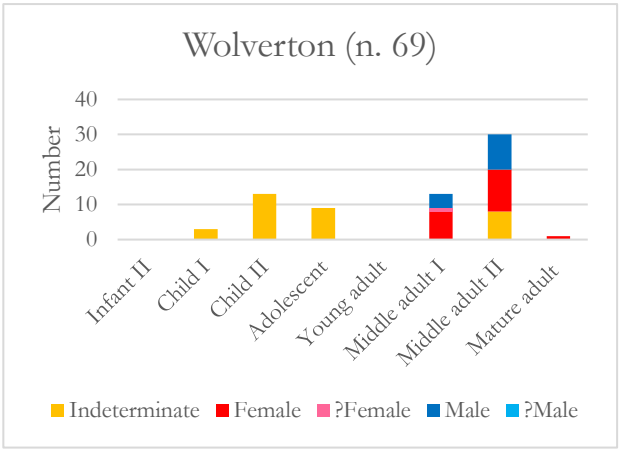
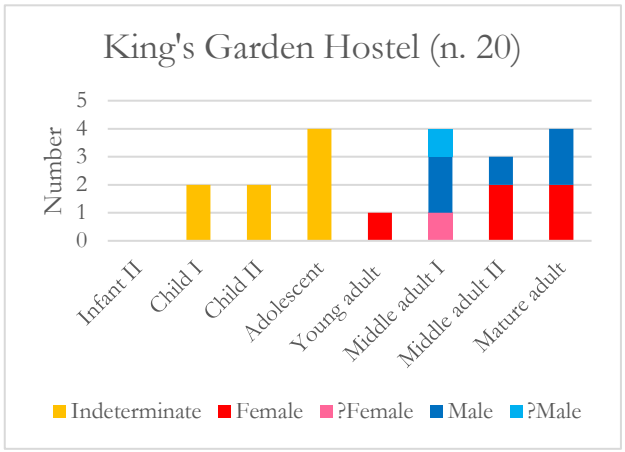


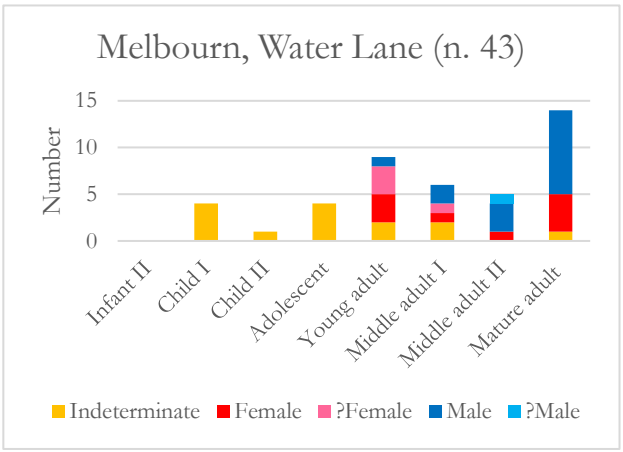
Figure 6.7: Osteological age of individuals buried with necklaces in the Thames Valley data sample.

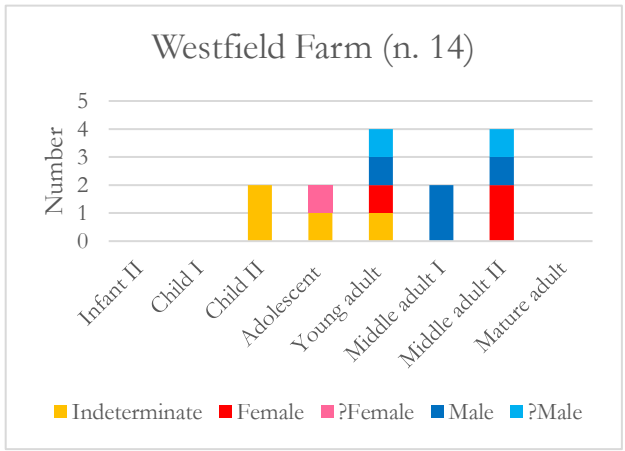
Demographic data was recorded from nineteen cemeteries; these are indicated by an asterisk (*) in table 6.1. The age-at-death profiles for thirteen of the sampled cemeteries are shown in figure 6.8; the six sites which are not shown (Bottledump Corner, Westbury-by-Shenley (both Bucks.), Trumpington (Cambs.), Oundle, Wakerley (both Northants.) and the Old Dairy, Amesbury (Wilts.)) each consist of fewer than ten graves, but still contribute to the overall demographic sample. In total the demographic sample consists of 863 burials.

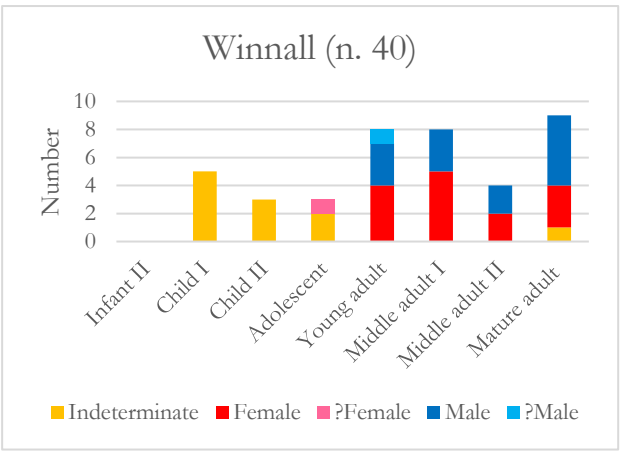

Marina Drive (n. 40)
Number
20
15
10
5
0
Infant II
Child I
Child II
Adolescent
Young adult
Middle adult I
Middle adult II
Mature adult
Indeterminate
Female
?Female
Male
?Male

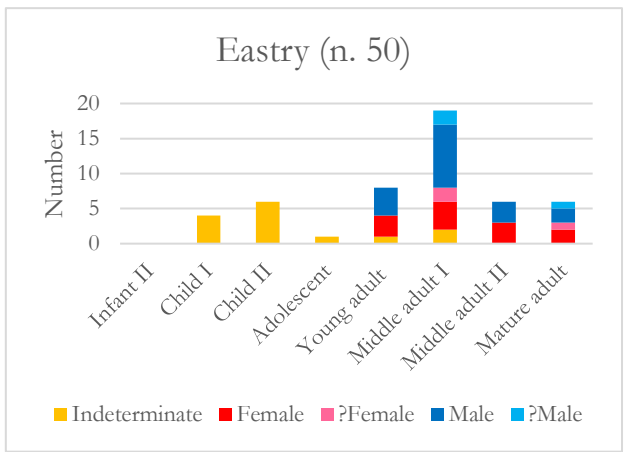

Wolverton (n. 69)
Number
40
30
20
10
0
Infant II
Child I
Child II
Adolescent
Young adult
Middle adult I
Middle adult II
Mature adult
Indeterminate
Female
?Female
Male
?Male

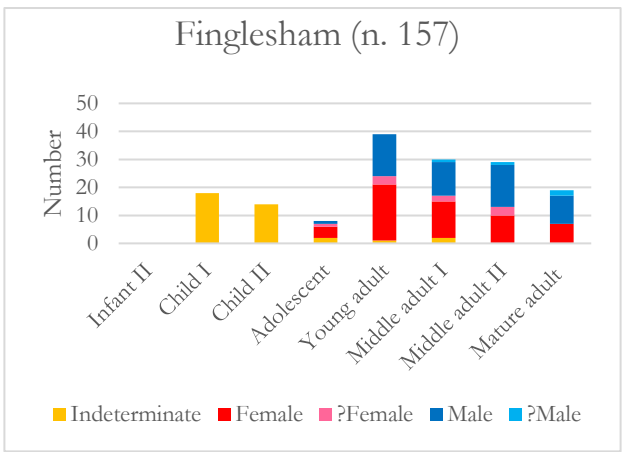

King's Garden Hostel (n. 20)
Number
5
4
3
2
1
0
Infant II
Child I
Child II
Adolescent
Young adult
Middle adult I
Middle adult II
Mature adult
Indeterminate
Female
?Female
Male
?Male


Melbourn, Water Lane (n. 43)
Number
15
10
5
0
Infant II
Child I
Child II
Adolescent
Young adult
Middle adult I
Middle adult II
Mature adult
Indeterminate
Female
?Female
Male
?Male


Westfield Farm (n. 14)
Number
5
4
3
2
1
0
Infant II
Child I
Child II
Adolescent
Young adult
Middle adult I
Middle adult II
Mature adult
Indeterminate
Female
?Female
Male
?Male


Winnall (n. 40)
Number
10
8
6
4
2
0
Infant II
Child I
Child II
Adolescent
Young adult
Middle adult I
Middle adult II
Mature adult
Indeterminate
Female
?Female
Male
?Male


Eastry (n. 50)
Number
20
15
10
5
0
Infant II
Child I
Child II
Adolescent
Young adult
Middle adult I
Middle adult II
Mature adult
Indeterminate
Female
?Female
Male
?Male


Finglesham (n. 157)
Number
50
40
30
20
10
0
Infant II
Child I
Child II
Adolescent
Young adult
Middle adult I
Middle adult II
Mature adult
Indeterminate
Female
?Female
Male
?Male

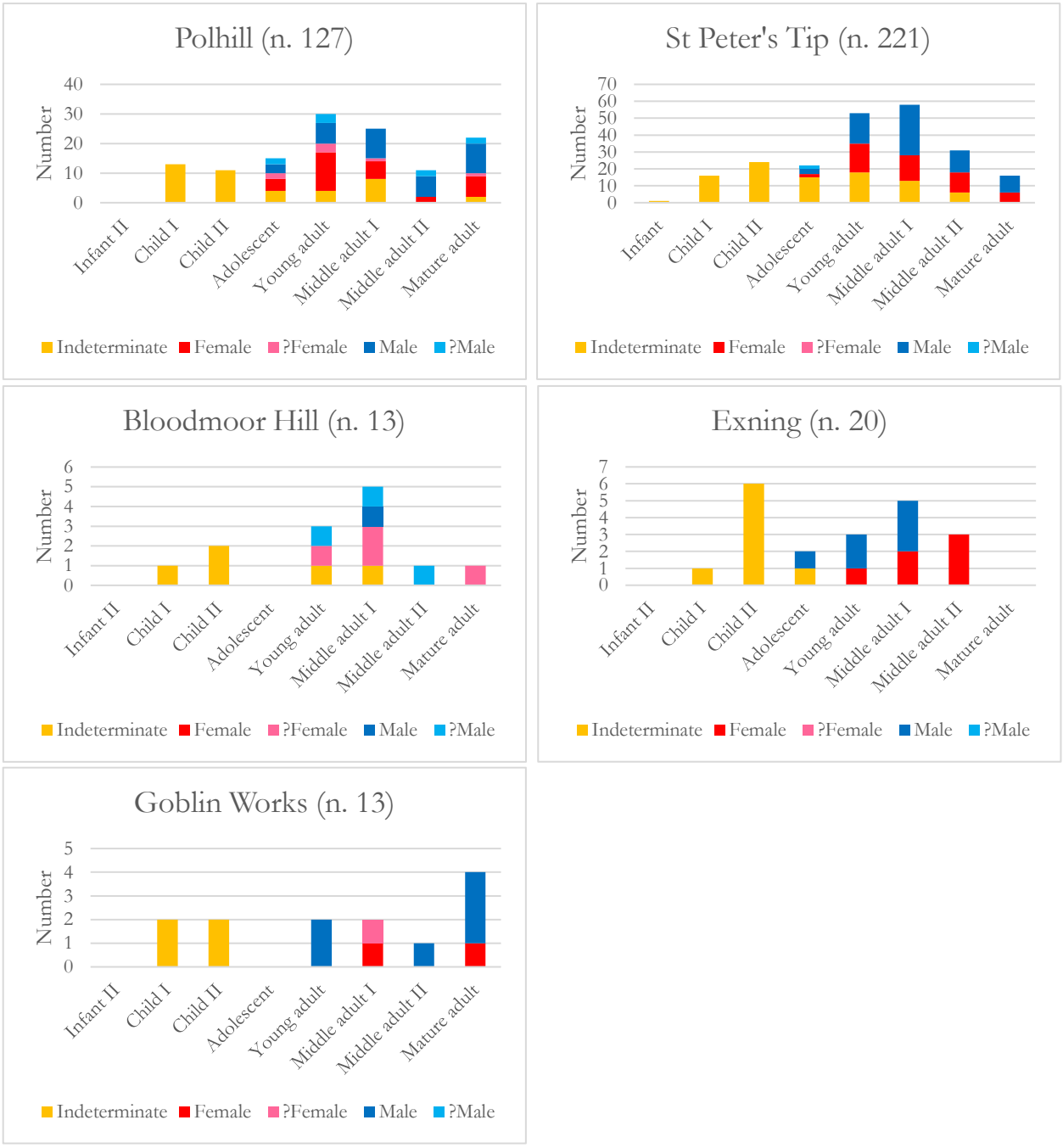


Figure 6.8: Demographic profiles of individual cemeteries.

There is some variability in the demographic profiles of the individual cemeteries. This is likely to be the result of both the small size of some of the cemeteries, and locally-specific conditions, like the resources available to each population and overall health of the community. The age-at-death profile of all the sampled cemeteries combined is shown in figure 6.9. Most individuals in seventh-century cemeteries died between the ages of eighteen and thirty-five. There is a gendered distinction here too: the number of females and probable females is slightly higher in the 'young adult' group than males, while in all of the age categories from 'middle adult I' onwards males slightly outnumber females. The peak in female mortality between the ages of eighteen and

twenty-five is most likely a reflection of the dangers associated with pregnancy and childbirth, since this age-at-death profile closely mirrors that of modern rural populations in developing countries (Sayer and Dickinson 2013: 291–3; see also Crawford 1999: 63). The demographic profile would suggest that child, and particularly infant, mortality was low, but it may be that some subadult individuals were not accorded burial in community cemeteries (see above, section 6.1.2). For the purposes of the present comparison, the potential underrepresentation of children and infants is not an issue, as the demographic sample against which the necklace graves are compared is that of the cemetery, not the wider population.

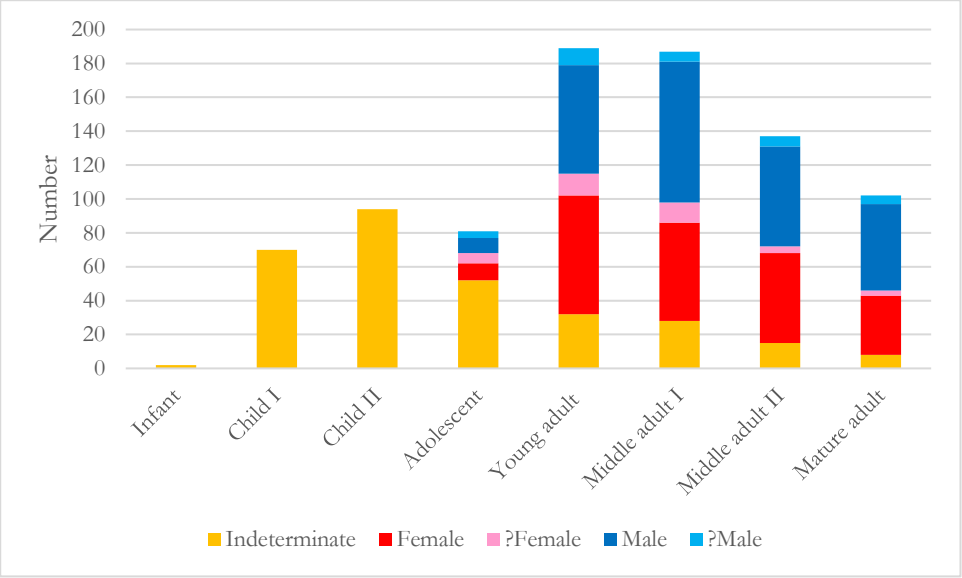


Fig. 6.9: Age-at-death patterning across nineteen seventh-century cemeteries.

Since there is a slight difference in the age-at-death profiles of osteologically-sexed females and males, and since necklaces seem to be almost exclusively associated with biological females, it is necessary to compare the necklace-graves with only the wider female population. While adult females and probable females can easily be extracted from the dataset, the majority of individuals under the age of eighteen are of indeterminate sex. Therefore, an equal split between biologically male and female individuals among the indeterminate burials has been assumed for the purposes of the present comparison. Certainly, the overall ratio of osteologically-sexed adult males and females, 284:248, suggests that the proportion of each sex which survived childhood was roughly equal. A broadly equal split between biologically-male and -female adults is also typical of Anglo-Saxon cemeteries more generally (Stoodley 2000: 458). The reconstructed 'female' population numbers 414.5 individuals. Figure 6.10 compares the demographic profile of this broader population with that of the necklace graves, expressed as percentages.

By comparing the demographic profile of the necklace graves with the broader patterns of age-at-death during the seventh century, some of the conclusions based on the data in figure 6.4 can

be modified. Necklaces are not more strongly associated with adult women between the ages of eighteen and thirty-five; instead, these individuals are simply better represented in the cemetery sample, meaning that the absolute number of necklaces with these age groups is higher. For most age cohorts, the demographic profile of the necklace-graves closely mirrors the overall age-at-death patterning. Necklaces are very slightly preferentially associated with individuals in the 'child I', 'adolescent', 'young adult' and 'middle adult I' categories, and noticeably less frequently buried with women over the age of thirty-five. There are therefore no age restrictions governing the burial of necklaces as a category of grave-good.

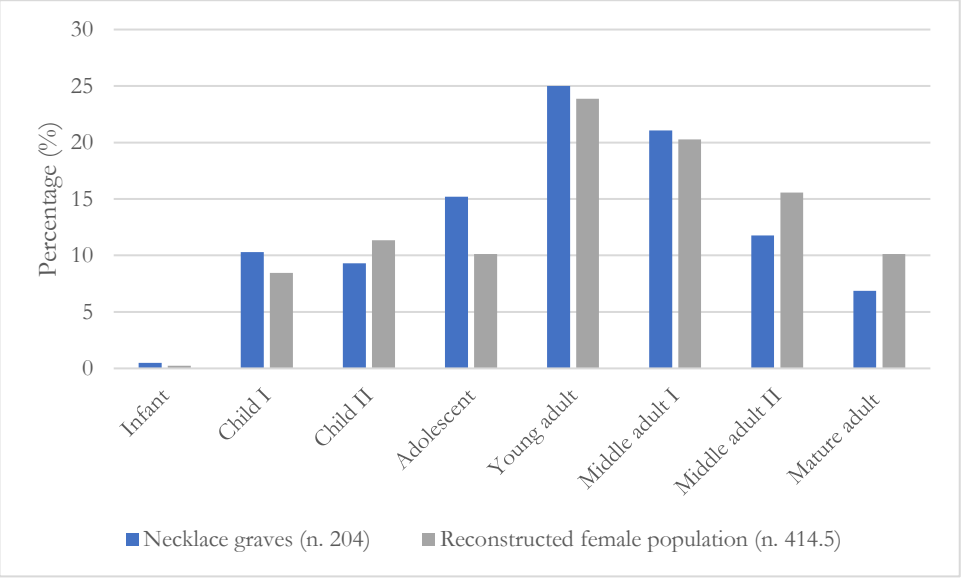


Fig. 6.10: Comparison of the demographic profiles of individuals buried with necklaces and a reconstructed female population based on sampled cemeteries

As necklaces are composite objects, it is also possible to explore whether the form and composition of necklaces shows any obvious age-related patterning. One key preliminary question is whether the number of necklaces elements varies according to age. Figure 6.11 shows the variation in the number of necklace elements across the age cohorts. The burial of single necklace elements is not restricted to any one age category, but is most commonly associated with older adults, over the age of thirty-five. The highest mean values are associated with the 'child I', 'young adult' and 'middle adult I' categories (table 6.4). These values are relatively close to the overall average number of necklace components recorded across the whole dataset, which sits at 8.84 elements (see above, chapter 5.2.1). This reveals that, just as the overall length of necklaces does not seem to vary significantly by region or according to the relative wealth of the assemblage, neither is there any marked variation according to the age of the wearer. Perhaps the most striking result of comparing number of elements across the age cohorts is that there is reasonable consistency both in the average number of elements with each age group and the overall degree of variation across each group. Again, these results confirm that a relatively restricted number of

necklace items is a key characteristic of seventh-century necklaces. These results also confirm, on a basic level, individuals belonging to different age cohorts are wearing the same *type* of short necklaces from childhood onwards.

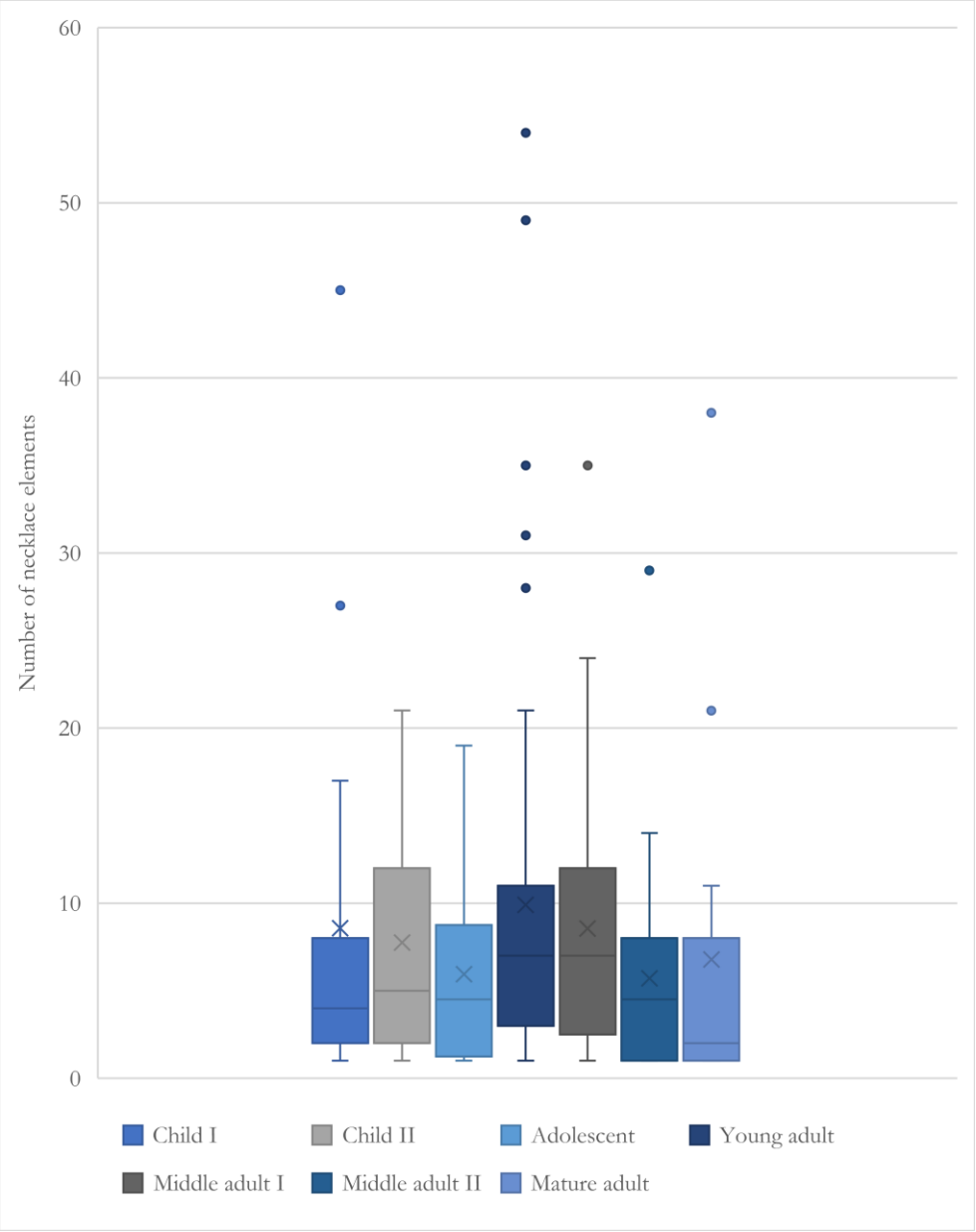


Figure 6.11: Box-and-whisker plot showing variation in the number of necklace elements buried with each age cohort. Note that three outliers are not shown on this graph: KE.Fi.57, an adult female around the age of thirty-five buried with 79 necklace elements; KE.SP.165, an adolescent of indeterminate sex with 84 necklace elements; and KE.Sw.C1138, an individual of indeterminate sex in the 'middle adult I' category with 121 necklace elements.

It is also possible to compare the proportion of different object types (broadly defined) associated with each individuals of each age cohort. The variation in the numbers of glass beads, beads of other materials, pendants and wire rings with each age category are shown in figures 6.12–15.

Again, the main impression is one of consistency: the same basic object types are worn by all ages, and there is little dramatic variation in the proportions of different object types. However, a few interesting patterns do emerge. Younger individuals below the age of twelve are associated with necklaces composed of generally higher numbers of glass beads than other age cohorts, and correspondingly fewer beads of other materials, pendants and wire rings. Women in the 'young adult' category wear necklaces consisting of higher numbers of non-glass beads, pendants and wire rings on average than other age cohorts, and correspondingly have a lower average number of glass beads. Older individuals, aged forty-six and above, seem to wear a slightly lower number of most object glasses (glass beads, other beads and pendants) on average. The only exception to this patterning is a slightly higher average number of wire rings found in the graves of women in the oldest age group.

Age cohort	**Average number of necklace elements**
Child I	8.58
Child II	7.74
Adolescent	5.95
Young adult	9.90
Middle adult I	8.56
Middle adult II	5.71
Mature adult	6.79

.

Table 6.4: The mean value of the number of necklace elements associated with each age cohort.

It is also possible to explore the age associations of some specific object types (fig. 6.16). It is necessary to exercise caution here, since few object types occur with sufficient frequency in the sample of osteologically-aged necklace graves to reveal any meaningful conclusions. This includes many of the pendant sub-types, include composite disc pendants (PE1), coin pendants (PE7) and cabochon pendants (PE9). Even in the case of those types that have been analysed the data samples are necessarily small. Here a preliminary examination of the potential patterning is offered; it is hoped that the results of future excavations will provide a more substantial data sample, against which these conclusions might be tested. Nevertheless, some interesting patterns do emerge. Firstly, it is importance to note again the absence of any obvious age *restrictions* regarding the provisioning of particular artefact types. Of those types found in sufficient numbers to justify a comparison using osteological data, examples are found associated with each age cohort.

An intriguing correlation is the stronger association of polychrome beads and amber beads (type PE3) with children, the former with the 'child I' cohort and the latter the 'child II' cohort. These bead types are correspondingly relatively poorly represented in the burials of young adults aged

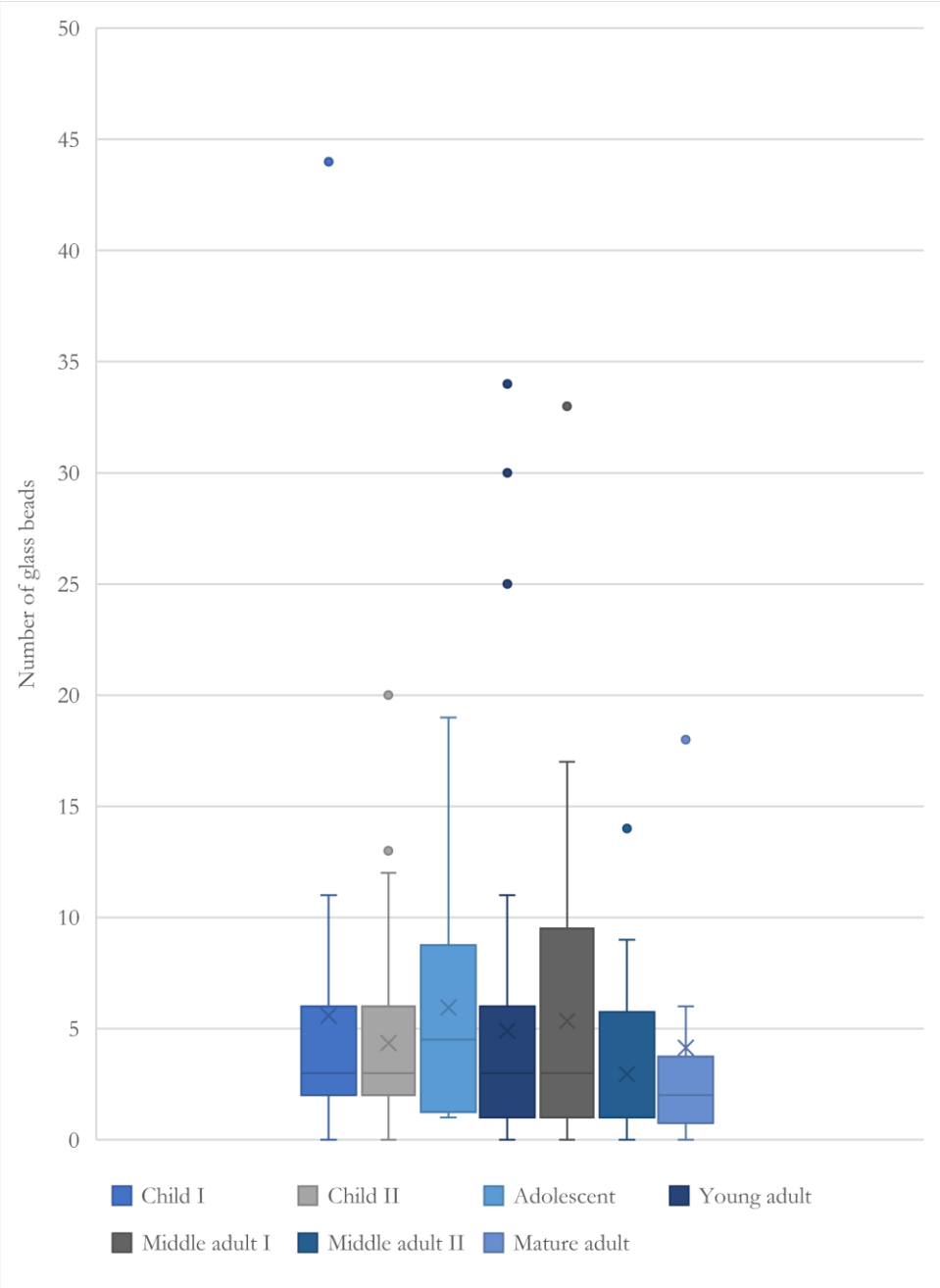


Figure 6.12: Box-and-whisker plot showing the variation in the number of glass beads buried with each age cohort.

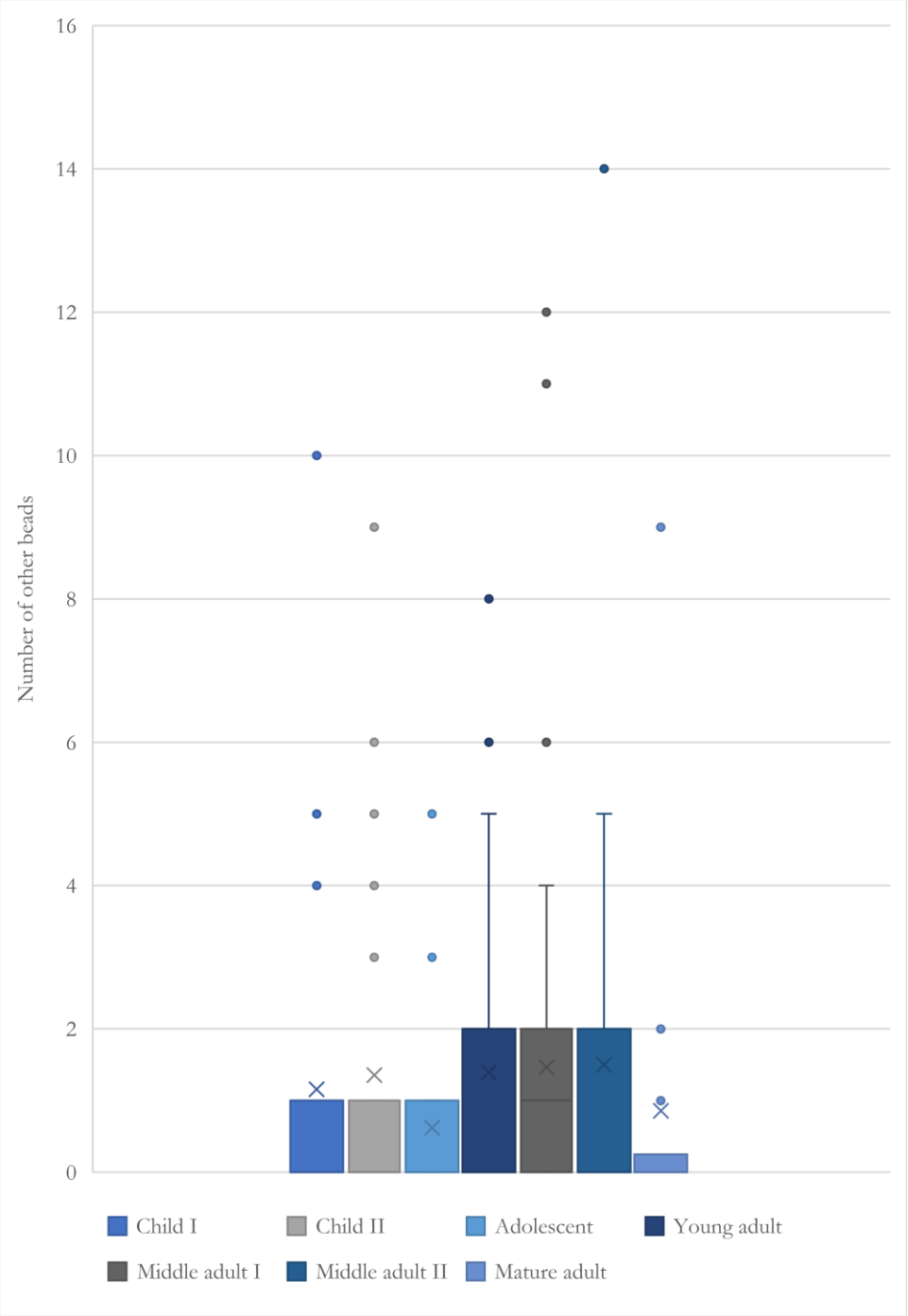


Figure 6.13: Box-and-whisker plot showing the variation in the number of beads of other materials buried with each age cohort.

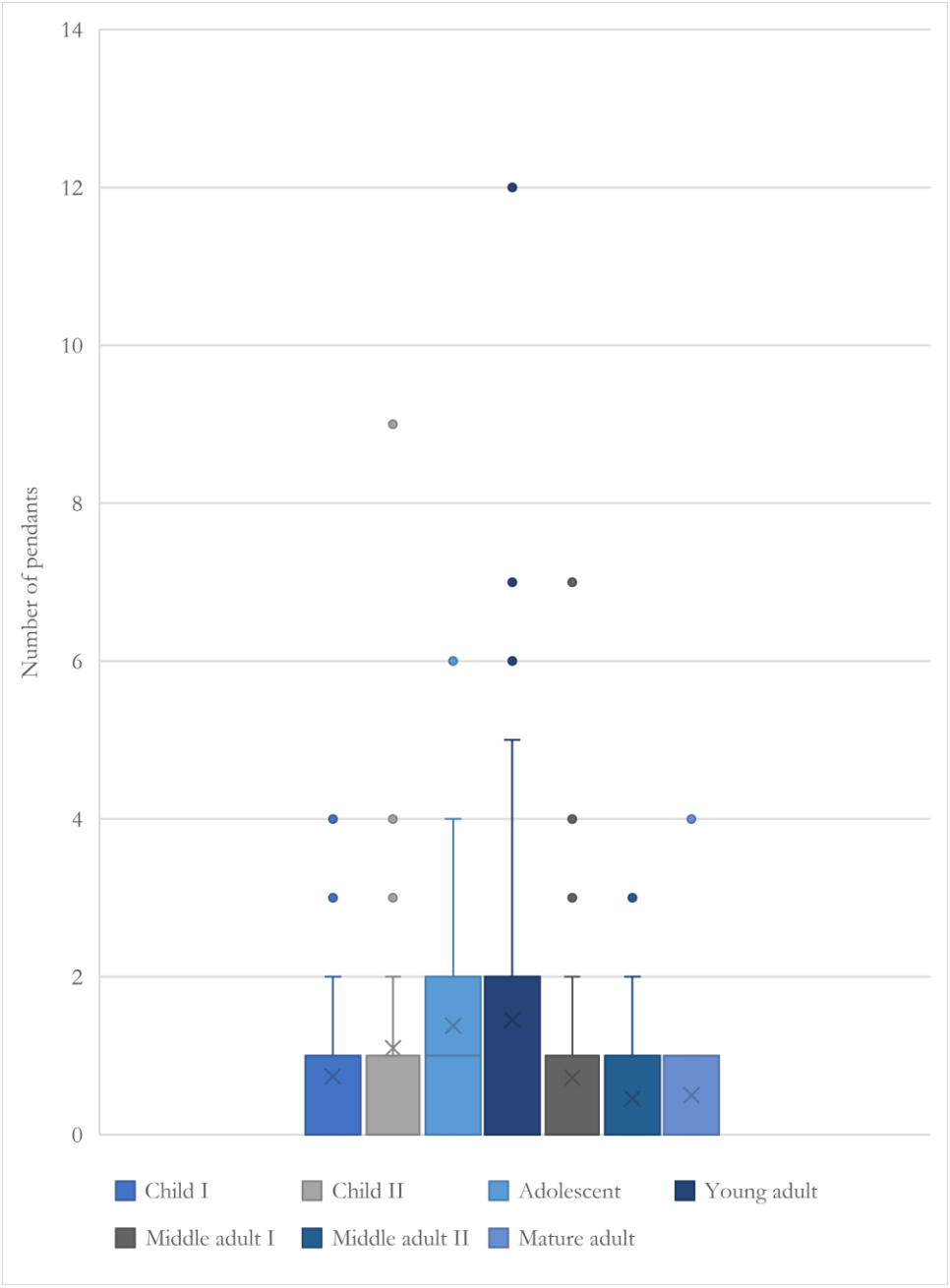


Figure 6.14: Box-and-whisker plot showing the variation in the number of pendants buried with each age cohort.

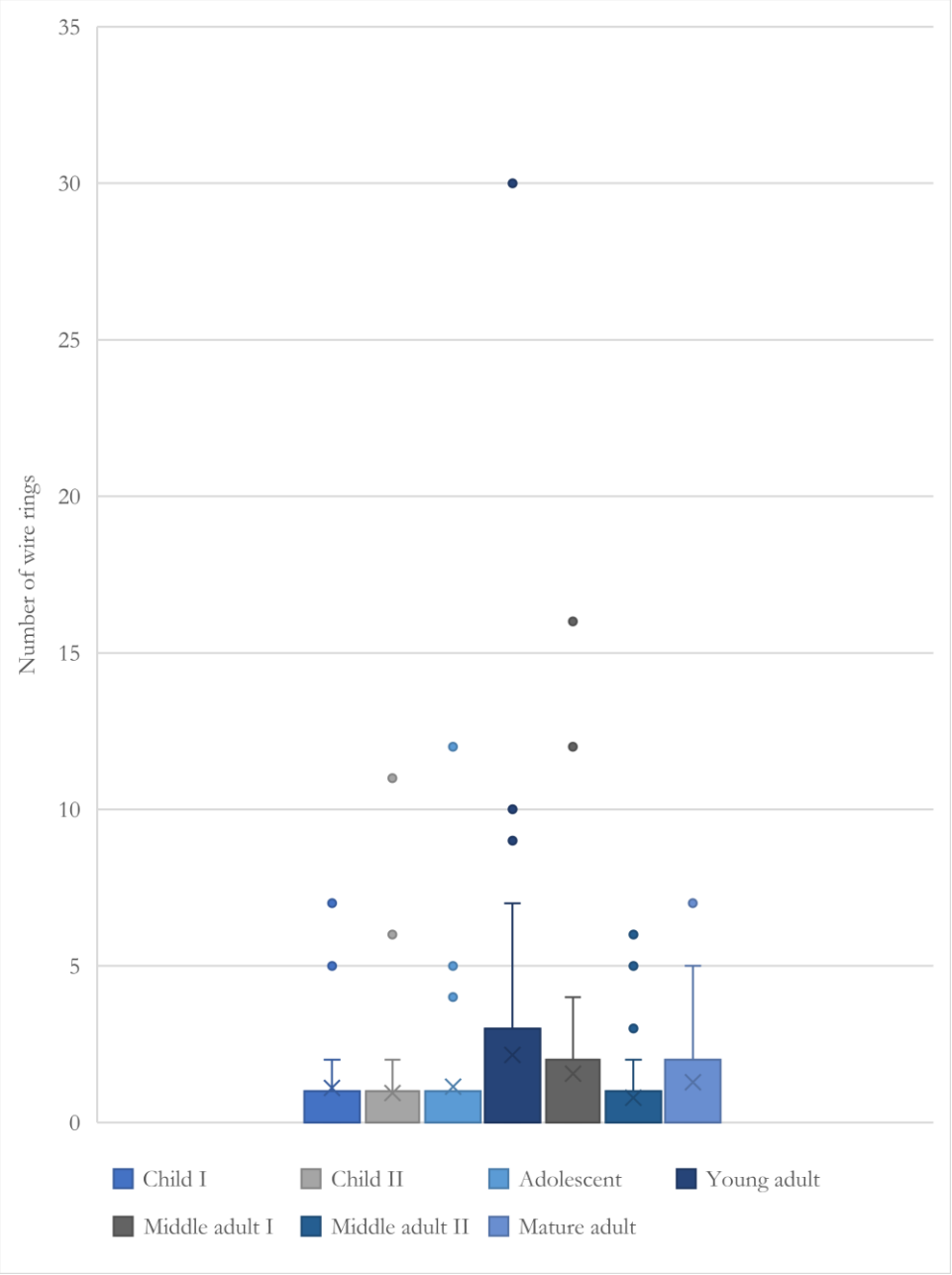


Figure 6.15: Box-and-whisker plot showing the variation in the number of wire rings buried with each age cohort.

between eighteen and twenty-five. Scutiform pendants (type PE2) are more common in burials of children and older adult women, and again, less frequently found in the burials of young adults and women of the 'middle adult I' category (although, again, it should be emphasised that this is a small data sample). There is also a degree of age-related patterning evident in the association of amethyst beads (type BE1-Amethyst) and, to a lesser extent, cowrie shell beads (BE1-Cowrie). These imported types are typically found with women between the ages of eighteen and thirty-five and are much less common in the burials of younger individuals and older women. There is

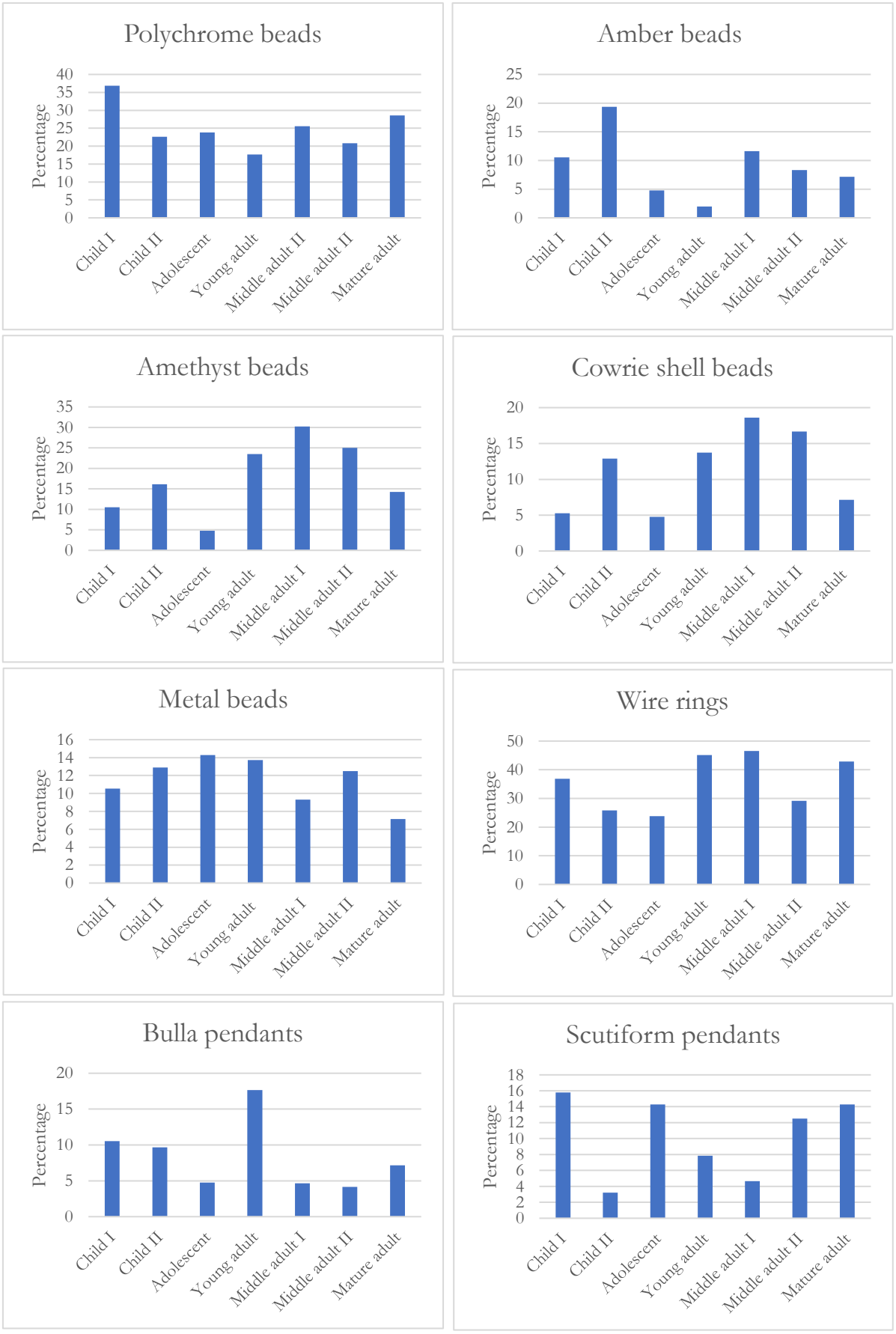


Figure 6.16: Percentage of each age category buried with various object types.

also a marked association of bulla pendants with young adult women, more than any other age cohort. Confirming the results suggested by figure 6.15, the slightly higher frequency of wire rings in the graves of adult women is also evident. Metal beads (BE2) show little clear patterning, with the possible exception of their underrepresentation in graves of mature adult women.

Finally, the age associations of various materials can be examined. Figure 6.17 shows the percentage of each age cohort buried with at least one gold object. The proportions vary between each grouping, but there is little clear patterning, revealing that the presence of gold objects in another feature of necklaces not restricted to any age cohort. Proportionally, gold pendants and beads are slightly more commonly associated with women in the 'middle adult II', 'adolescent' and 'child I' cohorts, and less frequently with individuals belonging to the 'middle adult I' and 'mature adult' groups.

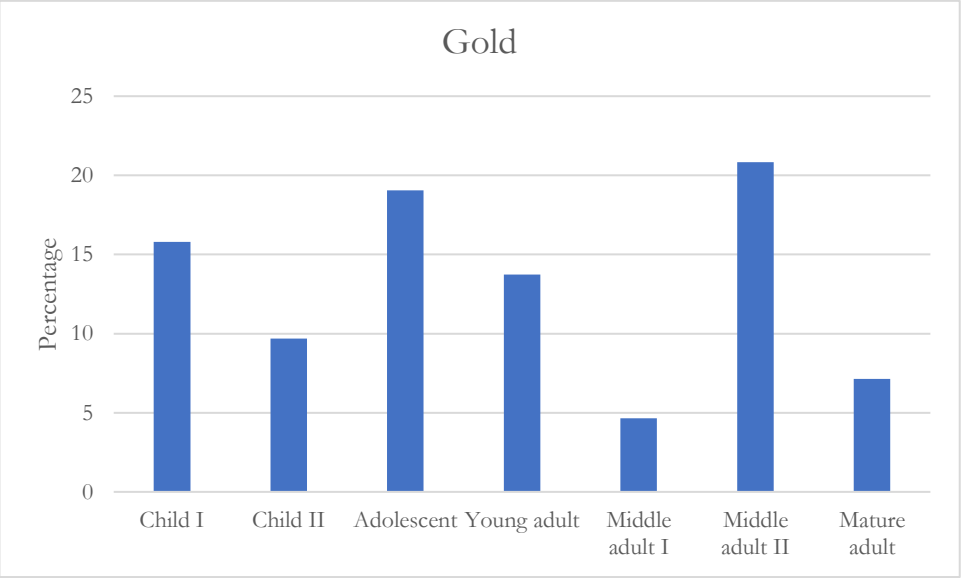


Figure 6.17: Percentage of each age category buried with at least one necklace item made primarily of gold.

There is more obvious age-related patterning evident in the provisioning of silver and copper-alloy objects. Silver objects are more common found in the graves of adults over the age of eighteen, rather than children (fig. 6.18). In part this must reflect the provisioning of wire rings as an object type, which are predominantly made from silver wire (see figs. 6.15 and 6.16). In the case of copper-alloy objects, this patterning is both reversed and more noticeable: children under the age of eighteen (along with young adults below the age of twenty-six to a slightly lesser degree) are more likely to have been buried with at least one copper-alloy object (fig. 6.19). Objects made from copper-alloy are less commonly found in the graves of women aged between twenty-six and forty-five and are entirely absent in the graves of mature adult women.

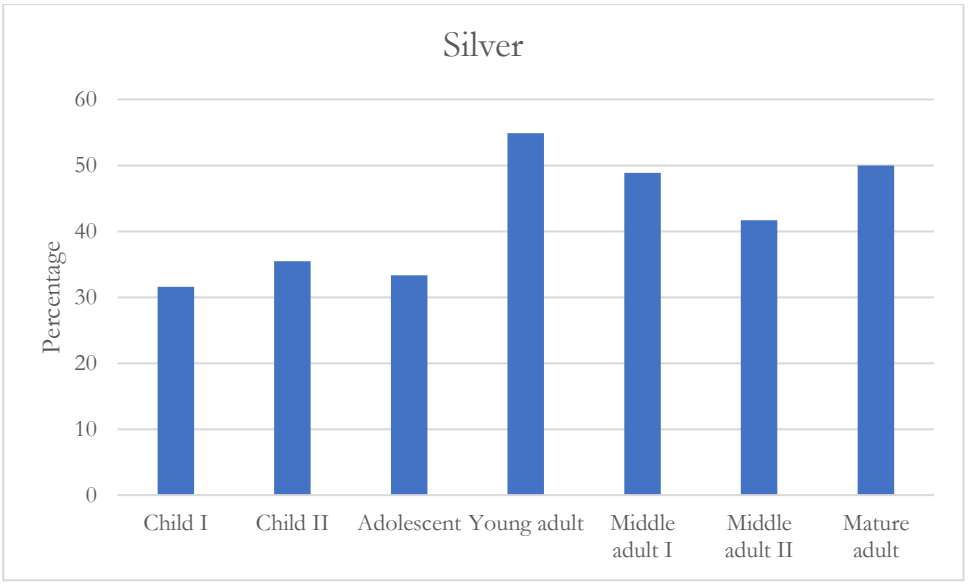


Figure 6.18: Percentage of each age category buried with at least one necklace item made primarily of silver.

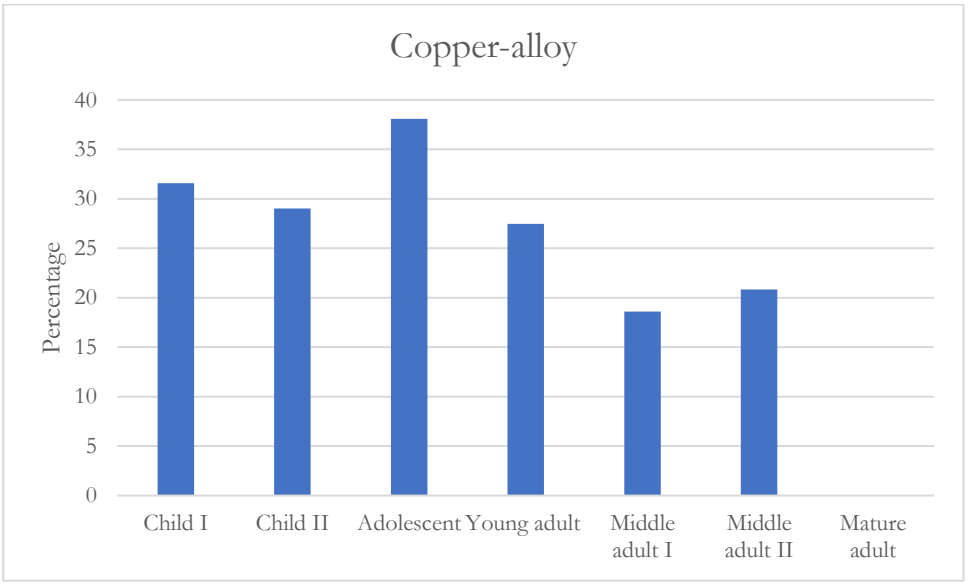


Figure 6.19: Percentage of each age category buried with at least one necklace item made primarily of copper-alloy.

6.4.1: Discussion

Analysis of the osteological age data reveals that, fundamentally, burial with a necklace was a rite accorded to individuals of all age groups; indeed, the proportion of the population buried with necklaces fairly closely mirrors the wider cemetery demography. This patterning carries over into the average number of elements associated with each age cohort, and the age-associations of particular object types. While individuals can occasionally have a markedly higher number of

necklace elements than average, there is no indication that this is at all connected to the age of the individual. Neither is any specific type of object exclusively associated with one particular age cohort.

The close correspondence between age at death among the general population and among necklace graves suggests that the wearing of necklaces may have begun as a young child, between the ages of one and five years old. Examples of young children belonging to this age cohort buried with relatively long and complex necklaces include a child between the ages of 2.5 and 3.5 from Lechlade (GL.Le.172/2) buried with a necklace consisting of silver wire rings, a small number of translucent glass beads, a Roman melon bead, two amethyst beads, two metal beads and a gold and cabochon garnet pendant (Boyle et al. 1998: 127), and a child of around 3.5 years at Didcot (OX.Di.12), whose necklace was composed of at least three silver wire rings and several unusual polychrome bead types (Boyle et al. 1995: 216). It is sometimes assumed that the objects buried with young children do not 'belong' to the deceased in the same way that grave-goods buried with adults do, and instead that they must be grave-side prestations or indicators of the social status of the family (Crawford 1999: 32; King 2004: 221). In the case of this personal jewellery, however, the close correspondence in the demographic profiles implies that necklaces were regularly worn in life, rather than simply gifted in death. It is difficult to comment specifically on the absence of infants within the sample of necklace graves, since they are found in very low numbers across seventh-century cemeteries generally, but the presence of necklaces in the graves of children from the age of one onwards may be because this corresponds to the age bracket at which children began to be regularly clothed, rather than simply being wrapped in swaddling clothes.[56] Certainly, this is the stage of the lifecourse during which most children will be able to move, walk and explore their environment at least semi-independently (Lewis 2011: 2).

If a necklace as a composite object is not strongly associated with any particular age cohort, there is some slight age-related patterning evident in the associations of particular object types and particular materials. For example, the necklaces found with children, and particularly younger children, more regularly feature elements like polychrome beads, amber beads (BE3) and items made from copper-alloys, object types which show affinities with the necklace styles of the fifth and sixth centuries. Such items may have had specific amuletic or mnemonic qualities but would also have appeared distinctly old-fashioned. The presence of amber beads in the graves of children in the seventh century, after they had otherwise largely gone out of use, is a phenomenon which

[56] It is extremely difficult to reconstruct the clothing worn by young children, since many are buried without metal garment-fasteners. Where evidence is available, this is because the young children are buried the full 'kit' of dress accessories typically found in adult graves. On this basis, a common assumption is that most children wore a simplified version of the adult costume, but, of course, there is a danger of constructing a circular argument here (Walton-Rogers 2007: 217).

has been noted previously (Geake 1997: 47; Walton-Rogers 2007: 217; Meaney 1981: 67). There are broader parallels for the apparently antiquated appearance of some of the necklaces worn by young children; Walton Rogers (2007: 217) discusses examples of children's graves of fifth- and sixth-century date that contain outdated dress-accessories.

Necklaces worn by children are also primarily composed of glass beads, and the average number of metal elements, such as pendants and wire rings, is lower than for subsequent age cohorts. Again, while there are considerable issues with attempting to determine the 'value' of particular objects and materials, it seems that children were more frequently buried with items thought to be less prestigious or more easily obtainable, such as glass beads and copper-alloys.

The provisioning of certain objects and materials seems to increase with age; imported materials like amethyst and, to a less extent, cowrie shells, as well as silver items are more frequently found in the graves of older individuals. Between the ages of eighteen and twenty-five individuals are most consistently buried with the highest average number of metal elements, particularly pendants and wire rings. In terms of object-specific associations, this patterning is borne out by the frequency with which bulla pendants (PE8) are found in the graves of young adults aged between eighteen and twenty-five. There is a corresponding drop in the average number of glass beads found with this age group; individuals in the 'young adult' group are, on average, buried with the lowest number of glass beads of all age cohorts. The amber beads (BE3) found in relatively high numbers with younger children are very infrequently found in the graves of young adults.

Some of the most notable age-related patterning relates to the final two age cohorts, 'middle adult II' and 'mature adult', women over the age of thirty-six. It is only after this age that the percentage of individuals buried with a necklace falls markedly below the percentage of this group within the wider cemetery population, suggesting that women belonging to these older age cohorts were least likely to be buried with a necklace. Interestingly, there are material correlates to this; women in the final two age cohorts are much more likely to be buried with a single necklace element than other age groups, and the average number of glass beads, non-glass beads and pendants in the graves of mature adult women is lower than all other age cohorts.

These results can be explored both in relation to the lifecourse and to the processes by which a necklace assemblage was collected and curated. In the fifth and sixth centuries the increasing average number of necklace elements associated with each successive age category, up to the age of forty (Stoodley 2000: tab. 7), suggests that the length of necklaces increased continually as an individual acquired or was given more elements across their lifetime. In the seventh century, since the overall length of necklaces remained both consistent and restricted across each age category,

the process of constructing and curating a necklace was, by contrast, clearly an ongoing, reflexive process. Indeed, such a scenario has already been proposed in light of the results of the examination of the evidence of wear and repair within the necklace corpus, which suggested that necklaces were fluid and mutable assemblages (see above, chapter 4).

As has already been argued, this process of curation must have been shaped by the personal taste, agency and social capital of the wearer. In the case of the jewellery worn by younger children, it may be that older, probably female, relatives also played a role in determining the composition of the necklace. The general patterning evident in the necklaces worn by younger children might plausibly result from the selection of objects from a relatively readily-available pool of material, composed primarily of beads, some of them heirloom polychrome and amber types that were no longer fashionable by the seventh century, and simpler copper-alloy objects. In some cases, however, it is clear that more prestigious objects and materials were sometimes also bestowed upon children from a young age. Some of these items obtained in childhood may have been retained throughout the life of the wearer, which would account in part for the evidence of wear on many items in the necklace corpus (see above, chapter 4.2), but undoubtedly others were swapped out for newly acquired elements. As an individual passed various age thresholds and took on new social roles, her agency to acquire certain materials, such as precious metals and imported materials, may have increased and thus there were new elements available for integration into her necklace.

As well as personal taste, patterns of inheritance and inter-generational gift-giving are likely to have been processes influencing the composition of necklaces. It is worth discussing inheritance in relation to seventh-century grave-goods for two reasons. The first is that many artefact types show physical evidence of an extended use-life, both in terms of wear-patterning and instances of repair (see above, chapter 4). The second is that several of the key bead- and pendant-types that characterise this period display an extended chronological salience, persisting across phases AS-FD and AS-FE of furnished burial, a span of between fifty and eighty years (see Hines and Bayliss 2013). This can be profitably compared with the tight chronologies for some fifth- and sixth-century objects, particularly brooch types, which develop on an almost generational timescale. Frequent inheritance of these Migration Period artefacts across multiple generations seems unfeasible from a chronological standpoint, although this does not mean that the material itself could not be recycled in a meaningful way (see Caple 2010).

It is difficult to pinpoint exactly the age at which Anglo-Saxon women typically began having children, although it is likely to have been between fifteen and twenty-five years of age. The youngest individuals from the small number of *in utero* double burials – i.e. women who had died

immediately prior to or during childbirth and been buried with the foetus still in the pelvic cavity – are between fifteen and twenty years of age (Sayer and Dickinson 2013). The peak in mortality for females in the 'young adult' age cohort (eighteen to twenty-five years old) also suggests that this was the stage at which most women began having children, especially given that modern studies have suggested that, statistically-speaking, the first pregnancy poses the greatest risk to the mother (see above, section 6.4; Sayer and Dickinson 2013). There are poignant examples of such women within the current sample of necklace graves. Grave 110 at Dover Buckland (Kent) contained the skeletal remains of a woman, estimated to have been between the ages of twenty and thirty. Within her pelvic canal, with the head pointed downwards, were the bones of an unborn full-term foetus, evidence suggestive of the death of both mother and child during a difficult pregnancy (Evison 1987: 18). Interestingly, in the context of the present study, the necklace items in this grave – two looped silver *sceattas*, a selection of glass beads and a silver wire ring – were not in the expected position on the upper chest but were instead placed between the lower legs. Were these elements of her personal jewellery that the mother had anticipated passing on to her unborn child? A woman between the ages of thirty and forty in grave 95 at Lechlade (Glos.), buried wearing a gold composite disc pendant and a glass bead, may be another example of a woman who died during the late stages of pregnancy, since the skeletal remains of a seven-month-old foetus were identified as deriving from the same grave during post-excavation analysis (Boyle et al. 1998: 97).

The evidence for the ages at which women regularly began to have children helps to contextualise some of the age-related patterning in the provisioning of certain necklace items and materials. Younger women, particularly those in the 'young adult' cohort more regularly buried with imported luxuries and higher average numbers of precious metal pendants and wire rings, are unlikely to have had a child older than five (i.e., belonging to the 'child I' cohort), if they had even been pregnant at all prior to their death. By contrast, however, older women who had survived beyond the age of thirty-five could feasibly have had a daughter approaching the upper end of the 'adolescent' age cohort. This seems to have been the overlapping stage in the lifecourses of mothers and daughters where the latter might begin to inherent more complex and valuable elements of jewellery from their mothers. Such patterns of inter-generational inheritance would explain both the generally 'richer' appearance (on average) of necklaces buried with younger women and the general reduction in the number of necklace elements in the burials of the oldest women.

6.5: CONCLUSIONS

This analysis has shown that, like most Anglo-Saxon jewellery, the necklaces worn in the seventh century are almost exclusively worn by biological females, and thus their wearing contributed to the expression and articulation of a feminine gendered identity. The age-associations of necklaces in the seventh century display some particular complexities. There are no absolute restrictions on the kinds of objects that could be worn by women any age. Equally, for all ages, necklaces were typically composed of a restricted number of elements.

Some object types do seem to be associated more with particular age cohorts, either because they were considered more appropriate to be worn by that group or because they fulfilled some specific amuletic or mnemonic function (such as the polychrome beads in the burials of the youngest children) or because the social capital to acquire particular items or materials (exotic imports, for example) was typically attained in adulthood. Necklaces are also slightly more frequently associated with younger individuals than older women; this seems to relate to the processes by which necklace assemblages were collected and curated.

Previous chapters have collated the evidence that implies many necklace elements circulated through complex networks of gift-exchange during the seventh century, either as materials or as finished items with extended biographies. The evidence from the osteological data sample suggests that at least some of this exchange occurred within close networks of female kin. Acknowledging the likelihood that the collective biographies of necklaces served to materialise and reify social relationships, the evidence discussed in this chapter points to some of the most important relationships being inter-generational, particularly those of mothers and daughters. This is a theme discussed in greater detail in the following chapter, which examines the biographical trajectories of high-status women mentioned in the seventh- and early eighth-century documentary sources.

CHAPTER SEVEN: NECKLACES AND SEVENTH-CENTURY SOCIETY

7.1: INTRODUCTION

Previous chapters have followed an object biographical framework as a means to examine seventh-century necklaces, focusing on their materials, manufacture, use, composition and age and gender associations. The purpose of this final chapter is to consider the contribution that the evidence from the necklace corpus can make to wider – and particularly persistent – debates surrounding the changing jewellery and dress fashions of the seventh century, the social position of women during this period, the influence of broader social transitions, including political centralisation and Christianisation, and shifting funerary practices.

Two central questions continue to be those of chronology and homogeneity. In other words, how rapid is the transition from a sixth-century Migration Period fashion to the markedly different seventh-century modes of female dress, and concurrently, why does the former shows strongly regionalised patterning while the latter appears essentially the same across a wide geographic area? It is essential to explore in detail the development of seventh-century necklace fashions and their relationship to what came before. Only once this interpretative groundwork has been laid is it possible to turn to other important questions: what did these necklaces mean to the women who wore them? Who were these individuals and what was their wider role within society? Why did necklaces continue to be placed in the grave at a time when the furnished burial rite was waning?

7.2: THE CHRONOLOGY OF THE MIGRATION PERIOD-CONVERSION PERIOD TRANSITION

Interpretations of shifting seventh-century dress fashions and burial customs are inevitably shaped by underlying chronological models. Previous models have favoured rapid transitions in the decades surrounding the turn of the sixth century. It is not uncommon to find descriptions within scholarship of the wholesale abandonment of previously traditional, Germanic modes of female dress, replaced, completely and swiftly, by a new style of costume. In part, this fairly blunt characterisation of the jewellery styles of the fifth-to-sixth centuries as entirely distinct from those of the seventh century relates to issues of periodisation, which encourages an uncritical division of material into broadly Migration Period and Conversion Period phases (Welch 2011: 275–6).

The more dramatic and sweeping the upheaval is understood to have been, the more plausible external influences and top-down pressures as explanatory factors seem. Hence Leeds (1936) interpreted the dress fashions and burial customs of his Final Phase as a Kentish fashion

transplanted to other regions through political influence. This argument depends on accepting at face value Bede's description of Æthelberht's *imperium*, however.[57] Geake (1997) was more careful in framing the rapid adoption of a novel suite of material culture as a deliberate, ideologically-motivated choice, recognising that material expressions of identity are activity constructed, rather than simply passively assumed. In Geake's model, the causational factors continued to be external pressures brought about by increasing social stratification and emergent kingdoms, with female jewellery co-opted as a medium by which a new 'English' ethnic identity could be communicated.

New chronological frameworks allow for these established models to be re-evaluated, to explore the question of how rapidly the fashions of the sixth-century Migration Period gave way to the seventh-century Conversion Period, and consequently what the factors behind this transition might have been. To summarise the results of the most recent chronological and typological research, it seems that the traditional Germanic form of dress and its corresponding metallic accessories characterise phase AS-FB (AD 510/45–555/85; Hines and Bayliss 2013). There were regional variations evident in this costume; in Anglian and Saxon areas various brooch types fastened a costume consisting of the peplos dress worn over a sleeved gown, while the women of east Kent wore the distinctive *Vierfibeltracht*, the outer garment consisting of a front-fastening coat (Walton Rogers 2007; discussed in more detail in chapter 5.4). By phase AS-FD (beginning between AD580 and 640) a new dress fashion was being worn, cutting across what had previously been defined regional zones. Necklaces are the primary form of jewellery during this period, and the subsequent phase AS-FE.

The intervening phase is AS-FC, which, in terms of absolute dates, covers the final decades of the sixth century and the first decades of the seventh (Hines and Bayliss 2013: fig. 8.16). The identification of AS-FC as a distinctive period is particularly important, in that it reframes the chronology of the early Anglo-Saxon period as a transition, rather than two discrete, abutting phases. Interpretation of phase AS-FC is not without significant challenge, however, as the authors of the *Anglo-Saxon Graves and Grave Goods* project admit (Hines and Bayliss 2013: 339–56, 537). In terms of the absolute chronological date range proposed for phase AS-FC there is considerable overlap with the subsequent phase, AS-FD (see fig. 1.2). It is also notable that there are almost no objects, whether from the necklace corpus or more widely among the suite of feminine material culture, that can be identified as a leading type of phase AS-FC. Instead, items identified as dating in part to phase AS-FC represent items primarily in use during AS-FB that had a longer salience (including many of the polychrome bead types) or the earliest introductions of objects that would come to characterise AS-FD and FE. Especially problematic are the very

[57] For discussion of this, see Fanning 1991; Yorke 1990: 28.

low numbers of graves assigned with confidence to phase AS-FC, clustered in a restricted number of cemeteries with a markedly uneven regional distribution (Hines and Bayliss 2013: fig. 10.7).

Most of the identified graves of phase AS-FC derive from cemeteries in east Kent, notably at Dover Buckland and St Peter's Tip; other graves of this phase from more recent excavations at Saltwood can be added to this list. The regional chronological frameworks developed for Kent are particularly robust and span the whole period of furnished burial (see Evison 1987; Brugmann 1999; Brugmann 2012; Richardson 2005). A continuous sequence of female dress styles has therefore been identified, labelled styles I–VI; Kentish dress style V was that worn during phase AS-FC. Kentish dress style V is characterised by a two-layered, probably sleeved gown, sometimes closed at the throat by a single disc brooch and cinched at the waist by a buckled belt (Walton Rogers 2007: 193; 2012: 187–8). Necklaces dated to phases AS-FC tend to contain a fairly large number of elements, and reconstructions suggest that they were arranged in complex, multi-stringed festoons (Walton Rogers 2012: fig. 5.7; Evison 1987: fig. 13). In some cases, such as grave 208 at St Peter's Tip, these necklaces represent mixtures of the latest in the series of polychrome beads (types BE1-Koch20, BE1-Koch34 and BE1-Dot34) and globular segmented types, coupled with the earliest examples of bead types that would become more popular during phases AS-FD and AS-FE, such as opaque orange (BE1-Orange), cowrie shell and amethyst beads. In other graves of this phase necklaces are dominated by small translucent green drawn segmented beads (here named BE1-SmallSeg).[58] This type is not discussed in detail by Brugmann (2004) or Høilund Nielsen (2013), but from the observations of the present study it seems that they are a distinctively Kentish bead form in use during phases AS-FC and AS-FD. Kent was also the only region where precious metal pendants seem to have been regularly worn as part of female dress during phase AS-FB, notably the earlier bracteates (type PE3-b; most of them D-bracteates).

Outside of Kent, graves belonging to phase AS-FC pose greater challenges of identification and interpretation. A small number can be identified at Melbourn, Water Lane (Cambs.), Morningthorpe (Norf.), and Holywell Row (Suff.) (Duncan et al. 2004; Green et al. 1987; Lethbridge 1931). In these graves, necklaces are dominated by the latest in the series of polychrome beads, including types BE1-Koch20 and BE1-Koch34, interspersed with miscellaneous monochrome types. The clearest connection with the later dress fashions of phases AS-FD and FE is evident in the presence of scutiform pendants (variants of class PE2), bell-shaped silver beads (type BE2-c) and simple early forms of wire rings. These necklaces appear in combination with a broochless, unbelted costume, sometimes with a small collection of items suspended from the waist. The larger cemeteries in the north of England provide a handful of

[58] See, for example, grave 360 at Dover Buckland (Parfitt and Anderson 2012) and grave C4659 at Saltwood (Riddler et al. 2006).

scattered examples of burials of phase AS-FC in this region. The adult woman in grave 96 at Castledyke South (Lincs.), for example, seems to have worn a late version of the peplos dress, fastened with a pair of small and relatively delicate annular brooches, and between them, above the collarbones, a simple necklace consisting of two monochrome beads, a single bead of type BE1-Koch34 and a bell-shaped silver bead (type BE2-c) (Drinkall and Foreman 1998: 63).

A particularly perplexing gap in the distribution of graves phased to AS-FC are the Saxon regions of central and southern England. To take the large and long-lived Thames Valley cemetery of Lechlade (Glos.) as an example, numerous furnished female burials belonging to both phases AS-FB and FE can be identified, but none can be assigned with confidence to the intervening period (compare Hines and Bayliss 2013: figs. 10.6–9).

This difficulty in identifying female burials dating to phase AS-FC is also evident in the summed probability distributions of the graves assessed by the *Anglo-Saxon Graves and Grave Goods* project, which is strongly bimodal (fig. 1.1). Archaeologically identifiable female graves are concentrated mostly in the mid sixth and mid seventh centuries. The same is not true of the male burials, which show a gradual decline in the overall rate of furnished burial from a peak in the mid sixth century (fig. 7.1). Comparison with the contemporary male sequence therefore suggests that the dearth of identifiable female burials datable to phase AS-FC are unlikely to result from underlying demographic fluctuations. Instead, it seems that the women who died during this period are likely among the poorly furnished or unfurnished graves of the cemeteries in use during this time.

It is presently unclear whether the archaeological invisibility of women during phase AS-FC reveals or obscures shifting dress and jewellery fashions across the transition from the Migration Period to the Conversion Period. If it is assumed that the rate of *furnished* deposition remains relatively stable, this would imply that during phase AS-FC most women, especially outside Kent, had begun to wear a style of dress essentially without chronologically distinctive accessories. In this case, the broader transitions from phases AS-FB to AS-FD should be understood not as the rapid and dramatic replacement of one dress- and jewellery-fashion with another but instead as a shift towards a style of costume worn without metal dress accessories or decorative jewellery, followed by the reintroduction of the latter in the form of short seventh-century necklaces and linked pins in phases AS-FD and AS-FE. The alternative would be that most women wore in life the kind of hybrid jewellery fashions represented in the small number of identifiable phase AS-FC graves but that, for some reason, a conscious decision was made by many communities not to include these items in the grave.

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Figure 7.1: Modelled frequency of furnished male burial through time.

Neither hypothesis is without issues and neither is likely to be satisfactorily resolved without further detailed examination of the underlying data. At present, on the basis of the limited evidence available, it seems that a transitional period (phase AS-FC) that saw the wearing of a hybrid necklace style is the more plausible model, with the caveat that wider fluctuations in the rate of furnished burial are very likely to be obscuring underlying patterns. Certainly, in Kent – the only region where it is possible to fully trace the development of dress styles from the fifth to seventh century – the material itself speaks to continuity and gradual change rather than rapid and wholesale shifts to a new suite of material culture. Hence the necklaces in the identified Kentish graves of phase AS-FC parallel features of the later seventh-century types, in the presence of pendants of various forms (mostly inlaid pendants and the earliest Style II bracteates), the first examples of imported bead types (mostly amethyst, cowrie shell and probably also BE1-Orange glass beads) plus the popularity of the latest polychrome types, especially beads of BE1-Koch34, and small numbers of amber beads, use of which would persist in small numbers into phases AS-FD and AS-FE. Other aspects of Kentish dress fashions are also suggestive of continuity, rather than sudden shifts. For example, the sequence of keystone-, plated- and composite disc-brooches present an obvious illustration of the development of a single recognisable artefact type across the Migration Period-Conversion Period transition of the later sixth and early seventh centuries (Avent 1975).

Although the graves dated to phase AS-FC outside Kent are far from a representative sample, again, on the basis of the material itself, connections can be made with the recognisably seventh-century jewellery repertoire: several of these graves contain precious metal elements, including scutiform pendants, simple wire ring forms and bell-shaped metal beads of type BE2-c, in

addition to the latest polychrome bead types also seen in Kent. There is also some limited evidence in Anglian regions for the persistence of other types of dress accessory across the chronological boundary of the Migration Period-Conversion Period. Delicate forms of narrow annular brooches are perhaps the best example of this (Walton Rogers 2007: 187; Geake 1997: 52).

7.3: THE DEVELOPMENT OF SEVENTH-CENTURY NECKLACE STYLES

Having reviewed the evidence for when, and indeed, how rapidly seventh-century necklace styles were introduced, attention can now be directed towards the question of *how* this distinctive jewellery developed. What processes and influences are reflected in the presence of different individual object types and overall form of seventh-century necklace festoons? Understanding how necklace styles developed is fundamental to exploring what the wearing of these objects would have meant to wearers and viewers.

It is instructive to begin here with Helen Geake's (1997; 1999) hypotheses concerning the development of seventh-century necklaces, since hers is among the most detailed studies of this class of objects and continues to be cited in more recent scholarship (for examples, see Walton Rogers 2012: 212; Williams 2010: 30; Hamerow 2016: 428). Geake's doctoral thesis outlined a comprehensive model to explain what she saw as the introduction of a whole range of new material culture styles at the beginning of the seventh century (1997). She argued that it is possible to detect a late antique 'flavour' evident in the form and style of many object types. Here 'late antique' should be understood as something of a catch-all term; some of the object parallels cited by Geake are roughly contemporary early Byzantine artefacts, while in other cases a revival of distinctively Romano-British artefact styles is posited. Geake argued that this late antique-style material would have been identifiable as such to contemporaries in seventh-century England, and represented a conscious adoption of the material signals of *Romanitas*, intended to reinforce political legitimacy in response to the societal pressures entailed by the historically-attested processes of kingdom formation (1997: 120–2).

Necklaces and their constituent elements are singled out as providing particularly clear evidence for the conscious imitation of late antique jewellery styles (Geake 1997: 109–112), with much of the discussion focused on the pendant corpus. Late Roman or early Byzantine parallels are suggested for many of the different artefact types, from cabochon pendants (variants of class PE9), bullae (PE8), composite disc pendants (PE1), coin pendants (PE7), mounted tooth pendants (PE10-b) and cruciform pendants (PE5), as well as amethyst and metal (BE2) beads. Following a survey of relevant collections of both late Roman (Johns 1996; Johns and Potter

1983) and early Byzantine jewellery (Baldini Lippolis 1999; Ross 1979, 2005; Spier 2010, 2012; Yeroulanou 2010; Brown 1979; Deppert-Lippitz 2000), it is the view of the present author that, although there are some clear visual similarities between Conversion Period Anglo-Saxon necklaces and the late antique jewellery discussed by Geake (1997; 1999), the closeness of the relationship between the two has been overestimated, and therefore does not further our understanding of what these necklaces meant to their wearers and viewers in seventh-century England. The purpose of the following discussion is not, however, to take each individual object type in turn and critique the various comparisons proposed by Geake (1997). Instead, it is important to examine some of the problematic assumptions implicit within the model as a whole, illustrated by relevant examples.

The first issue is that the materiality of some seventh-century necklace elements is not given sufficient consideration in Geake's model. For example, Geake points to the presence of imported materials, chiefly cabochon garnets (in pendants of type PE9-b) and amethyst beads as some of the clearest indicators of the influence of late antique jewellery fashions. There is no attempt, however, to unpack the significant implications of statements such as:

> '… it is possible that not only the fashion, but the garnets themselves… may have been imported from the Mediterranean' (Geake 1997: 110; for a similar statement on amethyst beads, see p. 112).

A review of the evidence for the provenance of these gemstones has revealed that both almost certainly do originate in the eastern Mediterranean and arrived in early medieval England in semi-finished form (see above, chapter 2.2.4–5). There is little evidence to suggest that this trade was direct. To judge from the distribution patterns of long-distance imports like amethyst beads and whole cowrie shells in Merovingian row-grave cemeteries, exchange seems to have been down-the-line, crossing the Alps and following riverine routes north (Drauschke 2010). Therefore, while Geake is not incorrect in identifying both cabochon garnets and amethyst beads as deriving ultimately from a late antique jewellery tradition, there is a problematic elision here of the archaeologically-identifiable movement of materials and the hypothesised transfer of ideas and styles. The same argument can be applied to other materials. The widespread use of gold in seventh-century necklaces, especially when compared to earlier Migration Period jewellery, is a feature that – superficially – suggests a connection to late antique jewellery traditions. Again, this pattern results primarily from demonstrable fluctuations in the availability and supply of materials from the later sixth century onwards, in this case the influx of gold in coined form, originally, although again certainly not directly, from the eastern Mediterranean (see above, chapter 2.2.1).

Clearly, therefore, it is not sufficient to point to the exotic provenance of some of the materials within necklaces as straightforwardly indicative of wider processes of conscious emulation.

It is to the evidence of design and manufacture that we should look in evaluating the connections between the Anglo-Saxon jewellery and proposed Byzantine prototypes. In the case of the imported materials, it is notable that the ways in which they were reworked are not reflective of late antique traditions. Cabochon garnets are a good example of this. Within the necklace corpus, these are most commonly set singly within a looped pendant frame (see figs. 9.109–111). By contrast pendants set with single gemstones are relatively rare within surviving collections of late Roman or early Byzantine jewellery and tend to feature unusual and visually interesting settings, such as intaglios or cameos (fig. 7.2). Undecorated cabochons are more frequently found in the bezels of finger-rings, when used singly (fig. 7.3), or are set within larger composite objects (fig. 7.4). These are idiosyncrasies in the use of materials that distinguish, rather than connect, the early medieval and late antique jewellery traditions.

Perhaps one of the most difficult aspects of Geake's (1997; 1999) overall argument is that the mechanisms by which emulation of late antique jewellery could have occurred are not satisfactorily addressed. The most straightforward explanation would be the imitation of finished pendants and necklaces since this would be consistent with other evidence for regular patterns of long-distance exchange. Whether such objects could have arrived with sufficient frequency to have stimulated the production and wearing of a whole new range of necklace elements is much less certain. Certainly, it is difficult to definitively identify any items within the present corpus as the products of early Byzantine jewellery workshops. Even the objects displaying the strongest visual parallels to late antique jewellery reveal specifics of technique and manufacture that instead connect them to the wider seventh-century necklace corpus. A good illustration of this are the cruciform pendants of the type found at Desborough (NH.De.01.20) and Milton Regis (KE.MR.00.01). Although similar in shape and design to a number of early Byzantine cross pendants featuring small central cabochon settings (fig. 7.5), the tubular arms and crude rivetted construction of the former and the reeded suspension loop and cloisonne garnet settings of the latter are features indicative of manufacture within the Anglo-Saxon goldsmithing tradition. The absence of any reliably identifiable finished jewellery elements that could have serve as prototypes presents a particular challenge to Geake's overall argument, given that we would expect these elements to at least occasionally turn up in necklace contexts were they particularly valued as material symbols of *Romanitas*.

In the case of some artefact types Geake (1997) proposes that the likely prototypes were Roman objects. A good illustration of this are bulla pendants (type PE8; see figs. 9.106–7). As a type, they

take their name from similar spherical or hemispherical pendants recovered from Roman contexts such as graves and jewellery hoards (for examples see Cool 2006; Watson 2003: fig. 49; Crummy et al. 2016: 6–7). While the occasional disturbance, whether fortuitous or intentional, of these kind of closed contexts during the early medieval period is well attested by the range of reused antique material found in fifth- to seventh-century graves (see White 1989; Werthmann-Carroll 2020), the argument that this material suddenly prompted widespread imitation of a late antique style of jewellery in the early seventh century seems difficult to sustain. Recent studies of the phenomenon of reused antiquities have overwhelmingly emphasised the importance of the unknown, mysterious biographies of these artefacts (Eckhardt and Williams 2003). This is also the conclusion of the present study, which has argued that the repurposing of antiquities in necklace contexts was selective, prompted by their aesthetic appeal and material affordances, as opposed to their inherently symbolising a known historical past (see above, chapter 2.2.7). An additional conclusion of the present study is that, while Roman objects and materials are the most numerous category of reused antiques, prehistoric material also forms an important part of this small corpus, which again serves to contradict the idea that there was a deliberate and ideologically-motivated selection of material to communicate a sense of Roman-ness.

Geake (1997: 121) also proposes that the depiction of late antique material culture in surviving visual media, such as statuary, mosaics, frescos and portable art, might have equally served as an indirect mechanism by which jewellery styles could have been imitated. The extent to which visual sources were available to serve as models is debatable. Indeed, in finding depictions of necklace jewellery within late Roman and late antique art one must cast a fairly wide net. Women wearing jewellery are very rarely depicted among the surviving Romano-British mosaics, for example; the figure of Dido wearing a short necklace and a body chain in the Low Ham (Som.) mosaic is an rare exception to this general rule (Cosh and Neal 2005: no. 207). Depictions of late antique jewellery, across various media, also rarely ever depict necklaces in sufficient detail to allow the type and materials of individual elements to be identified with confidence, and certainly not to the extent that they could have been reproduced in three dimensions.

There are therefore numerous issues with the mechanisms by which a proposed imitation of late antique jewellery could have occurred. A related problem is that, in looking exclusively to the late antique jewellery corpus to support a hypothesis of mimesis and emulation, Geake (1997) also overlooks parallels for certain objects from contexts that are much closer both geographically and temporally. This was in part a rejection of earlier scholarship, which proposed that the new jewellery styles of the seventh century were introduced instead through contact with the Franks (see Leeds 1936). Beaded wire pendants of type PE6 provide a good illustration of this. Geake (1997: 110) proposes a connection with the openwork filigree terminals of late antique necklaces,

but here there is an important functional distinction between these terminals and the looped seventh-century pendants. Much closer parallels for the Anglo-Saxon objects derive from graves, jewellery hoards and stray finds in Scandinavia, the Rhineland and the Netherlands (Nicolay 2014: fig. 5.36, Axboe and Grønnegaard 2019: 57–60; Clemmensen 2014: 128–30; Lamm and Axboe 1989).

The same is also true of composite disc pendants (type PE1; figs. 9.87–94). Geake (1997: 110; fig. 5.6) cites a gold filigree pendant from a late sixth-century jewellery hoard in the Dumbarton Oaks collection (see fig. 7.6i) as a parallel for the Anglo-Saxon disc pendants but does not note that this object is itself relatively unusual within collections of late antique jewellery. There are, however, numerous examples of gold pendants decorated with applied filigree from sixth- and seventh-century contexts in the Netherlands, Germany and northern Italy (see figs. 7.6ii–vi). Of course, such gold jewellery on the continent is itself understood to be influenced by contemporary Byzantine jewellery fashions (Schluze 1976; Koch 2013: 49–54). Again, however, it is necessary to separate stylistic influence in its strict art-historical sense, expressed via the use of similar materials and techniques, from deliberate and conscious imitation of eastern Mediterranean fashions. Allowing for the transfer of jewellery styles around the wider North Sea basin, it still remains questionable whether such objects specifically carried *imperial* connotations, or whether they were simply appreciated as symbols of high status and cosmopolitan taste.

Regular transmission of ideas and styles around the North Sea during the seventh century is also evident within the bead corpus. The status of research at the time of Geake's (1997) study allowed for little to be said on the subject of seventh-century bead fashions, beyond the predominance of small monochrome types. Subsequent work, especially Brugmann's (2004) typo-chronological studies, have revealed the presence of the same bead types (primarily BE1-Orange and BE1-WoundSp) in England, Scandinavia and Merovingian cemeteries in Germany, patterns which probably result from shared supra-regional bead-making traditions.

The purpose of drawing attention to Scandinavian and continental parallels for objects in the Anglo-Saxon necklace corpus should not be understood as implying that external stylistic influences were instead transplanted wholesale to seventh-century England from these regions, straightforwardly replacing the late antique or Romano-British fashions of Geake's hypothesis. Such approaches seriously underestimate the capacity for innovation on the part of the Anglo-Saxon craftworkers, given that there is clear evidence for the production of jewellery items in seventh-century England (see above, chapter 3). It is important to note in this regard that the composite disc pendants from Anglo-Saxon contexts are much more elaborate and show a generally higher level of technical skill than similar items from the continent (Mazo-Karras 1985).

The argument for conscious imitation of late Roman or early Byzantine models can also be called into question as chronological frameworks are refined. When Geake first proposed her thesis, the then-current understanding of the Migration Period-Conversion Period divide emphasised dramatic discontinuity. It is now clear, however, that the transition between the two – across phase AS-FC – was much fuzzier (see above, chapter 7.2). Some object types – particularly imports like amethyst beads and cowrie shells – are understood to have been introduced slightly earlier than previously thought, at least into Kent, which suggests that the import of exotic materials and the introduction of new forms of objects are not part of a single underlying contemporary phenomenon. Equally it is clear that some object types span the transition, with clear Migration Period precursors to some typically seventh-century artefacts identifiable. A good example of this is the small number of crudely formed wire rings in sixth-century contexts (Meaney and Hawkes 1970: 37–8). It is perhaps not surprising that a more delicate version of this artefact became increasingly popular in the seventh century, given the ubiquity of wire-making as a technique within contemporary jewellery production and the relative increase in the availability of precious-metals (see above, chapters 2.2.1–2 and 3.2.1.3).

Seeking to identify a single, all-encompassing cause behind the development of a distinctively seventh-century jewellery fashion also misses a fundamental aspect of the nature of necklaces at the centre of this project. They are, above all, assemblages. There is a wealth of evidence to suggest these are mutable collections, probably changing throughout the lifecourse as new elements are introduced, with the overall design as crystallised in the funerary record resulting from multiple separate decision-making processes. In this regard, these necklaces differ in a crucial way from the fixed loop-in-loop chains of their proposed Roman or Byzantine prototypes, which were clearly shaped by a defined and stable design principle. Within these mutable seventh-century assemblages, we should not expect to find a single underlying symbolic message, nor a unified stylistic inspiration.

Instead the distinctiveness of the seventh-century necklaces should be understood as the result of several factors: the introduction of new materials to an established form of female jewellery; the capacity for innovation on the part of seventh-century craftworkers, producing a new range of object types, some of which might draw on various external stylistic influences; and wider changes to female dress, including a shift away from metal fasteners like brooches and buckles, allowing for greater investment in non-functional jewellery, and the wearing of a more voluminous head-covering, which prompted the wearing of shorter necklaces higher up on the body (see above, chapter 5.4).

7.4: WOMEN'S NETWORKS

If the idea of a single monolithic cause underlying the introduction of a distinctive seventh-century necklace fashion must be abandoned, questions concerning the homogeneity of this material across Anglo-Saxon England persist. Numerous aspects of the evidence already discussed demonstrate that the wearing of necklaces in the seventh century was part of an established tradition. Many individual object types show a wide distribution, the underlying patterns of which have remained largely unchanged even as more recently uncovered finds are collated (compare figs. 9.26, 9.29, 9.40, 9.69, 9.73 with Geake 1997: maps 7–13). This is part of a broader suite of feminine material culture found across seventh-century England, suggestive of the wearing of the same style of female dress, sometimes accessorised with linked pins, composite disc brooches or workboxes suspended from the waist. The ways in which necklaces were worn show few locally- or even regionally-specific patterns. The method of suspending necklaces between paired wire rings is a good example of a widespread practice. Although highly individualised in their composition and components, the seventh-century necklace fashions are shaped by some important shared underlying principles, such as the trends toward a restricted length, with the average number of elements showing little regional variation (see above, chapter 5.2.1), and consistent age patterning within regional samples (see above, chapter 6.4). There are also instances suggestive of direct citation between particular objects and graves. A particularly interesting example of this is the presence of pendants set with segments of reworked Iron Age Class 6 beads in three graves from cemeteries north of the Humber, at Sheffield's Hill (Lincs.), Street House (N. Yorks.) and Cow Low (Derbs.). In each case the beads are reworked in the same way, to form a triangular arrangement of white spirals within the pendant frame. A more immediate connection between the three, perhaps deriving from a shared context of recovery (such as the Iron Age barrow cemeteries of East Yorkshire), has already been proposed (see above, chapter 2.2.7), but more generally these objects would serve as a material symbol of close networks that connected the three wearers.

A homogenous style of necklaces is just one aspect of well-furnished seventh-century graves that marks them out as a related group. Necklaces were part of a wider feminine costume that was worn across seventh-century England. Other distinctively seventh-century dress accessories show the same broad distributions as necklaces, including workboxes, linked pins, composite disc- and safety pin brooches (Geake 1997: maps 4–6, 20). The well-furnished female graves of phases AS-FD and FE are a discrete and related group, linked by a shared repertoire of material culture of which necklaces were just one aspect. An additional profitable comparison can be made with the bed burial tradition, also characteristic of this same group. There are thirteen known bed burials, of which eight are in the present database. Again, this rite has a broad distribution pattern, from

Wiltshire, East Anglia, the Peak District and the Tees Valley (Speake 1989; Evans et al. 2018: fig. 5.12). The selection of this relatively unusual burial rite provides a particularly clear illustration of the ideological links evident within this group. As bed burials are a broadly contemporary phenomenon, it is not possible to state which later burials emulated which earlier graves, but it is clear that this cohesive and dispersed group reflects patterns of connection, communal memory and repeated citation. As Williams (2006: 27–33) has noted, bed burials were undoubtedly impressive and involved funerary performances, the audience for which are unlikely to have been drawn exclusively from the immediate community.

The homogeneity of seventh-century female dress appears all the more marked when compared to the strongly regionalised distribution patterns of particular objects and dress styles during the Migration Period. The classic examples of this are the clustering of cruciform brooches in Lincolnshire and East Anglia and of saucer brooches south of the Thames, which have been compared – not unproblematically – to Bede's famous description of the migration and settlement of the Angles and Saxons (*Historia ecclesiastica* I.15). Recent scholarship has recognised that the wearing of these regional brooch- and costume types expressed an ethnic identity that was not grounded in the fifth-century realities of mass migration and population change, but which were instead active and situational constructs of the sixth century (Martin 2015; c.f. Harland 2019).

It is important to emphasise here, however, that the jewellery of the seventh century – primarily short necklaces and linked pin suites – did not directly replace brooches, either in a functional sense or a class of feminine dress accessories. Seventh-century necklaces find clear precursors in the bead festoons of the sixth century. It is worth briefly considering the function of these earlier necklaces within the strongly regionalised costumes of the Migration Period before examining how this relates to the later evidence.

Earlier bead festoons are an understudied class of objects, generally addressed from only a typo-chronological perspective (e.g. Guido 1999; Brugmann 2004), perhaps because they are viewed as somewhat minor elements of the complex sixth-century costumes featuring multiple metal dress accessories. While there are clearly regionally-specific ways of wearing bead necklaces, such as the Kentish fashion for suspending looped bead festoons from a single centrally-located brooch (Walton Rogers 2007: fig. 5.49), distribution maps of fifth- and sixth-century bead types reveal that few types closely correspond to the regional zones demarcated by various brooch forms (Brugmann 2004). One explanation for this might be, therefore, that while the brooches worn by some important adult women were constitutive of communal, perhaps even ancestral group identities, as Martin (2015) has convincingly argued, bead festoons were not subject to the same external interests and pressures, and instead represented an arena for the expression of

individualised identity and personal taste. This is a topic that would benefit immensely from further study but, generally speaking, it fits with observations of several studies exploring social identities in relation to osteological data (Stoodley 2000; Gowland 2006), which have demonstrated that the wearing of small numbers of beads was one of the few aspects of costume not governed by strict age-restrictions, which were presumably the result of community-wide norms and taboos regarding age-appropriate dress.

The evidence seems to suggest therefore that the declining popularity of the brooch-fastened costume toward the end of the sixth century marked the end of communal investment – both in a practical, material sense and an ideological one – in female dress. This shift was likely just one facet of a wider societal reconfiguration underway in the late sixth and early seventh centuries. Based on detailed studies of the chronology, grave furnishing and spatial organisation of a series of case-study cemeteries, Sayer (2009; see also 2010) has identified evidence indicative of fundamental changes to kinship relationships across the Migration Period-Conversion Period transition. The situation in many sixth-century cemeteries seems to have been that grave wealth and cemetery organisation were consciously manipulated by the community to highlight certain important individuals in each generational timespan, most often a conspicuously wealthy male-female pair. These burials, Sayer (2009; 2010) suggests, are those of the heads of the burying community, an extended kin group that probably consisted of a few families (depending on the size and duration of the cemetery). Comparison of the sixth- and seventh-century phases at Mill Hill and Finglesham (both Kent) revealed that this same inter-community vertical stratification is not evident in the later burials (Sayer 2009). By the seventh century the families that had the means and social capital to commemorate their deceased kin via the medium of furnished burial tended to do so with a relatively consistent level of investment. This seems to indicate a change in emphasis away from single central figures within wider kin groups to the immediate elite family as a cohesive unit. The changing funerary traditions of the seventh century therefore seem to represent a shift in outlook outwards, between distinct – and probably competing – families, rather than the inter-community relationships reflected in the cemetery evidence of the sixth century. This model dovetails neatly with the declining importance of an age-restricted gendered costume that symbolised group affiliation, while necklaces, which were much more intimately connected with personhood and the individual, persisted as a general category of feminine dress accessory across the Migration Period-Conversion Period transition.

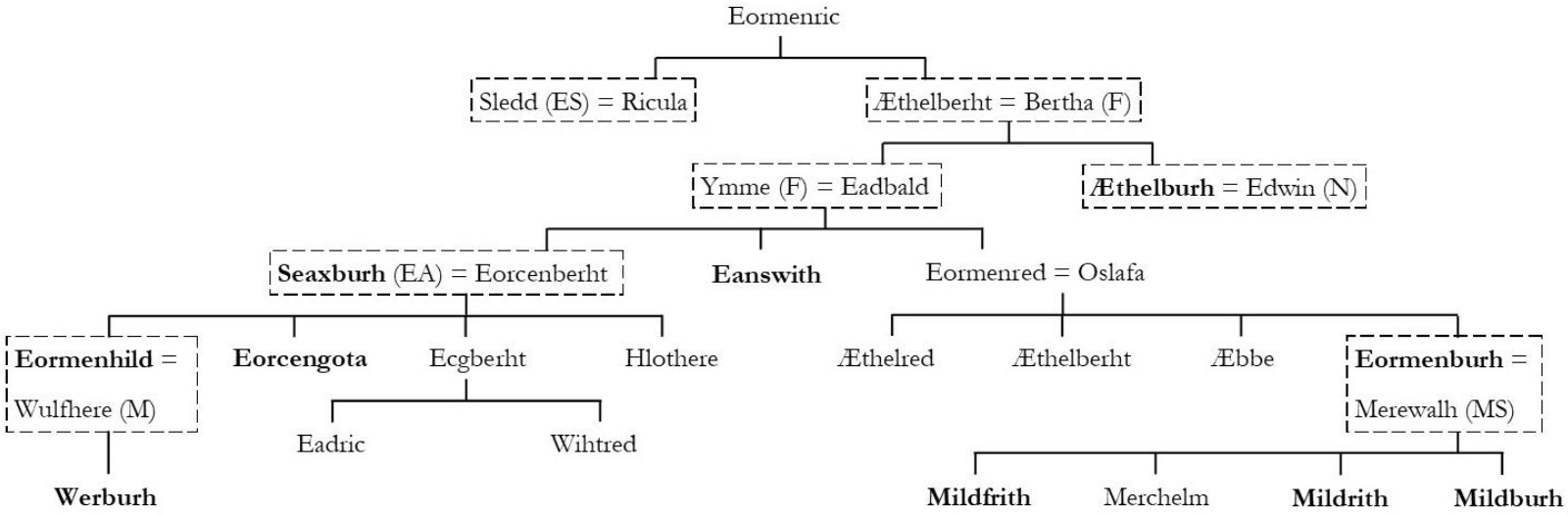
Therefore, it seems more productive to consider the spread – during phases AS-FD and AS-FE – of regionally-homogenous dress and jewellery styles as indicative of the broader networks and connections accessible to women during the seventh century and the importance of close familial relationships. The archaeological evidence for this connectivity can be contextualised through an

examination of the documentary sources. Through a careful reading of near-contemporary historical accounts and legislative documents, it is possible to build a picture of the kinship structures of the seventh century and explore the role of women within these.

Figures 7.7–9 present the genealogies for the Kentish, Northumbrian and East Anglian royal houses from the later sixth century to the end of the seventh, a period which covers around five or six generations (adapted from examples in Yorke 1990 and Dockray-Miller 2000). Focus is directed towards these royal dynasties as case studies because the interest here is specifically in the female members; for the other kingdoms of the East Saxons, West Saxons and Mercians the reconstructed genealogies are essentially regnal lists (Yorke 1990), and so of limited use to the present study. These imbalances in the nature of the evidence derive from the interests and focus of the underlying source material. Of these, Bede's *Historia Ecclesiastica* is the most valuable for reconstructing these familial relationships, but saint's lives, charters, regnal lists and, in the case of Kent, the later Mildrith legend, provides additional supplemental information (Yorke 1990). Even with such source material available, it is important to emphasise that the genealogical diagrams are by no means complete. Across the three case studies that there are multiple unnamed individuals, many of them women, missing from the family trees, and in all likelihood minor members of these royal dynasties are probably also seriously underrepresented. This is not to say, however, that this information cannot be used carefully to draw important conclusions of relevance to the current study.

One important observation is the frequency of exogamous marriages. Indeed, there just two examples across the royal dynasties of Kent, Northumbria and East Anglia where the marriages are not certainly exogamous.[59] Equally, however, this cannot be ruled out, since in each case our information is limited to the names of the relevant individuals. Exogamous marriages formed a complex web of dynastic connections between the Anglo-Saxon royal houses. Examples from Kent include the marriage of Ricula to Sledd of the East Saxons, Æthelburh to Edwin of Northumbria, Eormenhild to Wulfhere of Mercia and Eormenburh to Merewalh of the Magonsæte. Of the Northumbrian princesses, Hereswith married into the East Anglian royal dynasty and Osthryth and Ælhflæd the Mercian royal house, while the marriage of Eanflæd and Oswiu united the Deiran and Bernician sub-kingdoms. Two of the daughters of Anna of East Anglia also married into other dynasties, Seaxburh marrying Eorcenberht of Kent and Æthelthryth Ecgfrith of Northumbria. Equally, within the Kentish, Northumbrian and East Anglian genealogical diagrams, there are examples of exogamous brides of West Saxon and Mercian origin.

[59] These are the marriages of Eormenred of Kent to a woman named as Oslafa in the later Mildrith legend (Yorke 1990: 35) and the marriage of the Northumbrian prince Hereric to Breguswith, whose origin is not mentioned by Bede and who may therefore have also been Northumbrian.



Key:

N: Northumbrian	ES: East Saxon
M: Mercian	WS: West Saxon
K: Kent	MS: Magonsæton
EA: East Anglian	F: Frankish

Figure 7.7: The genealogy of the Kentish royal house from the later sixth to the early eighth century. Exogamous marriages are highlighted by dashed boxes. Bold font indicates women who entered monastic houses. Adapted from Yorke 1990: tab. 2–3 and Dockray-Miller 2000: appendix I).

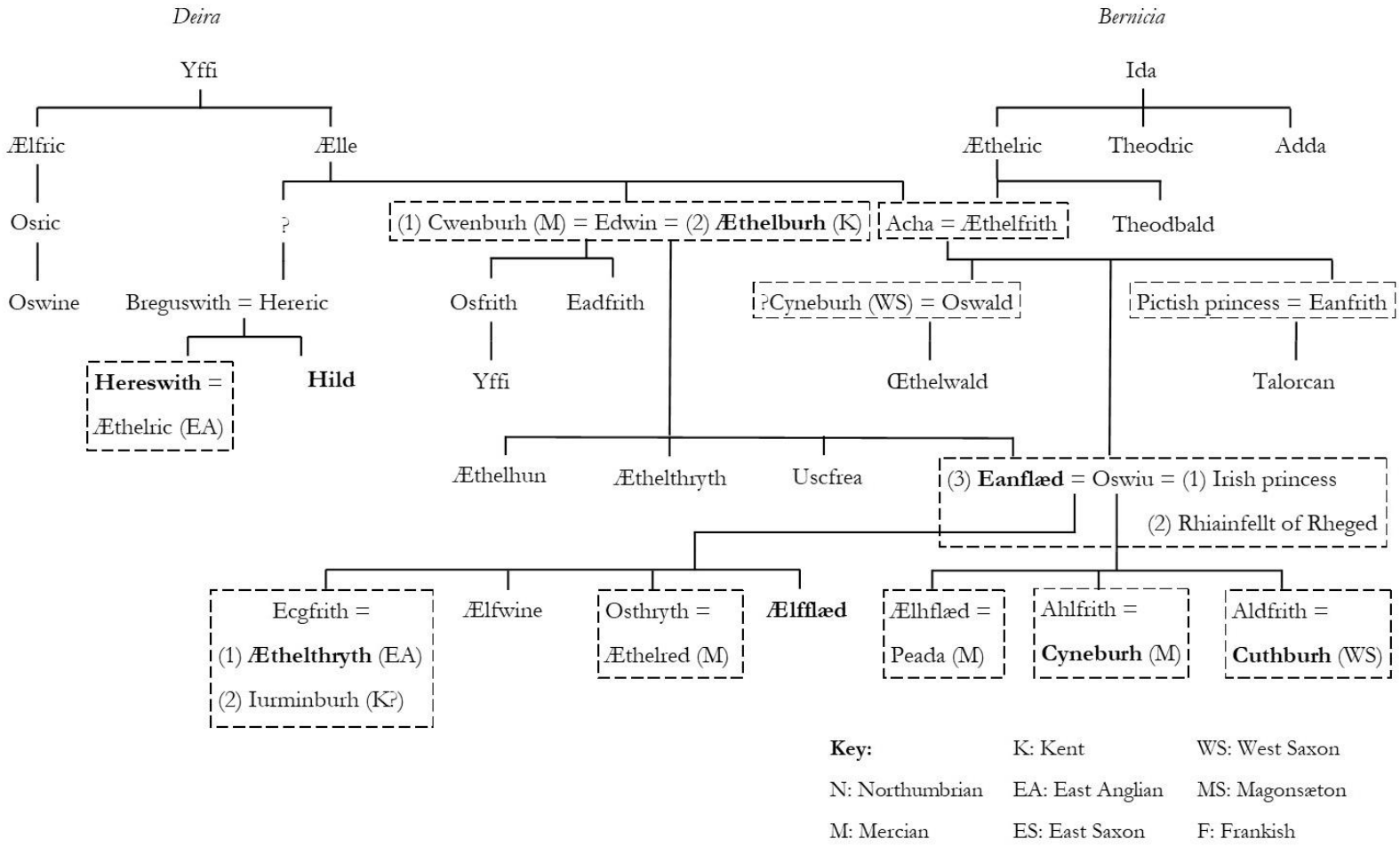


Figure 7.8: The genealogy of the Northumbrian royal house from the later sixth to the early eighth century. Exogamous marriages are highlighted by dashed boxes. Bold font indicates women who entered monastic houses. Adapted from Yorke 1990: tab. 9.

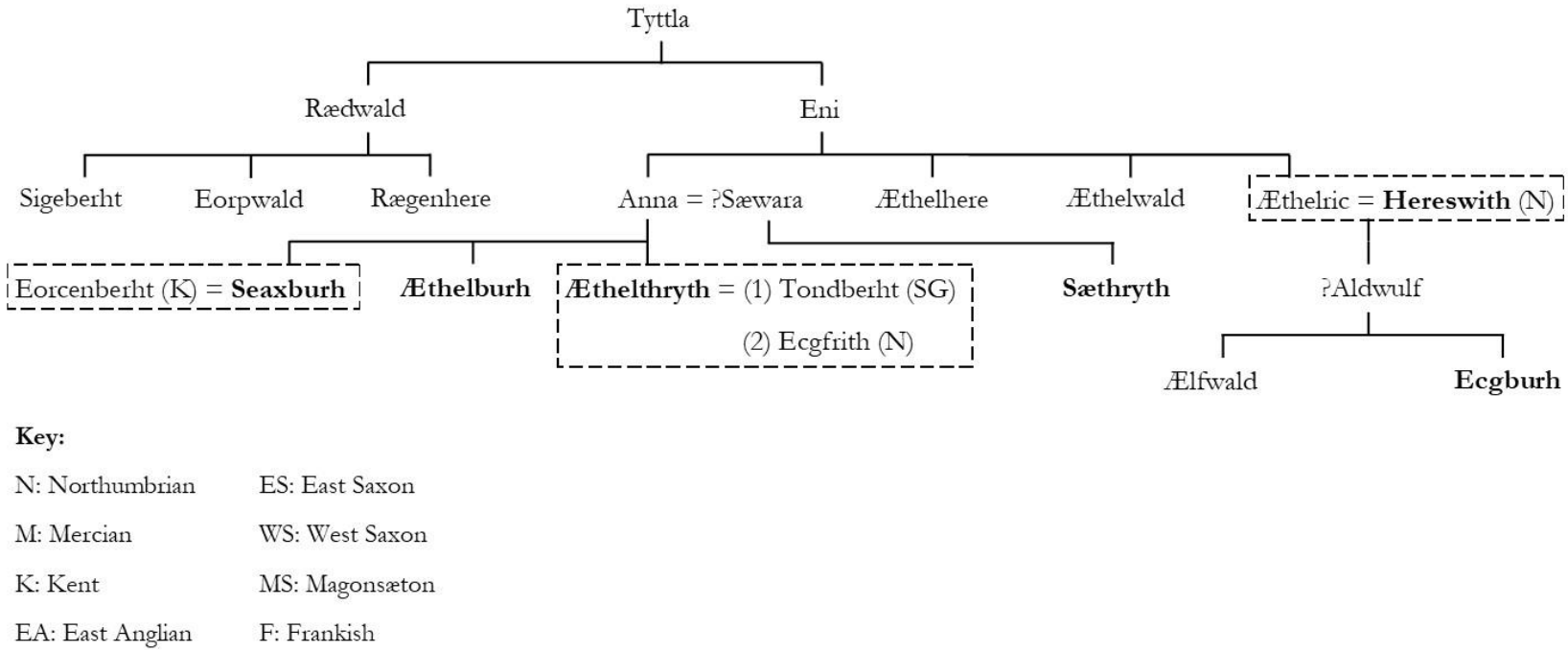


Figure 7.9: The genealogy of the East Anglian royal house from the later sixth to the early eighth century. Exogamous marriages are highlighted by dashed boxes. Bold font indicates women who entered monastic houses. Adapted from Yorke 1990: tab. 7.

Exogamous marriages also forged connections beyond the emergent Anglo-Saxon kingdoms. Two generations of Kentish kings, Æthelberht and his son Eadbald, married Frankish princesses in the later sixth and early seventh centuries, the former Bertha, daughter of Charibert and the latter probably a member of the wider Neustrian royal household, whom the Mildrith Legend names as Ymme (Yorke 1990: 29). Exogamous marriage was commonly practiced in the Merovingian kingdoms (Stafford 1983), and so the marriage of Æthelberht and Bertha should be understood as a reflection of the strong ties between Kent and the Frankish world in the later sixth century. By the middle of the seventh century, Anglo-Saxon women were also marrying into the Merovingian royal dynasties. Hagiographical traditions record that Balthild, wife of the Neustrian king Clovis II was an Anglo-Saxon slave, although it may be that she was a minor member of one of the royal dynasties, perhaps the East Anglian house, given the discovery of a gold seal-ring bearing her name in a Norfolk field (Nelson 1986: 17; Yorke 2017: Pestell 2013). In the case of the Northumbrian royal house, exogamous marriages were also used to forge links with the Celtic world. Oswiu famously had two Celtic wives before he married the Deiran princess, Eanflæd, and his brother Eanfrith also married a Pictish princess (Cessford 1996). There are also broader echoes of these historical realities in the theme of women-as-peaceweaver in Old English literature, the most famous example being Wealhtheow in *Beowulf*, whose very name emphasises her foreign origins.

Since seventh-century Anglo-Saxon society was patrilocal, exogamous marriage was a key mechanism by which women moved across considerable distances. Of considerable interest to the present study is the evidence that women actively retained close connections to their blood-relatives throughout their marriage. A particularly neat illustration of these strong kinship ties is Bede's short account of Imma, a Northumbrian thegn of Æthelthryth (herself originally a member of the East Anglian royal dynasty). Following his capture during a battle between the Northumbrians and Mercians in 679, Imma flees to Kent and is received by the king, Hlothere (*Historia ecclesiastica* IV.22). Bede is careful to note the familial connections that facilitated this: Hlothere was the son of Æthelthryth's sister, Seaxburh. Similarly, Eanflæd of Northumbria seems to have utilised her connections to the Kentish royal house through her mother, Æthelburh, to persuade her kinsman Hlothere to assist in promoting the career of bishop Wilfrid (Yorke 1990: 37). As Christine Fell (1984: 85) points out, women act as the lynchpins in these networks of connection and communication.

Further evidence of the maintenance of these close relationships with blood-kin was the frequency with which women returned to their families and their native kingdom upon the end of their marriage. Often this involved retreat to monastic foundations (Yorke 2003). The near-contemporary historical sources are replete with examples of women doing just this (highlighted

in bold in figs. 7.7–9). Hence sisters Æthelthryth and Seaxburh returned to their native East Anglia from Northumbria and Kent respectively to enter the monastery at Ely. Æbbe[60] was summoned from the province of the Magonsæte to become the first abbess of Minster-in-Thanet, founded after the murder of her brothers, Æthelred and Æthelberht. Cuthburh of the West Saxons travelled home from Northumbria to found the monastery at Wimbourne. An unnamed sister of Iurminburh seems to have returned to Northumbria to serve as abbess of Carlisle following the end of her marriage to Centwine of the West Saxons. In the later part of the seventh century, women born of exogamous marriages frequently took advantage of their ties to the native kingdoms of both their mother and father. Hence, Eormenhild, daughter of Eorcenberht of Kent and Seaxburh of East Anglia, travelled first to Minster-in-Sheppey in Kent upon the end of her marriage to Wulfhere of Mercia, before following in her mother's footsteps and relocating to Ely.

It is tempting to see the continued maintenance of close blood-kin relations partly as reflective of pragmatic concerns for the safety of female relatives in exogamous marriages. The murder of Æthelburh's granddaughter, Osthryth, at the hands of the Mercian nobility at the end of the seventh century illustrates the dangers that could face women who had married into other kin groups. The earliest lawcodes attest to the same concern for facilitating the return of women to her family following the end of a marriage, in this case assumed to be upon the death of the husband. Both the West Saxon lawcode of Ine (clause 38, transl. Whitelock 1955: 368) and the Kentish lawcode of Hlothere and Eadric (clause 4; transl. Oliver 2002: 128–9) stipulate that children should remain in the care of the mother, with the father's kin providing security for property and resources for raising the child – a cow in summer and an ox in winter according to Ine's code. The implication of both laws is that women typically did not remain with her husband's family. Duncan Sayer (2014) has discussed the same clauses within the lawcodes in relation to the variable proportion of infant burials at cemeteries of different sizes, suggesting that the higher proportion of infant burials at larger, regionally-significant cemeteries reflects a tendency for high-status women to temporarily return home to give birth aided by her close female relatives. This evidence of close, maintained connections to maternal networks is especially interesting in the context of the present study, which has suggested that the acquisition of necklace items in youth relates to patterns of inter-generational gift-giving (see above, chapter 6.4.1). That women assumed primary responsibility for young children also finds an intriguing echo in the account of Æthelburh. Upon the sudden death of her husband, Edwin of Northumbria, at the battle of Hatfield Chase in 633, Æthelburh fled to her native Kent with bishop Paulinus, taking

[60] There is confusion over the identity of the sisters Æbbe and Eormenburh, the former also sometimes called Domne Eafe. Both attest a charter in the name of Wihtred of Kent (S20), preserved as a ninth-century copy of a probably authentic seventh-century original. One was the mother of Mildrith and Mildburh through marriage to Merewalh, but the various versions of the Mildrith legend disagree on which and sometimes conflate the two (for discussion of this point, see Yorke 2003: 19; Dockray-Miller 2000: 19–20).

both her own children and her stepson with her. The male children were then sent to be brought up in the court of Dagobert I for their own safety, with whom Æthelburh had a close familial connection through her mother, the Frankish princess Bertha.

Entrance into monastic foundations was a key point at which close female kin-relationships, especially maternal and sororal networks, were reaffirmed and reified. The example of sisters Æthelthryth and Seaxburh, and Seaxburh's daughter Eormenhild, the first, second and third abbesses of Ely respectively, has already been noted. A later tradition suggests that Seaxburh and Eormenhild took the veil together, at the minster of Milton in Kent (Dockray-Miller 2000: 13–14). Later traditions record that, continuing the succession through the female familial line, Eormenhild's daughter, Werburh, followed her mother as abbess of Ely. Indeed, Fell (1994) has argued that the absence of evidence that Ely became a major monastic centre until it was refounded in the mid-tenth century suggests this it was a primarily a retreat for Æthelthryth and her close female kin, rather than a major house like Whitby or Barking. Another sister of Æthelthryth and Seaxburh, Æthelburh, and a stepsister, Sæthryth, also entered into a religious house together, in this case the double-monastery at Faremoûtier-en-Brie. There they were joined by their niece, Eorcengota (Seaxburh's daughter). Bede records that Hild had originally intended to join her sister Hereswith at Chelles before she was called back to Northumbria by Aidan. Hild's monastery at Whitby (*Streanæshealh*) is another example of a house where succession closely followed female kin relationships: Hild was succeeded as abbess by Ælfflæd, who seems to have ruled jointly with her mother, Eanflæd for a few years. Hild and Ælfflæd were at least second cousins, and their relationship may have been closer than this. Unusually, Ælfflæd's dedication to a monastery was an intervention by her father, Oswiu, while she was an infant, following his success at the battle of Winwæd; generally, women seem to have exercised more agency in the decision to found or enter a religious house, even in cases where land seems to have been granted by male relatives. The importance of female kinship networks is therefore also evident in Ælfflæd's case, since her mother, Eanflæd, follows her into the same Northumbrian house, rather than returning home to join her own mother's foundation at Lyminge as might otherwise be expected. Finally, we can point to a Kentish example of spiritual authority over a monastic house passing along maternal lines: Æbbe was succeeded as abbess of Minster-in-Thanet by her daughter, Mildrith.

Sketching the biographies of the women recorded in the earliest historical sources sees several important themes emerge. Crucially, these numerous examples reveal a broader pattern of complex and carefully maintained female kin-relations during the seventh century. Of central importance are the immediate relationships between mothers and daughters, sisters (and sometimes also stepsisters) and, to a lesser extent, aunts and nieces. Founding and entering

religious houses often represents the point at which such close female relationships could be most dramatically reaffirmed, but it is important not to create an artificial dichotomy between the religious life as a chance for women to exercise agency and any supposed passivity of women within exogamous marriages. Instead, marriage allowed women to forge new connections and links that could be utilised in various political manoeuvrings. Many of the women that would become abbesses of monasteries did so after the end of a politically advantageous marriage; possibly more women, about whom less is known, were also widows upon their taking of the veil. As Barbara Yorke (2003: 35) notes, 'royal female monasticism was not in opposition to the dynastic role of royal women… but a facet of it'. These complex networks of female connectivity stretch across a wide area. Both marriages and the later foundation of monastic houses reveal considerable and durable links forged between the emerging kingdoms. Instances of royal women travelling overseas to the continental monasteries of Chelles and Faremoûtier-en-Brie are an indication of the spread of these networks outside seventh-century England.

It is important to consider the spread of ideas throughout these female networks. Much of the previous discussion of exogamy between royal dynasties has focused on its uses as a tool of Christianisation, with Christian brides playing a role in the conversion of pagan husbands (see MacCarron 2017). The marriage of Æthelberht of Kent to Bertha is perhaps the best-known example of this, although Bede has little to say about the role of Bertha in the conversion of her husband. Yorke (2003: 27) also sees exogamous marriages as playing an important role in the spread of ideas about female monasticism, specifically in the marriage of Hereswith into the East Anglian royal house and Seaxburh into the Kentish royal dynasty, since there is a close fit here with the chronology of the foundation of royal houses. The nature of the available source material means that we are best placed to examine the transfer of religious ideas and customs, but it is important to emphasise that these were likely advantageous side-effects of the existing practice of exogamous marriage, rather than its sole, intended purpose. Undoubtedly other ideas permeated through these complex networks of female communication, including fashions in female dress and jewellery.

How far down the social spectrum these networks of communication and connection permeated is an interesting question. Of course, the examples of exogamous marriages and religious women evidenced in figures 7.7–9 are – by the nature of the available source material – those of the elites, for whom forging dynastic connections through marriage would have been particularly politically advantageous. While it is often tempting to speculate about possible connections between the richer female graves in the current data sample and named historical figures (see Sherlock 2012: 132; Lucy et al. 2009: 132–6; Newton 2020: 145 for examples), it is clear that not all the necklace graves are those of princesses. However, it seems that likely that the processes that fostered

connectivity extended beyond simply the level of the elites. The concern within the lawcodes with the circumstances arising from exogamy and patrilocality also implies that these were not practices restricted entirely to royal dynasties.[61] Ine's lawcode uses *ceorl* to in the clause ascribing responsibility for child-rearing to the mother. Whitelock (1955: 368) translates this as 'husband' but notes that it probably also had the dual sense of ordinary free-born man. It seems likely that female networks of communication co-existed at different scales. Elite women may have acted as nodal points in supra-regional networks stretching across the longest distances, as well as belonging to more immediate, localised female communities.

Such a scenario also fits with the underlying chronological models. It seems unlikely that exogamy as a practice was newly introduced in the seventh century, although evidence dating to the sixth century is naturally archaeological in nature. Sue Harrington (2011; 2020) has discussed evidence, mostly from Kent and the Isle of Wight, for high-status women in the sixth century whose repertoire of grave-goods provides an indicator of their connections beyond their immediate regional context. A classic example of this is grave 45 at Chessel Down (IOW), an adult female whose collection of dress accessories and other objects points to cultural links with Kent and Frankia (Arnold 1982: 106; Crowfoot and Hawkes 1967: 51). By the seventh century focus appears to have shifted from making cross-channel links probably reflective of important economic relationships to forging political alliances between the emerging Anglo-Saxon kingdoms. Exogamy in the seventh century should be understood both as a reflection of and a mechanism for the broadening scale for social networks, specifically those accessible to and mediated by women, from regional to supra-regional. The archaeological correlates of this in the seventh century are both the collapse of marked vertical social stratification within wider community groups, as focus shifted from shoring up inter-community hierarchies to establishing connections between competing elite families, and the adoption of homogenous styles of material culture, and specifically female dress.

Previous chapters have already suggested that close kin networks may have played a role in the shaping and curation of necklace assemblages, particularly those worn during childhood (see above, chapter 6.5). These networks, which can also be traced through an examination of women's roles and individual biographies in the historical source material from the seventh century, help to explain the adoption of similar female dress and jewellery styles across what had previously been defined regional zones. These were not passively imposed on women as part of a political strategy but were actively adopted by women connected in a real sense to broadening societal networks, as a sign of status and cosmopolitan taste.

[61] On the usefulness of the early lawcodes for understanding social developments during the seventh century, see Hines (2013).

7.5: Necklaces and Christianity

This leads neatly on to the theme of Christianity. Many studies have discussed the burial traditions and material culture of the seventh century in light of the Conversion process (for example Petts 2011: 97–116). This is not without justification: certainly, Christianisation represents one of the key transitions of the early Anglo-Saxon period. It is also of direct relevance to the present study, because it finds material expression in many of the items within the necklace corpus.

Cruciform iconography is a feature of composite disc (PE1), scutiform (PE2), beaded wire (PE6) and – obviously – cruciform pendants (PE5), as well as a range of other miscellaneous types. Figure 7.10 provides a demonstration of this kind of range. Quantifying exactly how widespread this use of Christian symbolism was presents a considerable challenge, however. Some items clearly display a very sophisticated iconographic message. The Wilton (Norf.) cruciform pendant provides a particularly good illustration of this. As Marion Archibald (2013b: 60–2) has noted, the construction of the cloisonné garnet frame deliberately echoes the form of the cross-on-steps depicted on the reverse of the coin (in this case, the front of the pendant), with flaring terminals and a straight lower arm. Cruciform shapes are also formed by the arrangement of mushroom- and arrow-shaped garnet cells in the pendant surround (Karkov 2011: 29). The suspension of the coin upside down in the frame is not an error on the part of the maker, but a deliberate choice allowing the pendant to be viewed primarily from the wearer's perspective (Evans 1991). Such evidence provides a rare and valuable window into the intimate and repeated engagements between the jewellery and its wearer. Other evidence that suggests this cruciform iconography was relatively widely understood is its presence among various types of seventh-century feminine objects. Parallels between the cruciform iconography of the disc pendant corpus and the punch-decorated lids of copper-alloy workboxes have been noted previously (Crawford 2004: 92; Hamerow 2016: fig. 2). In other cases, the intentionality of the design is more difficult to determine. Many of the items simply feature a design of two intersecting lines. Attempting to determine where on the spectrum of possible cruciform iconography the Christian significance is lost is a fruitless exercise. In many instances, meaning was probably contextually-derived.

Some previous models have tended to imply that the Christianisation process was a kind of prime mover as regards the changing dress fashions and burial rites of the seventh century. This is extremely unlikely from a chronological perspective. Key features of the seventh-century necklace fashion, for example, were established during phase AS-FD, and some early influences are also evident during phase AS-FC. Christianity, by contrast, arrived in Kent at the very end of the sixth century with the missionary Augustine, as the traditional account from Bede goes (*Historia*

ecclesiastica I.23–5); notably the contribution of Æthelberht's already-Christian wife, the Frankish princess Bertha, in promoting conversion is side-lined here. The Conversion process was a slow one; it was only by the end of the seventh century that the various kingdoms were all nominally Christian and how far this had permeated outside elite circles and in rural communities is debatable (Mayr-Harting 1991: 29–30)

A more interesting question, therefore, is how the early Christian influences interacted with and were mediated by the jewellery fashions of the seventh century. Some women buried with necklaces in the current corpus undoubtedly would have considered themselves Christian, especially those who chose to express this identity via material culture bearing cruciform iconography. Necklaces are also a feature of several of the historical accounts, and these accounts can also be used to shed light on the connections between Christianity and the wearing of this distinctive seventh-century jewellery. These accounts have been collected together and discussed in detail by Yorke (2011).

Two of the most important accounts are found in Bede's *Historia ecclesiastica*. The subject of the first is Æthelthryth, who, as noted, founded and retreated to the monastery at Ely following her marriages to Tondberht of the South Grywe and Ecgfrith of Northumbria, during which Bede records that she remained chaste. Bede recounts firsthand information from a doctor, Cynefrith, that Æthelthryth's cause of death was a large tumour beneath her jaw, which resisted attempts to treat it, but which was miraculously healed following the exhumation of Æthelthryth's uncorrupted body years later. The cause of the tumour is explained in Bede's account by Æthelthryth herself:

> 'I know well enough that I deserve to bear the weight of this affliction in my neck, for I remember that when I was a young girl I used to wear an unnecessary weight of necklaces (*superuacua moniliorum pondera*); I believe that God in his goodness would have me endure this pain in my neck in order that I may thus be absolved from the guilt of my needless vanity. So, instead of gold and pearls (*auro et margaritis*), a fiery red tumour now stands out upon my neck' (Bede, *Historia ecclesiastica* IV.19; transl. McClure and Collins 1994: 205).

The second account concerns Hild, abbess of the double monasteries of Hartlepool and Whitby. Bede describes an episode during her infancy, at which time her father was in exile from

Northumbria and had been poisoned.[62] This prompts her mother, Breguswith, to have a prophetic dream:

> '… he [Hereric] was suddenly taken away, and though she searched most earnestly for him, no trace of him could be found anywhere. But suddenly, in the midst of her search, she found a most precious necklace (*monile pretiosissimum*) underneath her garment and, as she gazed closely at it, it seemed to spread such a blaze of light that it filled all Britain with its gracious splendour. This dream was truly fulfilled in her daughter Hild…' (Bede, *Historia ecclesiastica* IV.23, transl. McClure and Collins 1994: 213).

An implicit connection between these two accounts is suggested by their proximity within the narrative, placed just four chapters apart in book IV.

The description of Æthelthryth's pearl-adorned necklace is clearly not reflective of anything within the present corpus, but here Bede is almost certainly drawing on Biblical phraseology (c.f. 1 Timothy 2.9; MacCarron 2011: 143; Fell 1994: 31). References to the 'weight of necklaces' also seem inconsistent with the short and delicate festoons known to have been worn in the seventh century. Yorke (2011) instead proposes a more nebulous connection with larger multi-stringed necklace festoons, of the kind represented in the Ravenna mosaics or Balthild's chemise, and suggests that the choice of the term *monile* (which could also be translated 'collar') further emphasises that this was a fairly substantial arrangement. There is no need, however, to take Bede's description of the weight of necklaces literally; rhetorical use is a better fit for the overall context of the vignette. The secondary meaning of *monile* as collar may express a tight fit more so than weight. As well as more closely corresponding to the extant objects, this also chimes with the repeated references to the location of Æthelthryth's tumour, on her neck immediately beneath her jaw. Bede also uses *monile* to describe Breguswith's necklace, suggesting that the same type of object is described in both accounts. In the latter case, a very heavy and complex necklace seems inconsistent with the description of the object appearing beneath a garment (*sub ueste*).

While it is interesting to note where Bede's sparse descriptions of Æthelthryth and Hild's necklaces conform to or diverge from extant contemporary objects, a more important point is how these objects are understood within their respective contexts. It is especially noteworthy that

[62] The marriage of Hereric and Breguswith is one of the few relationships within the Northumbrian genealogical diagrams for which it is not possible to comment on the familial background of the woman. It is regrettable that Bede reveals little else about Breguswith, since the desperate nature of this situation would have been compounded were she another example of an exogamous bride, isolated from both her husband and her blood-kin.

the presentation of necklaces is neither consistently positive nor negative across the two accounts. In the case of Æthelthryth the necklace is a material symbol of vanity, implicitly contrasted with the austere woollen garments she adopted upon entry into the monastery. While this is a stock hagiographical motif, for which numerous parallels can be cited (see MacCarron 2011), the importance here is the choosing of the necklace specifically to stand as a single symbol of high-status secular dress. The strength of these association between women and necklaces is further emphasised by the fact that, in searching for a material metaphor to represent Hild, even as an infant, Bede settled on a necklace. Although maternal prophetic dreams are relatively common in antique and early medieval literary traditions, the selection of jewellery as a symbol is unique (Yorke 2011). Bede was not following classical or Biblical precedent in choosing the necklace, but instead looked to the real world for a particularly apt material metaphor for Hild. That the necklace symbolising Hild is worn by her mother is also of interest; possibly this is an echo of patterns of inter-generational gift-giving previously identified (see above, chapter 6.4).

To a greater or lesser extent, Bede is often accused of deliberately suppressing the contribution or role of women during Christianisation process (see, for example, Hollis 1992). Women in secular society and the details of their lives clearly did not commonly fall within the remit of Bede's interests or writings. That two accounts mentioning necklaces specifically in the context of high-status women, presented in ways that foreground their centrality as vehicles for identity and personhood, are included in the *Historia ecclesiastica* provides an especially valuable window onto contemporary attitudes towards these objects.

Although the accounts of the necklaces described by Bede are presented in a Christian framework, drawing on stock hagiographical motifs, there is nothing specifically Christian about the necklaces themselves. Certainly, in the discussion of Æthelthryth's jewellery, worn in her youth, the necklace itself is located firmly on the side of the secular.[63] Neither, however, is the wearing of necklaces incompatible with seventh-century Christianity. Bede's condemnation of the nuns of Coldingham adorning themselves 'like brides' in elaborate garments (*Historia ecclesiastica* IV.25; transl. McClure and Collins 1994: 220) and Aldhelm's tirade regarding the sin of vanity addressed to the sisters of Barking Abbey (*De virginitate* LVIII; transl. Lapidge and Herren 1979: 128) serve to demonstrate that high-status religious women frequently maintained the costume of their secular counterparts.

In the prevalence of cruciform iconography within the necklace corpus we should not see the wholesale influence of Christianity on the jewellery fashion but rather its integration into it. Necklaces themselves were not specifically Christian objects, and nor was every individual that

[63] Gaimster (2011: 880–1) has also drawn attention to this interplay between the sacred and the secular in relation to female jewellery of the seventh century.

wore one likely to have been even nominally Christian. Nevertheless, for those women who had converted, it is not surprising that necklaces were the chosen medium through which Christian identity could be prominently communicated, given that they seem to have been central to the articulation of female identity during the seventh century.

7.6: NECKLACES AND THE FURNISHED BURIAL TRADITION

A detailed examination of the necklace corpus also has considerable potential to shed light on questions concerning the fluctuations in the rate of furnished burial. Necklaces are of immediate relevance to this ongoing debate because they are the class of gendered object most frequently deposited as grave goods in female burials (Geake 1997: tab. 4.18). The dramatic peak in the frequency of furnished female graves during phase AS-FE is one of the most intriguing results of the recent chronological models (see fig. 1.1; Hines 2013: 520; Hamerow 2016: 424); examining the underlying causes of this has the potential to shed the most light on the women who were distinguished via this funerary rite.

The prominence of women during phases AS-FD and AS-FE has sometimes been straightforwardly interpreted as a reflection of their social status. In other words, the placement of objects in the graves of women specifically was because they occupied a particularly elevated social position, although the reasons for this are not frequently articulated. More subtle versions of this argument have suggested that, by the seventh century, the expression of the status of the family unit had shifted primarily to the female sphere, because it was no longer considered culturally appropriate to invest in male graves in the same way (Hines 2013: 542). Hamerow (2016) also connects the archaeological visibility of women during the seventh century to their elevated position within dynastic structures but proposes that this was a strategy related to landholding. Drawing a connection between the richly furnished burials of women and the distribution of female monastic houses, Hamerow (2016: 443–7) argues that women embodied the sacral authority of the family as a unit to exercise control over landed wealth. The idea that women fulfilled a sacral role is a particularly persistent one in early medieval archaeology. In the Migration Period it finds expression in the identification of 'cunning women' (see Meaney 1981; Dickinson 1993). With regards to the evidence of the seventh century, however, it is important to reiterate the point that the apparently elevated social role of women appears, from the archaeological evidence, to predate the floruit of female monastic foundations in the later part of the century (c.f. Hamerow 2016: 424).

Necklaces and grave goods clearly represent a certain level of material wealth and social capital; these were individuals who could access luxury imports, precious metals and other materials

rendered desirable by their scarcity. Of the wider sample of seventh-century burials collected to provide context in chapter 6, around a third of the reconstructed female population was buried with a necklace. Clearly the wearing of necklaces was, in part, mediated by status, in addition to the other gender- and age-related identities already explored (see above, chapter 6). Some of the richer necklace graves are also marked out by other forms of investment. Burial under a mound or in a reused prehistoric barrow was a rite accorded to some of the individuals in the present corpus (for an example, see the bed burial at Swallowcliffe Down (Wilts.); Speake 1989). Other necklace graves appear to be 'founder burials', graves around which later inhumations are clustered. Good examples of this include the burial of a teenaged girl with a pendant necklace and other grave goods under a burial mount at Westfield Farm (Cambs.). Subsequent graves in the same small cemetery seem to have been placed as close as possible to this central burial, their orientation varying to account for the footprint of the burial mound ((Lucy et al. 2009: 129). Similarly, at Street House (N. Yorks.) two of the most spectacular necklace graves – 42 and 43 – are located at the centre of an unusual rectilinear arrangement of paired graves (Sherlock 2012). This evidence of cemetery organisation is difficult to understand as anything other than a reflection of the important social position of these individuals within the communities that buried them.

It is difficult, however, to extend this argument to suggest that either the wearing of necklaces or their deposition as part of furnished female burial rites was exclusively or even primarily an expression of status. The demonstrated fashion for short, delicate necklaces, for example, seems to be at odds with the idea that necklaces were, first and foremost, an advertisement of the wealth of the wearer. Would we not expect to see a greater range of artefacts arranged more prominently on the upper body in the richest contexts if this were the case? Equally, to judge from the (lack of) other objects commonly found alongside necklaces, the burial rite as a whole does not seem straightforwardly a means by which to display conspicuous consumption. A clear illustration of this fact is that, in just over twenty percent of the graves in database I (n. 126), the necklace was the only grave-good. Around three-quarters of the necklace graves (73 percent) contained just three or fewer additional items. Among these otherwise sparsely furnished burials are burials that might be considered relatively rich on the basis of their elaborate necklace. At Twyford (Hants.) the adult woman in grave 1070 was buried with a necklace composed of over twenty elements, including six bulla pendants, a glass cabochon pendant, silver wire rings and a collection of glass, shell and amber beads but no other surviving grave-goods (Egging Dinwiddy 2011: 87; see fig. 5.32). The necklace was the only object buried with a child around the age of three that included a large cabochon garnet pendant and amethyst beads in grave 172/2 at Lechlade (Glos.) (Boyle et al. 1998: 127). Similarly, among the richer (presumed female) graves at Street House (N. Yorks.),

grave 21 contained a necklace featuring two perforated gold Iron Age *staters* as the only grave-good (Sherlock 2012: 28, pl. 2.3).

It seems, therefore, that by the seventh century expression of social status was not a major structuring factor underlying the furnished burial rite. This is also suggested by the generally high proportion of unfurnished graves in cemeteries datable to the seventh century. Of the 863 burials from nineteen cemeteries collated to provide a demographic sample in chapter 6, thirty-six percent (n. 311) were unfurnished. Geake (1997: 31) recorded an even higher proportion of unfurnished burials in her more substantial sample of Conversion Period graves: 58 percent. It is clear, therefore, that by the seventh century furnished burial was a minority rite. It is crucial to explore the questions of why necklaces (and other objects found in smaller numbers in female graves) were exceptions to this general rule and why the marked gender discrepancy in the rate of furnished burials exists (c.f. Hines and Bayliss 2013: 520). It is not sufficient to suggest that the expression of social status had shifted wholesale to the female funerary sphere, since this hypothesis is a poor fit for the evidence of the graves themselves.

It is the contention of the present study that seventh-century necklaces were considered particularly inalienable. As a class of objects necklaces seem to have played a particularly important role in the construction and articulation of female identity. By the seventh century, they were the primary form of jewellery worn by women; only a small number of other dress accessories are known to have been worn, although none approaching the regularity of necklaces (Geake 1997: tab. 4.18; see also fig. 5.44). The wearing of necklaces seems to have begun in early childhood (see above, chapter 6), and the physical traces of extended use-lives evident on many objects provide a clear illustration of the mirrored biographical trajectories of necklaces and their wearers (see above, chapter 4). By their nature as assemblages, necklaces incorporated a diverse range of materials and object types, which might variously have been considered mnemonic and amuletic, as well as prestigious and inherently visually appealing (see above, chapter 2). Although a shared concept of style seems to have existed, identifiable most clearly via the consistently restricted length of necklaces and similar patterns of suspension and arrangement, within this loose framework there was considerable scope for individuality (see above, chapter 5). Necklaces should therefore be considered as a kind of palimpsest, onto which various facets of an individual's societal identity could be mapped and articulated.

The centrality of necklaces to the expression of identity and personhood during the seventh century can also be explored in relationship to concepts of ownership. A straightforward observation is, of course, that the level of individuality expressed via necklace assemblages would seem implausible if the wearer were not able to exercise agency over their layout and composition.

As already noted (see above, chapter 3), there is other archaeological evidence to suggest that women played an active role in the making of necklaces, especially through provisioning of materials. Near-contemporary historical sources also provide evidence for specifically female control over movable wealth during the seventh century. The lawcode of Æthelberht, for example, specifies that, upon the death of a childless woman, both her personal property (*fioh*) and her morning-gift (*morgengyfe*) were returned to her blood-relatives (clause 76.5; transl. Oliver 2002: 78–9). The multiple implications of this seem to be that a woman brought property with her upon marriage, that marriage itself also occasioned the gifting of other property in the form of the morning-gift, and importantly, that control of both was retained by the woman (Oliver 2002: 107). Might necklaces be an example of this kind of moveable wealth?

There are a limited number of alternatives available for dealing with inalienable items. One is gift-giving, as this allows the accrued biographical significance of the object to be retained and remembered even as it is exchanged (for a discussion of inalienability and gift-giving, see Weiner 1992). There is a wealth of evidence to suggest that necklaces were regularly caught up in cycles of inter-generational gift-giving. A close examination of the available osteological data has revealed patterns in the length of the necklaces and presence of particular materials and items that seem to relate to different stages of the lifecourse (see above, chapter 6.4). Again, we can turn to the historical sources to further contextualise this. If, as the above mentioned lawcode specifies, the property of childless women was returned to their kin, presumably the same type of property was divided amongst children when there were some. Although much later than the material discussed here, ninth- and tenth-century wills also provide evidence of women gifting dress accessories, garments and other female-associated items to daughters, granddaughters and other female kin (see Tollerton 2011: 202–6). The care with which specific items are described and especially the short snippets of biographical detail used to identify particular elements are especially interesting in the present context. A good example derives from the mid tenth-century will of Wynflæd, a noblewoman probably of West Saxon origin. She bequeaths an antique brooch (or perhaps a pin) decorated with inlaid wire (*hyre ealdan gewiredan preon*) to a granddaughter, Eadgifu (Owen 1979: 212–3), as well as various garments to her daughter.[64] In Merovingian legal documents jewellery and other forms of personal adornment are also singled out as objects that women could inherit from their mothers (Effros 2002: 28; Nelson and Rio 2013: 111).

The alternative to gift-giving as a means for dealing with inalienable items is their removal from society, either via inclusion as a grave good or other form of votive deposition, such as hoarding

[64] Interestingly, there is also a wider circle of women, to whom Wynflæd does not seem to be directly related, who are named as the receivers of various bequests, mostly in the form of moveable wealth (Fell 1984: 95). In this we can see a reflection of the kind of broader networks, of friendship, obligation or possibly even more distant-kin relationships, to which women could belong.

or placement in watery, liminal zones (see Crawford 2004). It seems productive, therefore, to view the shifting frequency of furnished burial across the seventh century primarily as a transition in attitudes towards the mnemonic role of objects in the funeral (see Devlin 2009), with those that continued to be placed in graves being those items that were considered inalienable.

At first sight, there appears to be an obvious issue with this argument as applied to necklaces. How can their inalienability be a factor in their frequent deposition in later seventh-century graves if they were equally caught up in networks of gift-giving and inheritance? The answer to this lies in the nature of necklaces as assemblages. The capacity of individual items to be exchanged as gifts and heirlooms while the necklace itself is substantially retained is a unique characteristic of necklaces and helps to explain their presence in so many female graves. This scenario fits neatly with the observed osteological patterning, which shows that on average older women tend to wear necklaces composed of fewer objects. The interpretation proposed here is that, in these graves, small collections of items were deliberately retained to constitute the necklace, after other objects had been handed down to adult children. The funeral is one obvious transitional point at which decisions regarding the fragmentation and partial retention of the necklace must have occurred. The same type of decision-making process is likely also to have occurred in the case of other objects, but this is now archaeologically invisible. Either the object was deposited in the grave, or it was retained. Parallels for the fragmentation of composite objects, deposited *pars pro toto*, can be cited from other contexts. For example, Woodward (2002) has discussed almost identical processes in relation to Bronze Age jet and amber lunate necklaces, which frequently show extensive wear and which were almost never deposited in graves as a complete set.

In this regard, it is interesting to consider Geake's (2003) arguments concerning the role of mourners in shaping the mortuary rituals of the Conversion Period. This posits that the decline in the rate of furnished burial and its abandonment in the final decades of the seventh century may be connected to shifts in the responsibility for organising and conducting burials. Between the fifth and seventh centuries, Geake (2003) argues, this was undertaken by the immediate community and potentially female specialists, while from the eighth century onwards the role played by the family was reduced in favour of the Church. There are interesting resonances here between the observations about the role of the family in shaping the funeral (and, as part of this, the provisioning of grave-goods) and the conclusions of the present study. If the composition of necklaces was, in part, shaped by female kin relationships, including the possibility that the funeral marked a stage at which necklaces could be fragmented for retention among the living as well as deposition with the deceased, and immediate – potentially female – family members made decisions regarding the deposition of artefacts, it is not surprising that necklaces, given their symbolic function, were more frequently selected to accompany the deceased.

In considering the gendered aspects of the changing rates of furnished burial during the seventh century, it is productive to draw a contrast between necklaces and weaponry, which were the major category of masculine-associated artefacts in fifth- to seventh-century graves. This study has repeatedly emphasised the importance of the necklace as a symbol of the individual and pointed to evidence for women playing an active role in the making and ownership of necklaces. Although weapons such as swords could equally be intimately associated with the body, sometimes over extended periods, recent interdisciplinary research has emphasised the individuality of the sword itself as an entity, a practice reflected in the frequent practice of naming weapons (Brunning 2019), rather than an extension of the wearer. Härke (2000) has also emphasised the evidence for the variety of mechanisms through which swords could circulate widely in early medieval society. Among the elites, it seems that the relationship of lord and retainer afforded greater avenues for the gifting and circulation of weaponry, beyond the kin-groups through which necklaces appear primarily to have moved. There was perhaps a much greater communal interest invested in the ownership and exchange of weaponry during the seventh century, while feminine objects like necklaces circulated through a more intimate network of close kin-relationships.

Alongside broader societal, political and religious shifts underway during the seventh century, it is also important to consider the combination of two important factors – specifically female patterns of ownership and circulation of objects and the centrality of necklaces as a material symbols of feminine identity and personhood – in examining the questions around the continued deposition of (these and other) objects in graves during the general transition towards a simpler, unfurnished burial rite.

7.7: Conclusions

The meaning, wearing and ritual deposition of necklaces during the seventh century was fundamentally shaped by broader societal shifts. These changes were clearly multifarious, from the increasing emphasis placed on the immediate family, the expansion of networks of communication and changing attitudes towards the circulation of objects, as well as, in the later part of the seventh century, the increasing influence of the Church. The distinctive funerary practices of the seventh century are typically assessed on a macro-scale, with debates focusing on increasing social stratification, political centralisation and ideological change (see Geake 1997; Hamerow 2016 for examples). The insights provided by this project demonstrate the importance of also integrating the meaning and symbolic value of the objects themselves, their dense

biographical entanglements and the intimate connections between necklaces and the women who wore them into our explanatory models.

This chapter has also considered the contribution necklaces can make to our understanding of the role of women in society. Rather than simply pointing to well-furnished burials as indicators that the social role of women was prominent, the evidence considered here reveals that this prominence derives from women's participation within networks of communication and connection. These networks could be both dynastic, and, later in the seventh century, spiritual. Regarding the latter, it is therefore possible to rethink the so-called golden age of female monasticism during the seventh century not as the Church offering women greater agency and freedom than previously, but instead as women actively shaping the early Church to increase their own power and influence.

CHAPTER EIGHT: CONCLUSIONS

8.1: INTRODUCTION

The thematic structuring of this thesis, around stages in the biographies of necklaces firstly as individual objects and subsequently as assemblages, allowed key conclusions and observations to be outlined at the close of each chapter, with each subsequent thematic section building on the findings of the preceding ones. Rather than synthesising the results of each chapter in turn, this final concluding section instead provides a summary of the key findings of the thesis and its wider contributions to the field of early medieval archaeology. The multiple questions raised during the course of this project and the potential avenues for future research it has identified are also addressed.

8.2: SUMMARY OF FINDINGS AND CONTRIBUTIONS TO THE FIELD

This thesis offers the first detailed exploration of seventh-century necklaces as a major category of artefacts from early medieval England. Drawing on a substantial database of both necklaces and individual objects and the first-hand examination of much of the material by the author, this project provides a more thorough and nuanced framework with which future studies can further explore these objects, and which can be used to contextualise future research. A detailed overview of the numerous object types covered by the present study is presented in the attached appendix, providing a summary of individual artefact types. New classifications of some object types have also been proposed here, building on the foundations laid by existing typo-chronological research by Brugmann (2004) and Høilund Nielsen (2013), among others. It is hoped that future studies will assess the usefulness and, importantly, the chronological relevance of these new descriptive categories.

The distinctiveness of seventh-century necklaces is perhaps their defining feature. They are both much shorter than the bead festoons of the preceding century and are composed of new object types and materials. This marked transformation in the style of necklaces worn between the sixth-century Migration Period and the seventh-century Conversion Period resulted in the pervasive notion that the idea of these later, shorter and more delicate festoons arrived in England as part of a fully realised cultural package (see, especially, Geake 1997; 1999). This idea can be abandoned in light of the findings of the present study.

In part the necklaces of the seventh century reflect broader economic changes of the seventh century. A new range of materials became available from the end of the sixth century and into the first part of the seventh century, much of it resulting from long-distance exchange. Materials

considered characteristic of these distinctive necklace styles were all carried along these long-distance trade routes: gold, silver, garnets, amethyst beads and whole cowrie shells (Huggett 1988). Attesting to the intensity and regularity of this exchange are both the substantial quantities of this material that were deposited in graves and the presence of more unusual items and materials with the same demonstrable eastern Mediterranean provenance. It is not surprising, therefore, that the material trappings of status and wealth during the seventh century shifted so markedly and dramatically to these new imported luxuries. More intriguing is the restriction of some of these objects to – to judge from the archaeological evidence – specifically female contexts of display and consumption. Of course, this can be connected to the forms in which luxury objects arrived and their affordances, as well as the potential symbolic or amuletic qualities associated with particular objects. Nevertheless, the crucial observation still remains that there was considerable investment in terms of resources expended in the provisioning of materials to adorn the female body. It is impossible not to view this investment, first in women's jewellery and then subsequently in their graves, as reflective of the status and social capital of the women who wore and were buried with these items.

A new suite of materials also brought about innovations in terms of technology and manufacture. A consideration of the range of techniques involved in the production of the precious metal bead and pendant corpus has revealed connections across multiple object types, as well as situating the necklace material within a broader context of non-ferrous metalworking during the period. The relative homogeneity in terms of construction and manufacturing techniques allows us to consider many of these elements the products of a small number of specialist craftworkers, probably making a range of items and travelling extensively across relatively wide distances. It is important, therefore, to emphasise the potential role of these artisans and their capacity for innovation in the introduction of new styles of necklace elements during the seventh century.

The greater emphasis placed on precious metals and imported luxury material within the necklace corpus also seems to have prompted a general decline in the importance of glass beads, although numerically these objects continue to dominate the corpus as a whole. Hence small simple brightly coloured monochrome bead types predominate, including some translucent forms that might result directly from the recycling of small pieces of vessel glass. There was not a wholesale decline in the skill of the beadmaker, however, as the occasional spectacular polychrome annular twist beads demonstrate.

Necklaces were one element of high-status female dress in a broader sense. An exploration of how necklaces related to and interacted with other aspects of costume, particularly the garments that survive only as mineralised fragments, has also revealed that necklaces developed in tandem

with marked changes to female costume, particularly the adoption of a longer and more voluminous head-covering. Necklaces became shorter and shifted towards the base of the neck to remain visible as the shoulders and chest were draped in the lightweight fabric of the veil. This emphasises the crucial importance of exploring jewellery as it relates to costume, rather than in isolation.

Finally, in considering the developments of seventh-century necklaces, the relative chronologies can also be taken into account. Although this thesis relies heavily on the established and robust chronological frameworks now available for the later sixth and seventh centuries (Hines and Bayliss 2013), a reassessment of the chronological models has demonstrated that the transition from the typical jewellery and costumes of the Migration Period to those of the seventh century is particularly complex. Some features seem to suggest a degree of continuity, at least regarding necklace fashions, especially in Kent, across what was once seen as a marked chronological boundary. Related to this it is also important to note that the lengthening of the veil is itself part of a longer transition, with the waist-length veils worn by Kentish women in the latter half of the sixth century representing the precursors of those identified as traces on the girdle assemblages worn below the hips in the seventh century (see Walton Rogers 2007: 157–9). It is argued here, therefore, that the necklaces of the seventh century should be understood as a development of the bead festoons worn during the sixth century, with their distinctive characteristics the results of numerous influences (from developments in costume to the broader economic transitions), rather than the wholesale introduction of an entirely new style of necklaces from elsewhere.

This project has also provided fresh insights into the question of what necklaces *did* during the seventh century. Here it is suggested that the signalling of wealth and status – while clearly important – was not their only, or perhaps even primary, function. Instead, necklaces were vehicles for the accumulation of layered meanings and significance. As objects of memory, they seem to have been particularly powerful. The suggestion that necklaces represent one of the key locations for the use and display of amuletic materials is clearly valid, although a critical appraisal of this phenomenon illustrates the importance of supporting this interpretation with contextual evidence. Necklaces were not merely collections of magical trinkets, and so the presence of certain materials and objects within a necklace context should not, in itself, be taken as conclusive evidence that such items were amulets.

Other necklace elements were clearly highly symbolic and communicative. This is most evident in the frequent presence of cruciform iconography among the pendant corpus. Although necklaces themselves are not Christian objects and not everyone buried with a necklace is likely to have been even nominally Christian, that necklaces were the primary means by which some

women chose to express their faith is entirely consistent with the role that necklaces played within female dress and modes of expression.

Many individual elements of necklaces are inscribed with physical traces of their extended biographies, in the form of wear, repair and modification. While this evidence is most recognisable among the small corpus of items made from gold, the presence of a significant number of heirloom beads among securely dated seventh-century necklaces provides a good indication that many more objects also had extended use-lives. An intense recycling economy underway during this period is also revealed through a contextual analysis of many of the materials represented in the current database, crucially with evidence to suggest that a large part of this involved the recycling of existing objects, rather than exclusively the melting down of fresh supplies of coined precious metals or raw glass, for example. It is argued that the accrued meaning and biographical significance of objects is not likely to have been lost during this recycling, given the socially enmeshed nature of cycles of material supply, making and remaking.

Objects with dense biographical entanglements materialised social relationships. Primarily this is revealed by the osteological data, careful interpretation of which has suggested that inter-generational gift-exchange was almost certainly a key mechanism shaping the collection and curation of necklace assemblages. Drawing on anthropological theories of keeping-while-giving (see Weiner 1992), it is suggested that the acquisition of necklace elements from different sources created a dense web of mnemonic connections between the wearer and her social circle. Such was the importance of using objects as material signifiers of these relationships, in a small number of cases items of an obviously masculine nature were modified or repurposed to allow for incorporation into a necklace. Careful reading of the near-contemporary historical sources provides crucial context for these kinds of female social networks. Although much of this material is explicitly concerned only with the elites, exploring the biographies of named women alive during the seventh and early eighth centuries demonstrates the wider importance of close kin relationships during the period, particularly the maternal connections of mothers and daughters. While many previous studies have noted that the founding of monastic houses by women was a family affair (Yorke 2003; Dockray-Miller 2000), it is the contention of the present study that this phenomenon was itself a reflection of the source of female authority and power during the seventh century. Likewise, the seemingly ubiquitous practice of exogamous marriage allowed high-status women to forge new connections and networks, while remaining closely tied to her blood-relatives. Drawing together this broader contextual information, it is argued that it is these networks of specifically female connection and communication that result in the markedly homogenous suite of female costume and dress accessories across seventh-century England. This dress style was a signifier of women's connections to a wider network, through which ideas and

fashions spread. The scale of these networks appear to have expanded during the seventh century, from regional to supra-regional.

Necklaces, therefore, were central to the construction of high-status female identity during the seventh century. This identity continued to be strongly gendered but was not straightforwardly age-linked. The wearing of necklaces was not restricted to any particular age cohort but seems to have formed a part of everyday dress from childhood onwards for the individuals possessing the necessary social capital to do so. Implicit here is the wholesale collapse of the kind of age-related taboos that structured the acquisition of increasingly complex female costumes during the fifth and sixth centuries. Emphasis seems to have shifted from the expression of defined social roles within immediate, localised communities to the membership of prominent families and dynasties (c.f. Sayer 2009; 2010). This, in turn, is bound up within the broader political reconfigurations of the seventh century, generally thought to have resulted in a society characterised by greater vertical social stratification.

The important dynastic role of women afforded them considerable opportunities for the expression of female power and agency. An examination of the materials and manufacture of items in the current corpus have gathered together the evidence to show that women were active participants in the making of their jewellery, exercising control over the supply of valuable recyclables and commissioning their transformation into pendants, beads and rings. The capacity of these valuables to circulate through specifically female networks of gift-exchange is yet another illustration of the independence and power afforded to women during the seventh century. The contexts at which the making of jewellery seem to have taken place – probably seasonally, by semi-itinerant artisans, at regionally-important central places – provide an indication of women's participation in the wider contemporary economy and power structures. Women's participation in the early medieval economy is particularly under-estimated and under-studied. It is hoped this study provides impetus for future research that goes some way to correcting this imbalance.

Necklaces were also a medium for the expression of female agency in other ways. Attempts to classify necklaces-as-collections into a series of recognised types largely failed, because each necklace is a unique collection. Although there are general stylistic preferences that structure the general form and content of seventh-century necklaces, they are primarily shaped by personal taste, and the decisions made by the wearer. The expression of individuality and personhood therefore emerges as a particularly central tenet of seventh-century necklaces. Again, drawing a comparison with the relatively strictly defined social roles expressed by female costumes of the fifth and sixth centuries, the importance of individuality during the seventh century is a key conclusion of the present study.

The biographical metaphor that structures this thesis can be understood on multiple levels. As noted, it is clear that individual objects can carry with them the meaning and sentimental value that results from their own unique biographical trajectories. Necklaces, as composite assemblages, therefore possess a biography that is collective and layered. There is also a fundamental connection to be drawn between the mirrored biographies of necklaces and their wearers. The evidence assembled across various chapters of the present study strongly suggests that necklaces were not consciously organised assemblages, structured by a coherent and fixed design principal, but were often accumulated piece by piece over time. Within this it is important to acknowledge the potential for objects to be removed – to be gifted, remade or simply replaced by items considered more prestigious or meaningful – just as frequently as they might be added. As collections, therefore, necklaces tell a story about the life of the wearer: her position within society, her beliefs and superstitions, her kin-relationships and social connections, her aspirations and her personal tastes. Each necklace therefore provides an extremely valuable, if oblique, glimpse into the life of an individual alive over a thousand years ago.

Finally, after detailed consideration of what it meant to own and wear a necklace in seventh-century England, we are on firmer ground in exploring the reasons behind the deposition of these objects in the grave. This, in turn, allows for a reassessment of the ongoing debates surrounding changes to the frequency of furnished burial across the seventh century.

The variations in the frequency of furnished burial across the seventh century are best understood as a reflection of the changing function and meaning of the funeral itself. There is good reason to think that the expression, articulation or reification of social roles was no longer the purpose of the funeral by the early seventh century, just as female jewellery seems to have no longer been wrapped up in the visual signalling of age and community hierarchies. Possibly the crystallisation of political structures during the seventh century meant that there were fewer anxieties in general that might necessitate the constant reaffirmation of hierarchies and group dynamics. As part of this, the role of grave-goods in the funeral seems to have fundamentally changed. A tension existed during the seventh century, between the recirculation of the possessions of the deceased among the living or their deposition as grave-goods (see Crawford 2004). It is clear that both rites co-existed in the same cemeteries, a fact which illustrates the continued role of the immediate kin or community in structuring and conducting the funeral. Necklaces – as items that were intimately connected to the individual and to concepts of ownership, while at the same time inherently possessing the capacity for fragmentation – were unusual among contemporary grave-goods in that they bridged the gap between the two possibilities for dealing with objects after death. Inherent within the nature of an assemblage is the capacity for keeping-while-giving.

This allows for a reassessment of the idea that the well-furnished burials of women during the seventh century are primarily a reflection of their status relative to male contemporaries. This is not the case. Instead, the differential rates of furnished deposition should be understood as reflecting gendered attitudes towards objects, their retention and circulation, and wider community interest (or lack thereof) in these processes.

Through a detailed and contextually-situated examination of the necklaces regularly placed in seventh-century graves, this study offers multiple fresh perspectives on debates surrounding the Conversion Period and the role of women during this period. Focusing less on the established top-down models concerned with the role of the Church or the impacts of kingdom formation, female identity, personhood, agency, networks and relationships are instead foregrounded as central themes within this formative period of English history.

CHAPTER 8.3: FUTURE RESEARCH

As well as providing answers to some questions, the results of this study raise others. There are, therefore, multiple avenues for further research stemming from this thesis. Firstly, it is hoped that the results of future excavations will provide the data to re-examine some of the conclusions presented here. A larger osteological sample, for example, would be particularly beneficial. As well as providing a more secure foundation for assessing the evidence of age-patterning that was here necessarily based on a restricted dataset, it would also facilitate other analysis, such as the question of how rates of wear and repair might be understood in relation to the age of the wearer.

There is also considerable potential for future research to clarify some of the particularly challenging aspects of the current chronological frameworks. The issues surrounding phase AS-FC were explored in brief in chapter 7 but would benefit from a more thorough investigation and analysis. As well as the rate of furnished burial itself, the difficulty in understanding the transition from phase AS-FC to AS-FD outside of Kent also has considerable implications for understanding the development of female dress fashions.

Another obvious starting point would be to consider other aspects of the phenomenon of well-furnished female burials, since the broader conclusions of this study draw on the evidence of women buried with necklaces. Accumulation of the wider demographic sample revealed that a number of other women were accorded a furnished burial rite, and sometimes these graves can themselves be considered rich. Two recent examples of such relatively well-furnished female graves that did not contain necklaces were identified during metal-detecting and subsequently

professionally excavated, at West Hanney (Oxon.) and near the Rollright Stones on the Oxfordshire-Warwickshire border (Hamerow 2015; 2020). Although no object is found as frequently among these other graves as necklaces, there is still considerable scope to reexamine this corpus in light of the findings of the present study. One particularly intriguing question would be whether other feminine gendered grave-goods show the same lack of age-patterning. If they do not, then this would reinforce the identification of necklaces as one element of a wider suite of female costume and the idea of a wholesale collapse in the signalling of age and community roles both through costume and the funeral. If other seventh-century feminine grave-goods are age-linked, this would suggest necklaces fulfilled a singular role within costume.

Composite disc brooches are one type of seventh-century feminine artefact that have been mentioned in passing several times by the current project. They provide a useful contrast to the necklaces examined here because, although the corpus of brooches is relatively small, they show considerable evidence of extended use-lives, in the form of repair, retention and fragmentation. They represent a particularly promising case study for exploring the complex decisions surrounding the retention and deposition of grave-goods during the seventh century. Equally, the bed burial tradition might profitably be explored in light of the evidence of specifically female networks of long-distance communication and connection, in which high-status women appear to have acted as nodal points. As noted, the bed burials are a useful piece of evidence in this regard, because they attest specifically to the spread of *ideas* among the female communities of the seventh century. Small collections of objects deposited in wooden caskets and in purse groups from the later sixth century onwards might also be explored in more detail as they relate to female ownership and control of portable wealth.

It is also hoped that the result of this study will prompt detailed examination of the necklaces of the fifth and sixth centuries from a social, rather than purely typo-chronological, perspective. This study has suggested that the necklaces of the seventh century are not entirely disconnected from their predecessors. It has also been noted that fifth- and sixth-century necklaces show age-restrictions structuring their overall number of elements, but apparently not in the provisioning of small quantities of beads (see Stoodley 2000). Neither do fifth- and sixth-century bead types show the same strict regional distribution of the better-studied brooch types (see Brugmann 2004). In light of the results of the present study, it would be especially interesting to consider whether the necklaces of the fifth and sixth centuries also represented a medium for the expression of individuality and personal taste. If this is the case, then the continued wearing of necklaces as an element of seventh-century costume might represent deliberate retention of a costume element fundamentally connected to personhood, as other elements of dress subject to greater communal interests, investment and taboos were potentially fairly rapidly abandoned.

8.4: POSTSCRIPT: NECKLACES AFTER THE CONVERSION PERIOD

With the apparently abrupt cessation of the furnished burial rite in the final decades of the seventh century (Hines and Bayliss 2013), a major source of evidence for the wearing of necklaces as a regular part of female dress is lost. Evidence with which to consider the transformation of necklace fashions into the eighth century is especially sparse. Excavations of settlements and stray finds recorded on the *Portable Antiquities Scheme* website attest to the continued use of beads and pendants but these single objects shed little light on their potential use within necklaces. Necklaces are found in a few of the Viking graves in the British Isles, such as that from Saffron Walden (Ess.), but these clearly belong to a distinct, Scandinavian jewellery tradition. There are no references to necklaces as elements of female dress outside the corpus of Old English poetry[65] from the middle of the eighth century onwards, a fact which further underline the importance of the two references to necklaces, worn by Æthelthryth and Hild, in Bede's *Ecclesiastical History* (see above, chapter 7.5).

By the time elements of female costume come to be regularly described in ninth- and tenth-century wills, there are no mentions of necklaces, although other dress accessories, such as brooches and pins, are described (Owen-Crocker 2004; 1979). Neither does visual culture furnish us with any certain depictions of necklaces. Owen-Crocker (2004: 229) draws attention to a possible pendant necklace depicted on a late tenth- or early eleventh-century depiction of the Virgin on a cross shaft from Sutton-upon-Derwent (E. Yorks.) (see Lang 1991: 220–1, fig. 7i). However, fragmentation of the stone makes it difficult to determine exactly what the artist intended to depict – an embroidered or otherwise decorated garment edge is equally plausible.

The general paucity of evidence for necklaces after the early eighth century should probably be understood to indicate that they declined in popularity and ceased to be a major part of female costume, although how rapidly this process occurred is unclear. It is also not certain what the reasons for this might have been. The evidence of the present study might possibly suggest the declining supply of certain long-distance impacts was a factor, while the evidence that the seventh-century necklaces were shaped by the lengthening veil might also suggest that the wearing of more substantial head-coverings from the later eighth century onwards, of the kind depicted in later manuscript illuminations, may also have resulted in the necklace falling out of favour. Equally, it

[65] One example of this is the comparison of a necklace or torc given by Wealtheow to Beowulf in the eponymous poem to the necklace, *Brosinga mene/Brisingamen* (*Beowulf* l.1199, ed. Fulk et al. 2008: 42), which in Norse mythology is associated with Freyja. The relevance of this passage to the evidence of necklaces in the seventh century, however, is debatable, given the difficulties in identifying the specific geographical and temporal context into which to place *Beowulf*.

is interesting to speculate whether the increasing influence of Christianity on female dress may have played a role, especially if the ideals of modesty and chastity espoused by Bede and Aldhelm began to resonate with a more receptive audience.

What the likely decline of necklaces from the later period illustrates most clearly, however, is that the necklaces worn during the seventh century were inextricably linked to the seventh-century social contexts in which they were used and worn. This observation provides a neat illustration of the importance of situating the archaeological material within the broadest and most detailed contextual framework possible, in order to explore how objects were shaped by, and in turn shaped, early medieval society.

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