Chapter 7: Synthesis and discussion

INTRODUCTION

The following discussion attempts to integrate the different strands of evidence presented in the chapters above to produce a reassessment of some of the most important aspects of the cemetery. The debt to the work of Giles Clarke is obvious, and the high quality of presentation of the data in the 1979 report has made it a key source of material for many subsequent analyses of aspects of Romano-British cemeteries. For some aspects of the present analysis, however, the resources of this project have not permitted consideration of the evidence and its comparanda at a level equivalent to that of the earlier work. The analytical possibilities of a cemetery such as this are enormous and the purpose of this report is to present the data and indicate some of its potential, rather than attempt exhaustive analysis of all areas. At the same time, in the 30 years that have elapsed since Clarke's publication new evidence for late Roman cemeteries in Britain has been published, new insights into the material, from consideration of individual object types to ways of looking at large questions such as identity, have developed, and whole new techniques of analysis, particularly with regard to isotopes, have emerged. It is unsurprising, therefore, that not all the issues that seemed important in the 1970s appear so now; many questions are the same, but some are different.

This section begins with discussion of the chronology of the cemetery, followed by a review of its principal physical characteristics, before moving on to consider aspects of detail at the level of individual graves, their structure and contents and what these tell us about the burial rites practised. Many of these aspects are also relevant to the question of chronology. A summary of the evidence for the cemetery population follows, and the discussion concludes with a brief review of the extent to which aspects of religion conditioned the ways in which people were buried at individual and group level.

CHRONOLOGY

Problems of chronology

Establishing a chronological sequence for the cemetery is a basic requirement for any analysis of its use. Only with a rigorous chronological framework in place is it possible to investigate how funerary practices changed through time, allowing us to produce a nuanced understanding of the dynamics of the use of the cemetery. Without it we run the risk of combining evidence from throughout the use of the cemetery to produce an idealised, composite model of late Roman funerary practices at Lankhills that may bear only a generalised resemblance to the ceremonies that actually took place there at different times during the 4th century. A chronological framework also enables us to correlate events at Lankhills with those at other contemporary cemeteries, both within Winchester and further afield. This has a direct impact on our understanding of late Roman society in Winchester and beyond during the later part of the Roman period, for which the burial evidence provides some of the most important information. Indeed, the continued use during the second half of the 4th century of the Lankhills cemetery for organised burial provides some of the most convincing evidence for the continuing occupation of the city itself, and the apparently abrupt abandonment of the burial ground may afford a dramatic demonstration of the equally sudden collapse of urban life (Biddle 1983, 115 and note 3).

Archaeological dating evidence, by its very nature, produces chronologies that contain an ever-present but rarely acknowledged element of uncertainty (Hinge 1996, 66). Dating based on artefactual typologies provides a date range within which the artefact is thought to have been manufactured or to have been in general circulation, and it is inferred that the feature from which the artefact was recovered was created within this period. However, even if this assumption is correct (and it frequently is not), the resulting date range for the feature may be quite large and is likely to overlap with the similarly-derived date ranges for other features, making the creation of a chronological sequence problematic. In the case of cemetery sites, this situation is exacerbated by the possibility that objects accompanying the dead may have had a use-life of unknown length before being placed in the grave, or may have been deliberately curated and perhaps chosen for use in the funerary ritual specifically because of their antiquity or previous associations (Schiffer 1987, 88; for pottery see Biddulph 2005; Wallace 2006, 260-262). This may be the case with some of the grave goods at Lankhills, where damage to some of the pottery vessels may have been sustained during their use prior to incorporation into burials (Booth, Chapter 4), and in their study of the eastern cemetery of Roman

London, Barber and Bowsher (2000, 122) went as far as to suggest that damaged vessels were preferentially selected from existing household stock for use in burials. Also at Lankhills, a denarius of Hadrian dating from AD 119-138 was recovered from Grave 3029, which in all other respects appears to be part of the main, 4th-century phase of the use of the cemetery, suggesting that the coin, although exhibiting relatively little sign of use-wear, may have been 200 years old when placed in the grave. In some instances the dating of objects placed with a burial is clearly at odds with that derived from stratigraphic evidence. In others graves may have contained material with conflicting date ranges. Thus Grave 745 contained a vessel dating from the first half of the 4th century and a brooch and belt likely to date from the second half of the century, but examples of this kind of occurrence were rare.

The ambiguities inherent in archaeological dating techniques are accentuated in the case of burials, which are likely to represent a single event. Each burial is likely to have taken place in no more than a single day, and to a contemporary observer the burials forming the cemetery would have taken place in a definite, discernible sequence, but to an archaeologist the dating evidence associated with a given grave may only indicate a date range that spans several (or more) decades, and which encompasses many burials. Consequently the sequence of burials is lost. This is graphically demonstrated at Lankhills by the large number of graves that can only be attributed broadly to the first half of the 4th century on the basis of ceramic evidence. The availability of dating evidence is additionally affected by changes in funerary practice, such as the apparent shift away from the deposition of pottery vessels after the mid-4th century. It should also not be forgotten that the majority of the graves contained no datable objects and so cannot be assigned any date on artefactual grounds.

The nature of the cemetery did not, unfortunately, lend itself easily to the establishment of chronological sequences through the stratigraphic relationships between burials. In general some effort seems to have been made to avoid disturbing existing burials, with the result that the majority of the graves were dug into previously undisturbed ground and so had no useful stratigraphic relationships, having been cut into the chalk bedrock and sealed by the modern overburden. Where sequences existed, which was mainly on the eastern side of the cemetery where a dense concentration of graves had been dug into the backfilled ditch 450, they were generally short, consisting of no more than three or four superimposed or successive burials. Few of these groups included graves with datable artefacts that might have assisted in the attribution of absolute dates to the sequence, and it is not possible to make correlations between the individual sequences.

Phasing the cemetery

With the caveats discussed above, it has been possible to use the existing dating evidence to construct a broad chronological scheme for the use of the cemetery, based on those burials to which a date could be attributed on the basis of associated artefacts, stratigraphy or radiocarbon determinations. The evidence from Clarke's excavations was also re-assessed in order to incorporate all the dating evidence from the cemetery into a single integrated scheme. The majority of the burials lacked either intrinsic dating evidence or stratigraphic relationships with features that could be dated and so remain unphased, but there is no reason to believe that they do not conform with the scheme devised for the datable burials.

There is no evidence for breaks in the use of the cemetery. Although the types of datable objects placed with the dead changed over time (and may have their own, unrelated, dating schemes), burial seems to have been continuous from its inception until the end of the 4th century, if not beyond. There were, however, changes over the course of the century in the degree of use of particular areas of the cemetery, the most notable of these being the expansion of burial into the area east of ditch 450/F.12 in the second half of the century. In the report on the 1967-72 excavations, Clarke (1979, 116-119) used this shift as a basis for dividing the cemetery into four distinct areas with clearly defined, though overlapping, periods of use. The area of the OA excavation was mostly confined within only one of these zones, Area W, to which Clarke attributed a period of use of *c* AD 310-370/90, with burials here becoming less common after *c* AD 365/70 (ibid., 117-8).

Because the use of the cemetery, and particularly of the area west of ditch 450/F.12, was continuous, this use cannot readily be divided into a sequence of distinct phases, as the dislocations in activity that this would imply are simply not present. However, the date ranges of many of the datable artefacts placed with burials fall clearly on either side of AD 350, and this allowed these burials to be attributed to either the first half of the 4th century or after AD 350, while a small number of burials could be assigned to the period after AD 388 on the basis of numismatic evidence. This facilitated comparison between burials with artefacts dating from before AD 350, those from the second half of the century, and those dating from the final stage of the use of the cemetery, after AD 388. The division of the dated burials into these broad periods enables the development of the cemetery and diachronic changes in the funerary practices that occurred within it to be examined, although it should be emphasised that they are not intended to be phases in the conventional sense of distinct, temporally bounded episodes distinguished by dislocations or alterations in the activities represented (Clark 2000, 158).

The dating evidence

A total of six graves from the OA excavations were attributed to the period before AD 350, eight to the second half of the century, and four to after AD 388 on the basis of coins deliberately placed with the burial. Although it is possible that some coins may have been in circulation for some time before being deposited, and therefore that they provide a misleadingly early date for the grave with which they were associated, there is no indication that the issues of the 330s and 340s were more worn than the coins appearing in later graves, and therefore no particular reason to place them in the later period.

Very few of the pottery vessels associated with graves have closely-defined date ranges, and a few of the reduced ware types could only be assigned a very broad date range in the period AD 270-400 (no attempt has been made here to reconsider aspects of the published chronologies of New Forest pottery types). Where closer dating was possible the most common ranges were AD 270-350 and AD 300-350, and this allowed a further 20 burials from the OA excavations to be attributed to the period before AD 350.

Most of the other categories of material placed with the burials were broadly attributable to the 4th century, but some are more specifically associated with the latter half of the century, and can thus be used to assign the graves in which they occur to this period. These items were the shale spindle whorls, the combs, the bone and ivory bracelets, and the belt sets and crossbow brooches. In all, 23 graves were attributed to the period after AD 350 on the basis of these associated finds.

A small number of burials that contained objects dating from the first half of the 4th century also contained material that indicated that they dated from the second half of the century. Grave 18, which contained a small jar dated to *c* AD 270-350, also had 11 bone bracelets and thus a date later than that of the pottery vessel is indicated. Grave 745 had a flask or jug that also dated from before AD 350, but the unusual strap ends in this grave belong to the second half of the 4th century. One grave that contained a group of three coins dating from the 330s and 340s (1370) was assigned to the period after AD 350 because it also contained four bone bracelets, and another (1755) that contained three coins of similar date was likewise attributed to the later period on the basis that pottery from its backfill dated from the second half of the century. In the latter case, however, the 'discrepancy' between coin and pottery dates may only have been very slight and a date around the middle of the 4th century is not implausible.

Two further burials from the OA excavation could be attributed to the period before AD 350 on the basis of stratigraphic relationships with graves dated to this period on the basis of artefactual evidence, and four graves that cut burials dating from after AD 350 were similarly assigned to that period.

Radiocarbon dating

A series of radiocarbon dates was obtained with the aim of providing independent dating for key aspects of the cemetery, particularly relating to its earliest and latest phases. A specific objective was to use these dates to test the view that use of the cemetery had ceased at the end of the 4th century. It was unfortunate that the present excavations did not encompass any of the area east of the original north-south boundary ditch, the area where Clarke thought that the latest burials had occurred. Nevertheless, six inhumation graves (87, 1175, 1385, 1440, 1491 and 1846) and one *bustum* burial (655) were selected for radiocarbon dating on the basis that they were the latest graves in local sequences and/or were potentially of late 4th-century or later date on other (mostly artefact-related) criteria (see Table 6.15). Most obviously, two of these graves (1175 and 1440) were dated after AD 388 by associated coins.

As presented in Figure 6.5 the calibrated radiocarbon dates have quite wide ranges, particularly at the 95% confidence level. The date for the *bustum* Grave 655 is centred on the end of the 4th century, which is consistent with the archaeological evidence. Broadly comparable evidence placing Graves 87, 1175, 1385, 1440, 1491 and 1846 at the end of the 4th century is not, however, reflected in the same way in their radiocarbon dates. These tend to span the later 3rd and 4th centuries. The earliest dates for these graves on archaeological criteria (for example, assigning Graves 1175 and 1440 to AD 388 rather than any later point in the date range (388-402) of their associated coins, let alone a subsequent date) therefore coincide fairly consistently with the upper extremity of the 95% confidence ranges of their associated radiocarbon dates. This is clearly problematic. The radiocarbon dates cannot be considered to be 'wrong', but for so many dates to display the same pattern, when one or more (if not all) of these dates might reasonably have been expected to resemble that obtained from *bustum* Grave 655, suggests a phenomenon that requires explanation. This is not easily achieved, but one possibility is that the radiocarbon dates reflect a documented skewing effect on radiocarbon dated human bone resulting from consumption of relatively high levels of marine food, as a result of which radiocarbon dates appear older than would normally be the case (for examples from widely differing periods, see Barrett *et al*. 2001; Cook *et al*. 2001). The suggestion that this applied to some of the Lankhills people may be (tentatively) supported by the work on the carbon and nitrogen isotopes. In general terms Cummings and Hedges (above) conclude that 'the slight enrichment in carbon suggests a small, but consistent, incorporation of marine fish or shellfish into the diet of some of the people interred in the cemetery'. In the specific cases, it is unfortunate that because of the nature of the sampling strategy, carbon and nitrogen isotope

data were only recovered from two of the radio-carbon dated individuals, those in Graves 1175 and 1622. These had moderately enhanced $\delta^{13}C$ levels (-18.7 and -18.8‰ respectively), ie in a range (-18 to -19‰) enriched by 2‰ or more compared to the carbon values of both pigs and herbivores, consistent with the general interpretation just quoted. The relative paucity of direct evidence for fish consumption in Roman Britain is well-known (Locker 2007), and Winchester is no exception to this pattern, but shellfish, particularly oysters, are routinely recovered here and might have formed a substantial part, if not the majority, of the marine component of the diet which contributed to enhanced carbon levels. In fact it is not possible to estimate with any precision the size of any such marine offset in relation to the recorded radiocarbon dates since the nature of the elevation of bone collagen depending on diet remains uncertain (Hedges and Reynard 2007). It may be considered unlikely, however, that the possible extent of marine food consumption indicated here would have been sufficient to result in the apparently 'too early' radiocarbon dates recorded here (Gundula Müldner pers. comm.).

The radiocarbon dates therefore possibly shed an interesting sidelight on an aspect of the diet of the Lankhills people, but they do not advance understanding of the date of the latest phases of burial activity at the cemetery.

THE CEMETERY

The development of the cemetery

Land divisions predating the cemetery

A sequence of features identified in Clarke's excavations was interpreted as having at some stage defined the eastern limit of the cemetery (Clarke 1979, 99-110). Feature F.9, a series of irregular, intersecting pits interpreted as planting pits for trees or shrubs, and feature F.43, a shallow gully interpreted as a bedding trench for a hedge, extended across the excavation area on parallel north-south alignments, and although it was not possible to demonstrate whether they were contemporary, both were clearly superseded by a substantial V-shaped ditch, feature F.12, which lay on a similar alignment. A shallow, linear depression (F.23) *c* 4 m east of the ditch was interpreted as a negative lynchet formed at the foot of a putative bank associated with the ditch. It was further argued that after these features had eventually been overtaken by the eastward expansion of the cemetery, its eastern limit may have been marked by gully F.37, which was situated *c* 29 m to the east of ditch F.12, at the eastern edge of the excavation.

The results of the OA excavation have indicated that some of these features, rather than necessarily being created to enclose the cemetery, may represent the boundaries of previously-defined plots of land into which the cemetery was inserted. Features F.9, F.43 and F.12 all extended into the area of the

OA excavation, where they were recorded as features 460, 470 and 450 respectively. In addition, a sequence of shallow ditches on an east-west alignment ran across the northern part of the excavation area, and ultimately defined the northern boundary of the cemetery.

Gully 470 lay at right angles to the east-west boundary, and is likely to have been contemporary with at least one phase of that boundary, dividing two plots of land on its southern side. The north-south orientation of gully F.37 may indicate that it, too, was part of this scheme of boundaries, the whole defining a group of rectilinear plots, the full extent of which is not known. Neither the date at which these plots were created, nor the period of time for which they were in use could be established with absolute certainty, but they clearly predated the main period of use of the cemetery, possibly by some considerable period of time. The only dating evidence directly associated with any of these boundaries was a coin dating from *c* AD 260-295 from ditch 1352, although as this object was recovered from the surface of the feature during cleaning there is some doubt as to whether it was securely stratified. Indeed, this absence of artefactual material may itself be indicative of an early date for these features, as it is apparent from the presence of residual fragments of pottery and animal bone within the backfill of many of the graves that during the use of the cemetery there was a significant quantity of such material lying on the ground surface or within the topsoil, presumably debris from funerary rites or commemorative meals, which might be expected to have become incorporated into the fills of any features that were open at the time. Certainly the features defining the north-south boundary had silted up before the second half of the 3rd century, when ditch F.12/450 was dug, clipping the eastern edge of feature F.9 in the southern part of Clarke's excavations and cutting obliquely across gully 470 within the area of the OA excavation.

Ditch 450 roughly followed the alignment of the earlier gully 470, but at its northern end it curved eastward, and would appear to represent the western side and north-west corner of an enclosure rather than a redefinition of the earlier boundary. The coincidence of this ditch with the earlier boundary is unlikely to be merely fortuitous, and is likely to indicate that the earlier boundary was still being respected when the enclosure was constructed. Indeed, the curvature of the ditch may indicate that to the east of the excavation area, the northern side of the enclosure lay on approximately the same alignment as the east-west boundary. Perhaps the plot of land east of gully 470 was being re-defined and converted into a discrete enclosure by the creation of a more substantial earthwork. The precise date of its creation is uncertain, but after the ditch had partly silted up a turfline that developed over its primary fill contained sherds of New Forest ware, indicating a *terminus post quem* of *c* AD 270 for

this deposit. No conclusive evidence was found regarding the function of the enclosure. It is possible that it was from the outset funerary in nature, as has been suggested for an enclosure in the Wotton cemetery at Gloucester, which has been tentatively interpreted as a precinct around a mausoleum (Foundations Archaeology 2003), although this may be unlikely at Lankhills as the feature predated the commencement of burials in this part of the cemetery. It may have had a more prosaic use, and Clarke's (1979, 105) suggestion that this area was cultivated is by no means unlikely, although this use could have predated the establishment of the enclosure suggested by ditch 450, the scale of which might imply more than just definition of an area of agricultural use. The burial of a neonate (1725) was recorded lying on the base of the ditch, but as this burial was truncated by both cremation burial 1724 and pit 1671, it is possible that it was interred in a grave cut that was not recognised at the time of excavation. This individual may therefore have been buried during the main period of use of the cemetery, and not placed at the bottom of the ditch when the latter was initially dug.

The east-west boundary appears to have remained in use for a considerable period of time, and was retained as the northern limit of the cemetery. There is evidence for at least four phases of ditch cutting, which are likely to have resulted from successive re-definitions of the boundary. Although some graves encroached on the ditches of this boundary, they were few in number and no burials at all were located beyond it, indicating that the boundary continued to be respected into the 4th century and defined the northern limit of the cemetery throughout its use. The digging of a small group of graves into the fills of the ditches indicates that, although the boundary was still respected, the ditches themselves had by this time silted up, and that the physical expression of the boundary most likely survived as a bank. As burials extended right up to the ditches, as well as in some cases being dug into them, it is likely that the bank lay to the north of the ditches. The ditches themselves were relatively slight, and while this might have been in part a consequence of modern truncation of the sequence in this part of the site it might also suggest that the position of the boundary was indicated by further elements such as a hedge, although there was no archaeological evidence for such a feature (or indeed, for the putative bank associated with the ditches).

The early phase of the cemetery, c AD 300-350

The pits

The earliest activity associated with the cemetery was the digging of the group of large, shallow pits in the central part of the excavation area, and possibly a similar group of features at the western end of Area 1. The precise purpose of these pits is uncertain, and the virtual absence of finds is not helpful in this respect. A purely functional role cannot be ruled out; the chalk bedrock that lay close to the surface here would certainly have been a potentially valuable resource, but the shallow depth of these features would not have been sufficient to obtain a worthwhile quantity of material. However, the close spatial association of the pit clusters with later cemetery features, and in particular with the group of early burials sealed by the soil layers and with the sequence of late 4th-century graves including prone burials and burials with unusual alignments, seems unlikely to be merely fortuitous and suggests that burials were being deliberately associated with these earlier features. It seems probable that these pits were used in rituals associated with the funerary use of this area, perhaps related to communication with, or the dedication of offerings to, the dead or the chthonic deities (see below). The nummus of Maximian recovered from the upper fill of pit 1261 provides a *terminus post quem* for this activity of AD 303-5, assuming that it was certainly associated with this feature. If this interpretation is correct it follows that the digging of the earliest pits will have been contemporary with burial activity somewhere in the near vicinity, even if this only extended to the area of the pits themselves at a later date.

Graves AD 300-350 (Figure 7.1)

The evidence for the date of the inception of burial at Lankhills reinforces that established by Clarke's excavations, and indicates a date during the early 4th century. As discussed above, ceramic evidence was of limited usefulness in this respect, as the earliest pottery could be attributed only to fairly broad date ranges, typically of *c* AD 270-350 or *c* AD 300-350. The numismatic evidence was able to provide more closely defined dates. With the exception of a denarius of Hadrian that is likely to have been of considerable antiquity when interred, the earliest coins deliberately placed with burials were two Providentiae Caess issues of AD 324-5 and AD 326. This is consistent with Reece's (1979, 202) assertion that 'graves with coins in them date from after *c* 320'. It is therefore likely that burial began during or shortly before this decade, although it cannot be assumed automatically that placement of coins with burials was a consistent practice throughout the life of the cemetery.

Clarke (1979, 116-119) suggested that in general burials spread from west to east, presumably from an origin adjacent to the Cirencester road, to the west of the area excavated. The OA excavation has found no evidence to contradict this model, although since most of this area is located to the west of ditch 450/F.12, which Clarke suggested was a single, undifferentiated area, the opportunity for identifying such a progression is strictly limited. The distribution of graves containing pottery or coins dating from the first half of the 4th century indicates that by *c* AD 350 burials were distributed across the entire area west of ditch 450, and that at
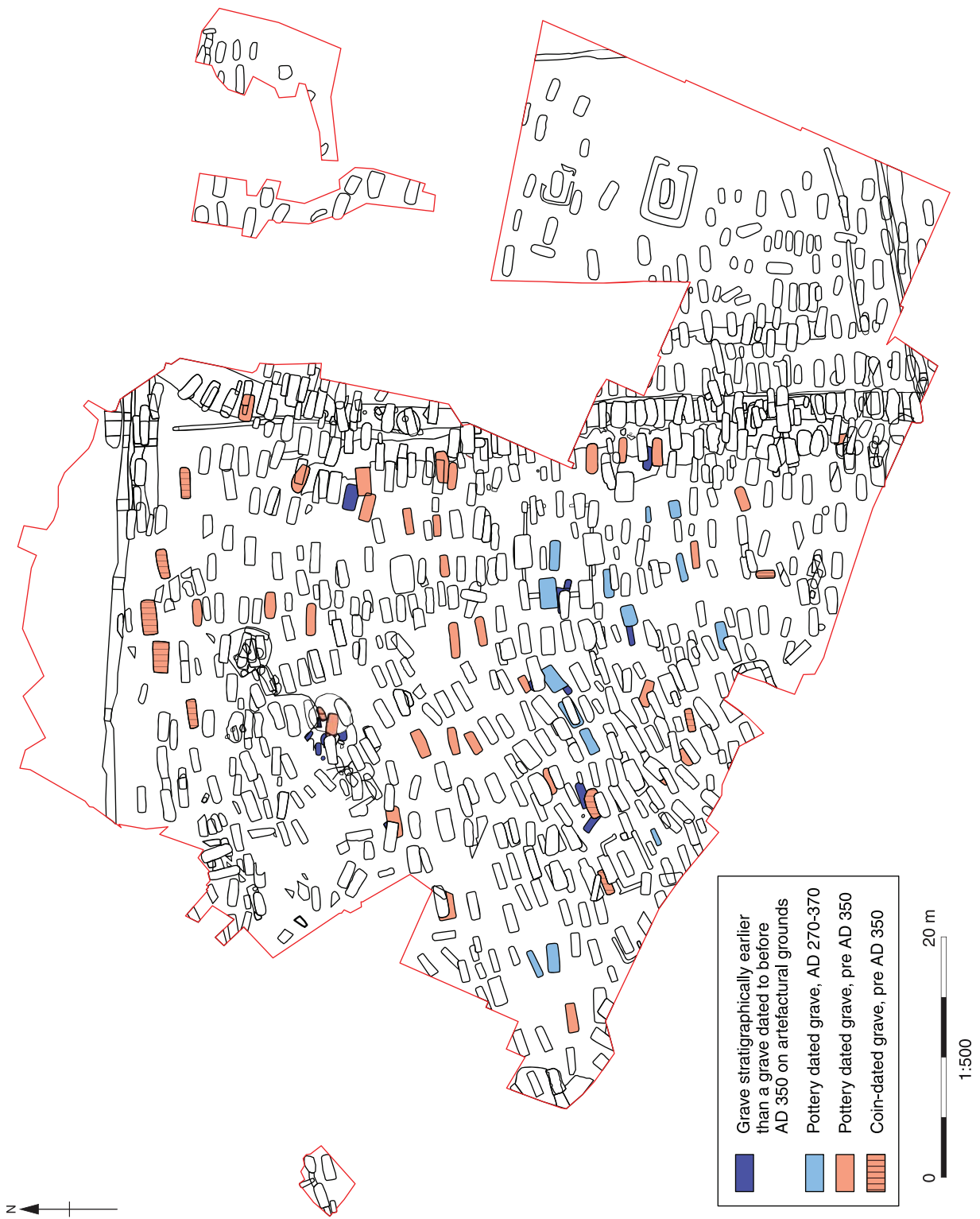
Fig. 7.1   Distribution of graves with artefact dating probably before AD 350

1755 - Dated by pottery
in backfill to 359-400

1705 - Coin 330-48
and spindle whorl

98 - Pottery 270-370
and spindle whorl

	Grave stratigraphically later than a grave dated to post 350 on artefactural grounds
	Coin-dated graves, 388-402
	Coin-dated graves, 364-387
	Coin-dated graves, 350-636
	Graves containing SFs dating from after 350

N

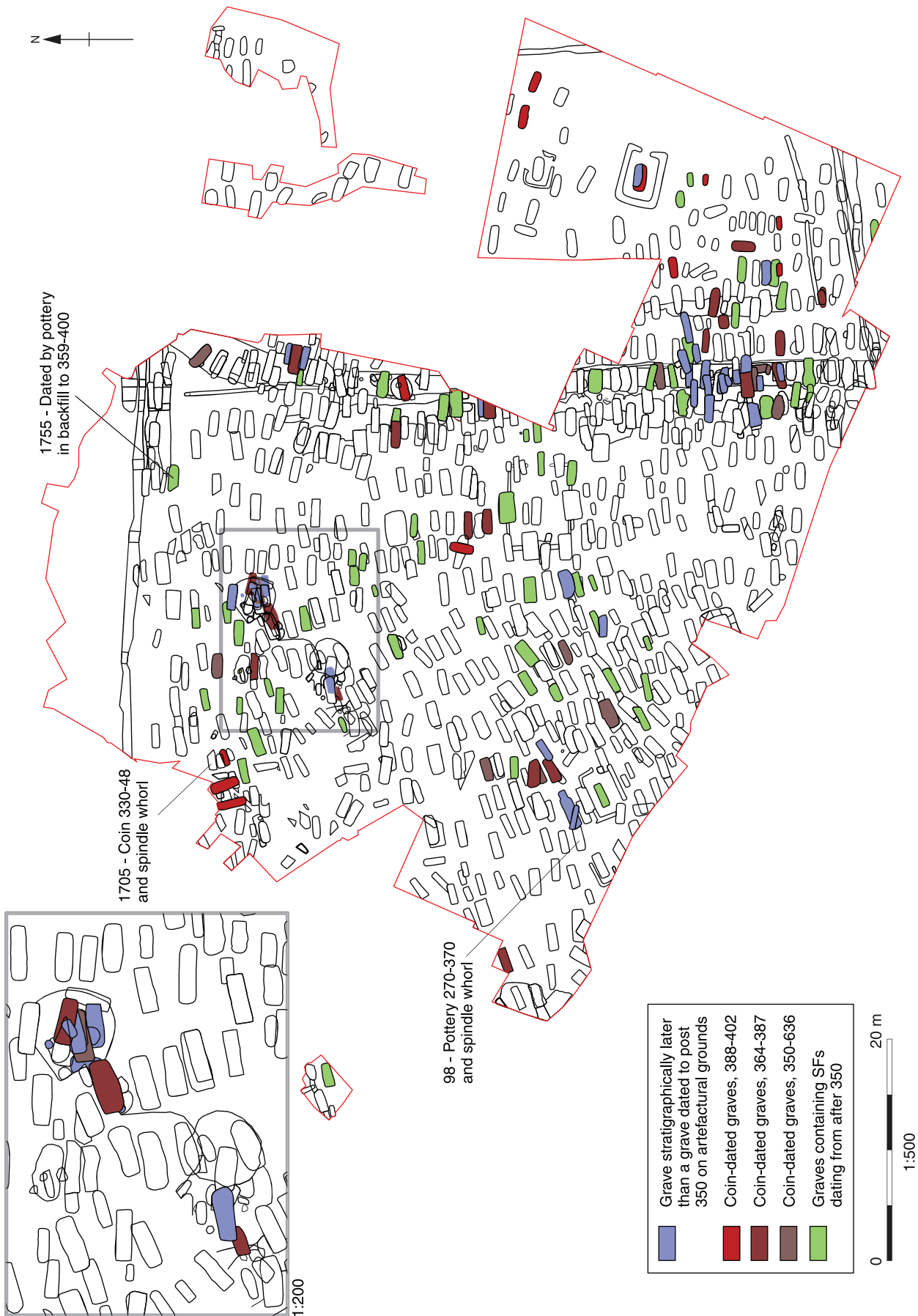1:200

1:500

0   20 m

Fig. 7.2   Distribution of graves with artefact dating after AD 350

least one grave (1810) had been dug into the backfill of the ditch. This need not imply that this area was completely filled with graves at this time; burials continued to be made here during the second half of the century, and it is more likely that graves were distributed sporadically across the area, the intervening spaces only later being infilled with subsequent burials. Some of the earliest coin-dated graves were located along the northern edge of the cemetery, where Grave 635, which contained a nummus of Constantine II dating from AD 326, and Graves 870, 1355 and 1403, which all contained coins dating from the 330s or early 340s, lay close to the northern boundary ditch. Although a change in the orientation of burials can be observed between those located to the south-west of a line drawn from Grave 1350 to Grave 645, and south to grave 163 from Clarke's excavations, which are oriented approximately WSW-ENE, and those to the north and east, which are aligned more strictly west-east, this does not appear to correspond with any chronological phases of the expansion of the area used for burial. Rather, it is likely to be a result of the proximity of major topographical features, the burials in the south-western area being aligned on the Cirencester road while the alignment of those to the north and east is derived from that of the features defining the northern and (initial) eastern boundaries of the cemetery.

The group of burials dug into the backfilled pits in the central part of the excavation appears to represent a distinct episode of use of this area, as it was only after these burials had been sealed by soil layers that graves which conformed with the general pattern of burials in the surrounding area as regards spacing and orientation were dug here. The dating evidence from these features is not sufficiently precise to establish whether these burials were made before the main period of use of the cemetery, or whether they were contemporary with early burials in the rest of the cemetery. The presence of a nummus of Constantine dated AD 330-331 in Grave 1547 and a pot with a date range of AD 300-350 in Grave 1622 would appear to indicate that these burials date from the first half of the 4th century, while the earliest dated grave that cuts the soil layers (1490) was dated to AD 367-375 (or later) by a coin of Gratian. It is possible that this area was for some time reserved for use by a specific part of the community, who cremated most of their dead rather than interring them in the manner of the majority of the surrounding burials.

The later 4th century (Figure 7.2)

The area used for burial was not enlarged during the period from AD 350 until the 360s or 370s. Burial still continued in the area that was already in use, resulting in infilling of the spaces between the earlier graves. Perhaps the most notable feature of this period was the apparent intensity of grave-digging within the backfilled ditch 450/F.12. The

failure of burials to extend beyond the ditch suggests that the interior of the adjacent enclosure was not available for burial at this time, and further that it was the bank on the eastern side of the ditch that was treated as the boundary, rather than the ditch itself. Presumably the ditch was regarded as being outside the enclosure, and therefore a legitimate location for burials. The repeated digging of graves into the ditch may indicate that the area to the west had by this time been substantially filled with graves. Indeed, if Clark's suggestion that burial spread from west to east is correct, it is possible that the backfilled ditch was seen as the last piece of ground available for burial in this part of the cemetery.

The evidence from Clarke's excavations indicated that the first graves to be dug beyond ditch 450/F.12 were associated with coins of Valentinian I (AD 364-75) and Valens (AD 364-378). After the apparent stand-still in the expansion of the cemetery during the previous decades, it would appear that the enclosure to the east of the ditch was now made available for use for burial. Burials of this date were dug into the area formerly occupied by the bank surrounding the enclosure as well as in the area beyond it, which is unlikely to have happened if the bank was still extant, as it would have provided an impediment to the digging of graves in this location. This suggests that the bank was levelled when the enclosure was given over to burial, and some of the latest fills of ditch 450/F.12, particularly those overlying the mounds over graves recorded in Clarke's excavations, may have resulted from backfilling of the upper part of the ditch with material from the bank.

The latest burials, represented by graves containing coins of the final issue of Roman coinage found regularly in Britain, dating from AD 388-402, are characterised by two contrasting patterns. First, the eastward expansion of burial into the area of the former enclosure, revealed in the excavations of 1967-72 and in the more recent work by Wessex Archaeology, continued, although the burials became increasingly sparse, with considerable empty spaces between them. Secondly, a small group of burials was inserted into the north-western part of the OA excavation area. The latter included at least two burials (Graves 1373 and 1440) that completely disregarded the earlier burials in this area, being aligned north-south and dug through existing graves.

The end of burial at Lankhills

The date of the final use of the cemetery cannot be pinpointed with any certainty, although it is a key question both for Lankhills itself and for the wider chronology of the Roman town. Radiocarbon dates were obtained specifically to test the presumption that the use of the cemetery may have extended beyond AD 410, and perhaps well beyond that date, as discussed above. The artefact-based arguments

for the chronological framework for the end of the cemetery set out by Clarke were also re-assessed (eg Clarke 1979, 4, 287-8). The presumption in favour of an extended chronological range, however, is no more acceptable than a narrow view of the chronology of the cemetery if it is not tested as rigorously as possible.

In a potentially extended chronological framework the value of the standard dating media of coins and pottery (the latter in any case a relatively blunt tool) is reduced, since the extent to which these continue in use (or, in the case of pottery, in production) after the end of the 4th century remains either uncertain or controversial. For the latest copper alloy coinage (leaving aside the still largely exceptional 5th-century material known from several sites in Britain (Abdy 2006, 91-94; Moorhead 2006; but see now Collins 2008)), hoarding as late as the 420s seems likely (Guest 1997, 415) with the implication that some use continued at least as late as this. This is not to say that graves at Lankhills with coins of the House of Theodosius necessarily date after the end of the 4th century, but that such a dating is possible. With regard to pottery, thinking about the demise of production in the major late fine ware industries for the most part remains linked to the issues related to the end of the monetary economy, upon which these industries are considered to have been dependent (eg Young 1977, 241). Again the difficulties of distinguishing between period of production and length of use are to the fore. Work on the black-burnished ware industry has identified a phase of production that is thought to extend into the 5th century (eg Gerrard 2004), but it is likely that Winchester fell outside the distribution area of the relevant products (ibid., 72, fig. 8.4). The general absence of black-burnished ware at Lankhills may indeed owe something to related chronological factors, that is to say reflecting the contraction of the market area of the industry back into its south-western heartland after about the middle of the 4th century, but for the most part is more readily explained in terms of the typological range of vessels employed in the cemetery and the preference for a more local source (the grog-tempered tradition industry) for cremation urns.

Clarke (1979, 4, 287-8) used the absence of Quoit brooch style metalwork as one element in his argument for an early end date for the cemetery. This is problematic, however, because the associations of this material, regardless of its generally accepted insular origin, tend to be with non-urban locations, typically early 'Anglo-Saxon' cemeteries (as for example, barely 3.5 km distant at Worthy Park; Hawkes with Grainger 2003, 58, 74, 134, plate 1) but also because, while the Winchester area does lie within the overall distribution of pieces in this style (Suzuki 2000, figs 78 and 79) the total number of objects is insufficiently large for arguments based on their absence to be compelling. Such an absence cannot therefore be taken as a secure guide to the chronology of Lankhills.

The latest readily-datable graves are therefore those containing coins issued in AD 388-402, although the burials themselves may be later than this date, as the coins could have been in circulation for some time, or deliberately curated, before their final deposition. These graves certainly appear to represent the final phase of burials, since those to the west of ditch 450/F.12 are, without exception, the latest burials in their stratigraphic sequences, and those to the east are located at the limit of the eastward expansion of the cemetery, where the graves peter out. The end of use of the cemetery following the digging of these graves does not appear to have been foreshadowed by any gradual dropping off of use during the preceding period. Since so many graves lack datable artefacts it is difficult to establish the relative proportion of burials made during different periods of the cemetery's use, but the admittedly subjective impression provided by the dateable graves is that there was no significant decline in the rate of burial until the final abandonment of the cemetery.

Several artefact types are demonstrably or potentially associated with the latest (post AD 388) phase of use of the cemetery. The presence of these artefact types (eg bone bracelets and combs), which may not have made their first appearance before the final third or final quarter of the 4th century, does not necessarily mean that their use extended beyond the end of the century, but again this is possible. The evidence for repair of several of the crossbow brooches (see Chapter 4 above) is also highly suggestive of use well beyond the date of their initial production, even if this is not always very precisely defined; these were clearly still important items, the continued use of which was considered desirable (were no replacements available, or was their issue a one-off event?). The dating of Hawkes IB buckles is also pinned firmly to the late 4th-early 5th centuries, but again closer precision is unlikely to be achieved, although Cool (Chapter 4 above) argues for a 5th-century rather than an earlier date. All that can be said for the present example (from Grave 1175) is that the earliest possible date for its deposition is AD 388.

There are thus no graves which contain artefacts of indisputably 5th-century date, either as grave goods or as incidental inclusions, and no Anglo-Saxon material has been identified within the cemetery (although a stave-built bucket from grave 2038 of the recent Wessex Archaeology excavation is possibly of early Saxon character (Wessex Archaeology 2009, 19)), despite the discovery of Anglo-Saxon pottery dating from the 5th century within the town (Biddle and Kjølbye-Biddle 2007, 195) and the presence of a cluster of early Anglo-Saxon cemeteries in the surrounding area (ibid., 199-203). In the present site the best evidence for the continuation of burial beyond the end of the 4th century comes from the sequence of late graves in the central part of the excavation and the smaller group in the north-western corner. The former group constitutes

one of the longer stratigraphic sequences, and may have a start date during the middle of the 4th century, since one of the earlier burials, cremation burial 1195, contained a coin of Valens (AD 364-378). If this is the case, then it is reasonable to infer that the later part of the sequence continues into the 5th century, and this proposition would be consistent with the later part of the date range provided by the radiocarbon determination of AD 267-272, AD 335-465 or AD 482-533 for cremation burial 655. This burial was one of the latest in the sequence, along-side inhumation Grave 790, which contained a coin of AD 383-388, and Grave 795, which cut Grave 790 but in which, unfortunately, no human remains survived *in situ*. The two late burials in the north-western part of the OA excavation, Graves 1373 and 1440, clearly disregarded the east-west orientation of the majority of graves in the cemetery, and particu-larly those through which they were dug. This might indicate that by the time these burials were inserted, not only were the earlier graves in this area no longer visible on the ground surface, but possibly even that the predominant burial orientation had been forgotten, although this is unlikely to have been the case if the use of the cemetery was contin-uous, as argued above. While it is more likely that the north-south alignment indicates a different burial tradition from that of the common west-east rite, these graves are in any case probably among the very latest in the cemetery. However, although these two groups of graves may serve as evidence that burials were still being made into the early part of the 5th century, they are clearly not typical of the cemetery as a whole. The burials in the central part of the OA excavation are unusual as regards both the length of the stratigraphic sequence and the range and forms of burial present, including *bustum* burials and three prone burials, while the anomalous orientation of the burials in the north-western part of the excavation is one of the principal reasons for suggesting that they are of significantly late date, although such a date is also supported by the artefactual evidence.

It could be suggested that later burials might pass unrecognised if they lacked accompanying grave goods, but there is little evidence to support this. In particular, there are insufficient stratigraphic sequences in which late 4th-century graves are followed by such undated burials (one of the relatively few examples being the Grave 790-795 sequence mentioned above), and in fact burials with grave goods became more numerous and the range of objects placed with them more varied, during the second half of the century. The latter tendency continued with the graves containing the final issue of coins.

The absence of substantive evidence for continued burial during the 5th century would seem to indicate that, with the exception of a small number of anomalous burials, the use of the cemetery ended (perhaps, as has been suggested, rather abruptly), some time fairly shortly after *c* AD 400.

Organisation

The boundaries of the cemetery

The cemetery excavated at Lankhills formed part of the northern cemetery of *Venta Belgarum*, which extended along the road leading out of the north gate of the city and led toward Cirencester. It has often been assumed that the area used for burial was spatially uninterrupted, and that the cemetery expanded northward in a linear fashion over time from its origin as a relatively small area at the junction of the Cirencester road with the road to Silchester. However, it now appears likely that burial was more discontinuous, and that the area contained a number of more or less discrete cemeteries, which may have been in use at different times. In particular, the area excavated at Andover Road, to the west of the Cirencester road, may represent a distinct burial area (Ottaway and Rees forthcoming, 307)

The site excavated at Lankhlls lay within one of a number of areas that were newly given over to use for burial during the late 3rd and 4th centuries. For a few decades during the early part of the 4th century it may have become the only area of the northern cemetery that was in use, as evidence from other excavations suggests that the area at Victoria Road West may have gone out of use for a short period between *c* AD 320 and 340, and burial in the areas at Hyde Street and Andover Road may not have commenced until the middle of the century (ibid.). Burials were still being made during this period in Winchester's other cemeteries, however, as both Chester Road in the eastern cemetery and the ditch of Oram's Arbour in the western cemetery have produced contemporary burials (ibid.).

As discussed above, the area used for burial at Lankhills was contained within pre-existing plots, defined by ditches and banks. No artefactual evidence was found to indicate the date at which these plots were first laid out, but their stratigraphic relationship with possible enclosure ditch 450/F.12, which was beginning to silt up by *c* AD 270, suggests that they were in existence some considerable time before burial was initiated in this area. It is conse-quently uncertain whether they were originally established for some non-funerary, perhaps agricul-tural purpose and were only subsequently utilised for burial, or whether they were established as part of a wider scheme of enclosing land designated for burial, albeit some time before this area was actually so used. Support for either hypothesis can be found in contemporary cemeteries elsewhere; at the Poundbury cemetery at Dorchester, Dorset the 4th-century cemetery overlay a series of rectilinear field enclosures (Farwell and Molleson 1993, xii and 18), whereas the burials at the eastern cemetery of Roman London were all located within a series of 29 plots defined by roads, ditches, paths and other open areas flanking a minor road (Barber and Bowsher 2000, 13).

By the time the part of the cemetery within the excavation area came into use, the principal north-south boundary had been superseded by a ditch (450/F.12) that may have formed the western side of an enclosure, although the boundary that extended across the northern part of the site was apparently still in existence. The area available for burial was therefore constrained by the pre-existing boundaries of the enclosure to the east, the Cirencester road to the west, and the boundary ditch to the north. It is interesting to note that it appears to have been the bank accompanying ditch 450/F.12 that was treated as the boundary of the enclosure, and that the ditch was thus outside the enclosure and therefore a legitimate location for burials. The area west of the enclosure appears to have been fully utilised from the outset, and eventually became overcrowded, resulting in the adjacent enclosure being given over to funerary use. Once the cemetery had been extended beyond ditch 450/F.12 it is not known where its eastern boundary lay, and if an earthwork similar to ditch 450/F.12 defined the eastern side of the enclosure it has not been located and must have lain beyond the eastern edge limit of Clarke's excavation. Alternatively, the much slighter ditch F.37 may have formed the new boundary, but as the burials petered out before reaching it this cannot be demonstrated conclusively.

Boundary features are rather scarce in the other areas of the northern cemetery that have been investigated, although this may be explained, at least in part, by the location of such features beyond the (often limited) areas investigated by excavation. Perhaps the clearest example of a boundary associated with the cemetery is at Victoria Road West, where the area used for burial during the late 3rd and 4th centuries was bounded to the north-east by a ditch (F12) that was originally dug during the late 2nd or 3rd century to separate a group of buildings from a gravel path alongside the Cirencester road (Browne *et al.* forthcoming, 99). Similarly, at Andover Road the western limit of the cemetery was defined by a substantial ditch (F221), which was dug during the late 3rd or 4th century, possibly when the cemetery was first established (Teague forthcoming, 111-112).

Possible symbolic aspects of the cemetery boundaries are discussed further below.

The alignment and layout of the burials

The graves in the area of the OA excavations were somewhat less densely concentrated, and appear slightly less well ordered than is the case immediately to the south in the area of Clarke's excavations. This impression is probably accentuated by the truncation caused by the basement of the School House, which had affected a significant area of the western part of the OA excavations and is likely to have completely destroyed the shallower graves in this area, but it also holds true of those parts of the

site less obviously affected by truncation. Whereas the graves recorded in Clarke's excavations were for the most part densely packed and arranged in closely spaced lines (Clarke 1979, 372), the OA excavations revealed a slightly more dispersed distribution and a more irregular structure. The ordered arrangement of burials is a common characteristic of late Roman cemeteries, although how strictly this was maintained varies between sites. The predominance of lines over rows and vice versa is also variable. Rows are strikingly dominant at Poundbury (Farwell and Molleson 1993, 67-9) and Ashton, Northants (Frere 1984, 300-301; 1985, 288), although even then there were minor irregularities within the rows that led the excavators of the former site to conclude that the rows were the result of gradual developments, being extended piecemeal as new burials were added rather than having been planned from the start (Farwell and Molleson 1993, 69). The main phase of the cemetery at Butt Road, Colchester, appears to exhibit both tendencies, with rows more common in the southern part of the excavated area and lines to the north (Crummy and Crossan 1993, fig. 2.21). Within the cemeteries of Winchester other than Lankhills, the most organised arrangement was the third phase of burials at Victoria Road West, where the irregular rows and nascent lines are similar to the arrangement seen at Lankhills, whereas the burials at Hyde Street and Andover Road were more randomly organised. Although the overall organisation of the burials becomes less ordered in the northern part of the cemetery at Lankhills, it is nevertheless possible to discern some groups of burials that may have been arranged into short lines, such as Graves 1170, 1035 and 1230 in the north-western part of the excavation, or the graves cut into the northern boundary ditch near the north-eastern corner. Some adjacent burials also appear to have been laid out parallel to each other, creating short rows, such as those formed by Graves 850, 1000, 1105, 1135 and 1205 in the central part of the site or Graves 35, 565, 670 and 885 in the north-eastern part. Such alignments, however, are not dominant features of this part the cemetery, and the overall impression is of a fairly *ad hoc* approach to the locating of each grave, albeit within the framework of a general west-east alignment. A similar arrangement of slightly irregular alignments and short-lived rows has been noted at the eastern cemetery of Roman London (Barber and Bowsher 2000, 300).

The overriding characteristic of the burials is a common west-east orientation, and it is possible that the apparent rows and lines are nothing more than a side-effect of this shared orientation rather than the deliberate imposition of an ordered arrangement. The preference for a west-east orientation can be observed elsewhere in the late Roman cemeteries around Winchester, although alignment of burials with relation to pre-existing boundaries can also occur. Within the northern cemetery, both phenomena were observed in the cemetery at

Victoria Road West, where, following an initial phase in which the burials were aligned parallel to the ditch defining the north-eastern limit of the cemetery, a more strictly west-east orientation was adopted around AD 350 (Ottaway and Rees forthcoming, 310). At Hyde Street the majority of burials were similarly oriented west-east (ibid.), and at Andover Road, although the earliest burial was oriented north-south, the subsequent burials were all approximately west-east. Further afield, most of the burials from the main phase of use of the town's eastern cemetery were again oriented west-east, although in the case of the area excavated at Chester Road, as at Victoria Road West, this followed an initial phase of burials with a different alignment (ibid., 170-1). Beyond Winchester, west-east orientations have been found to be dominant at the majority of the late Roman urban cemeteries that have been adequately investigated, as, for example, at Poundbury, Dorchester (Farwell and Molleson 1993, 67-9), Westgate, Chichester (Magilton 1993), and Northover, Ilchester (Leach 1994). At Butt Road, Colchester, as at Victoria Road West and Chester Road, west-east orientation was adopted during the early part of the 4th century following an initial phase of burial with a different orientation (Crummy and Crossan 1993). The recurrent preference for this orientation has been recorded too frequently to be the result of mere chance, and clearly indicates a deliberate choice on the part of the individuals responsible for laying out the cemeteries and carrying out individual burials. Although it has been argued that it was derived from the liturgical requirements of Christian burials (Watts 1991, 53-4), there is insufficient evidence to support the notion that Christianity was so influential in Romano-British society, and there is plentiful evidence for the continuation of probable pagan beliefs and practices in cemeteries with a predominantly west-east grave orientation, not least from Lankhills itself (see below). The choice of orientation may alternatively have been influenced by the solar cult that was actively promoted by a sequence of emperors from the late 3rd century onward, and which may have come to be confused with, and to some extent combined with, Christianity (Macdonald 1979, 425-6).

The west-east orientation was in many cases fairly approximate, resulting in a considerable amount of variation in the alignment of individual graves. Most strikingly, there was a slight difference in orientation between the graves in the southern and western parts of the cemetery, which are aligned approximately WSW-ENE, and those to the north and east, which are aligned more strictly west-east. This is most likely to be explained by graves being aligned according to the nearest significant landmark rather than strictly according to cardinal points. Thus, the graves in the southwestern part of the cemetery are aligned at right angles to the Cirencester Road, those in the northern part of the cemetery are aligned parallel to the bank

and ditch defining its northern boundary, and those to the east are aligned at right angles to the boundary defined by ditch 450/F.12. The importance of such pre-existing features in determining the alignment of burials is demonstrated at Poundbury, where the orientation of the burials appears to have followed that of the boundaries of the earlier field system (Farwell and Molleson 1993, xii and 18), and at Alington Avenue, Dorchester, Dorset, burials were arranged alongside the earthwork of an earlier ditched enclosure (Davies *et al.* 2002, 127). The clearest demonstration of the influence of topographic features on the orientation of the burials at Lankhills is provided by a group of burials dug into the backfilled ditch 450/F.12 in the north-eastern part of the excavation. Here, the northern end of the ditch curved toward the northeast, and the orientation of the burials dug into it curved similarly, indicating that they had been deliberately positioned at right angles to the bank that lay alongside the eastern edge of the ditch.

At some cemeteries the preference for a west-east orientation might be compromised, or perhaps was not considered important. At the Bath Gate cemetery, Cirencester, for example, the majority of the burials were aligned north-south, parallel to an adjacent earthwork boundary (Viner and Leech 1993, 100-1), and a north-south orientation also predominated in the eastern peripheral cemetery at Poundbury (Farwell and Molleson 1993, 19). At Oram's Arbour, the one adolescent and the adult graves appear to have taken their alignment from that of the earthwork (Ottaway and Rees forthcoming, 311). The orientation of burials, both at Lankhills and more generally in Roman Britain, therefore appears to have been determined partly by a preference for a west-east alignment, and partly with reference to pre-existing features of the landscape, characteristics observed equally in rural as well as in urban contexts (eg Pearce 1998; Booth 2001, 21-22). The preferred alignment was not imposed dogmatically, and in some cases was disregarded completely. Even in those cemeteries, such as Lankhills, where the majority of burials were oriented west-east, the influence of significant boundary features could still be felt, and the cardinal orientation compromised accordingly, although it is possible that this was a result of the individuals digging the graves assuming that the two orientations coincided.

The maintenance of a common orientation, and the avoidance of disturbance of earlier graves, would have required graves to be marked in some way so that their location was not lost, although little evidence survives to show how this was done. No tombstones have been recovered from the cemetery, or indeed from anywhere else in Winchester. As is well known, the inscribed tombstones recorded from Roman Britain come largely from the north and west; appropriate stone is more plentiful here, but more significant is the predominant association of the practice of inscrip-

tion with the military and other officials (Mattingly 2006, 202). The 'epigraphic habit' does not seem to have caught on with the native population, and in any case it declined substantially during the latter part of the period (ibid., 247-8). Other forms of marking graves may have been used. One grave was associated with postholes that might have held wooden grave markers, although such markers may not have penetrated deeply enough to impact on the chalk bedrock. It is possible that the outlines of graves were marked using stones or pieces of tile, and this could be the source of the fragments of roof tile found at the cemetery (Poole, this volume), although apart from two imbrices in Grave 256 none of this material was discovered *in situ*. Graves may have been marked only by the mound formed over the burial by excess spoil during backfilling, and/or by markers set into the tops of such mounds and leaving no trace at the truncated level at which the graves were examined archaeologically. Several such mounds were recorded in Clarke's excavations, where some graves had been dug into the hollow left by ditch 450/F.12 before it had silted up to the level of the surrounding ground surface, and had subsequently been preserved beneath further silting, but there were no examples of this in the area of the OA excavations, which had been subject to truncation during the construction of the School House. This calls to mind Sidonius Apollinaris' account of the accidental near-disturbance of his grandfather's grave in a cemetery near Clermont, resulting from the settling of its mound over time (Letters, 3.12.1-2). Although Sidonius' grandfather had served as Praetorian Prefect of Gaul, it is clear from the description that his grave was marked only by the mound.

The widespread distribution of graves dating from the first half of the 4th century (Fig. 7.1) indicates that the whole of the area west of ditch 450/F.12 was in use for burial from the outset, but it is equally clear from the distribution of burials containing grave goods dating from the second half of the century (Fig. 7.2) that much infilling continued during this period. This would suggest that the earlier burials were rather scattered, with open spaces between them that were only subsequently filled by later burials. The plan of the early phase of the use of the cemetery may thus have appeared very similar to that recorded in the eastern part of Clarke's excavations, where no infilling took place because of the abandonment of the cemetery.

There is surprisingly little evidence that the early graves had any significant influence on the locations of later burials. It might be expected that early graves of significant individuals would have acted as foci for clusters of burials, as subsequent graves, perhaps of members of the same kin group, were deliberately placed near them, as at Andover Road, where the earliest burial, G336, has been interpreted as such a 'founder's grave'. However, with the exception of grave 150 from Clarke's

excavations, which had been provided with an enclosure surrounded by a hedge and appears to have attracted subsequent burials, placed within the enclosure and dug into the bedding trench of the hedge, it is difficult to identify any such clustering. Five other definite examples and one possible example of similar enclosures were located within the areas of the combined excavations, but of these only the possible example (in the 2005 watching brief area) may have attracted subsequent burials. Likewise, none of the 21 stepped graves, which may also have been burials of prominent individuals and may all be of relatively early date (see below), was associated with deliberate clustering of later burials (Figure 7.3). In contrast with the stepped graves, however, both the distribution and chronology of the enclosed graves are more wide-ranging and two of Clarke's examples were certainly of very late Roman date. These have been seen as possibly related to a tradition found more widely in western Britain in the post-Roman period and considered to indicate the burials of a secular elite (Webster and Brunning 2004, 78-9).

Throughout the period of use of the cemetery an area in the central part of the OA excavations appears to have been reserved for a distinct set of burials. Distinguished initially by the digging of a complex of pits, perhaps as receptacles for libations or other offerings, the south-western part of this area was used during the first half of the 4th century for the insertion of a group of cremation burials, in contrast to the predominant rite of inhumation that prevailed throughout the majority of the cemetery. By the Valentinianic period, if not earlier, the cremations had been forgotten or consciously disregarded and this part of the area was used for inhumations like the rest of the cemetery, but the area immediately to the north-east now became the site of a sequence of burials that included more cremation burials, including *bustum* burials, as well as inhumation graves, including three prone burials. The density of these latter burials would suggest that they were inserted into this constricted area deliberately, perhaps because it was a particularly desirable location or reserved for the burials of a specific group of people, whether a family group or with some other association.

The results of Clarke's excavations suggested that the organisation of the cemetery broke down somewhat during the latter years of its use, with the orientation of burials becoming more varied and less care being taken in the digging of the graves themselves, which were shallower and more irregular in shape (Clarke 1979, 144), and a similar phenomenon has been observed elsewhere in Winchester's northern cemetery at Victoria Road West (Ottaway and Rees forthcoming, 312). The number of graves within the area of the OA excavations certainly dating from this final period of the use of the cemetery was too small to add significantly to discussion of this phenomenon, mainly because the majority of such late burials appear to
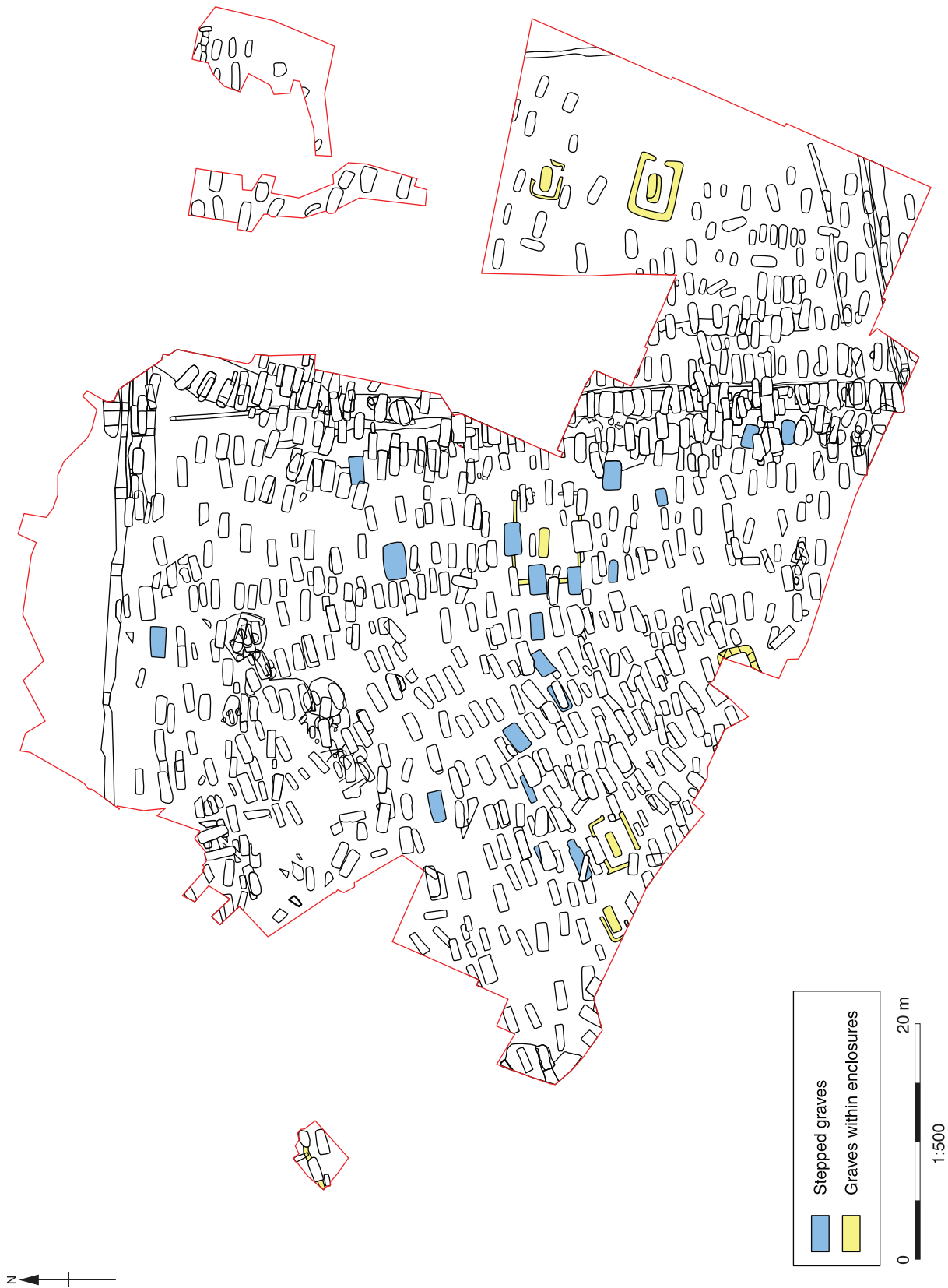
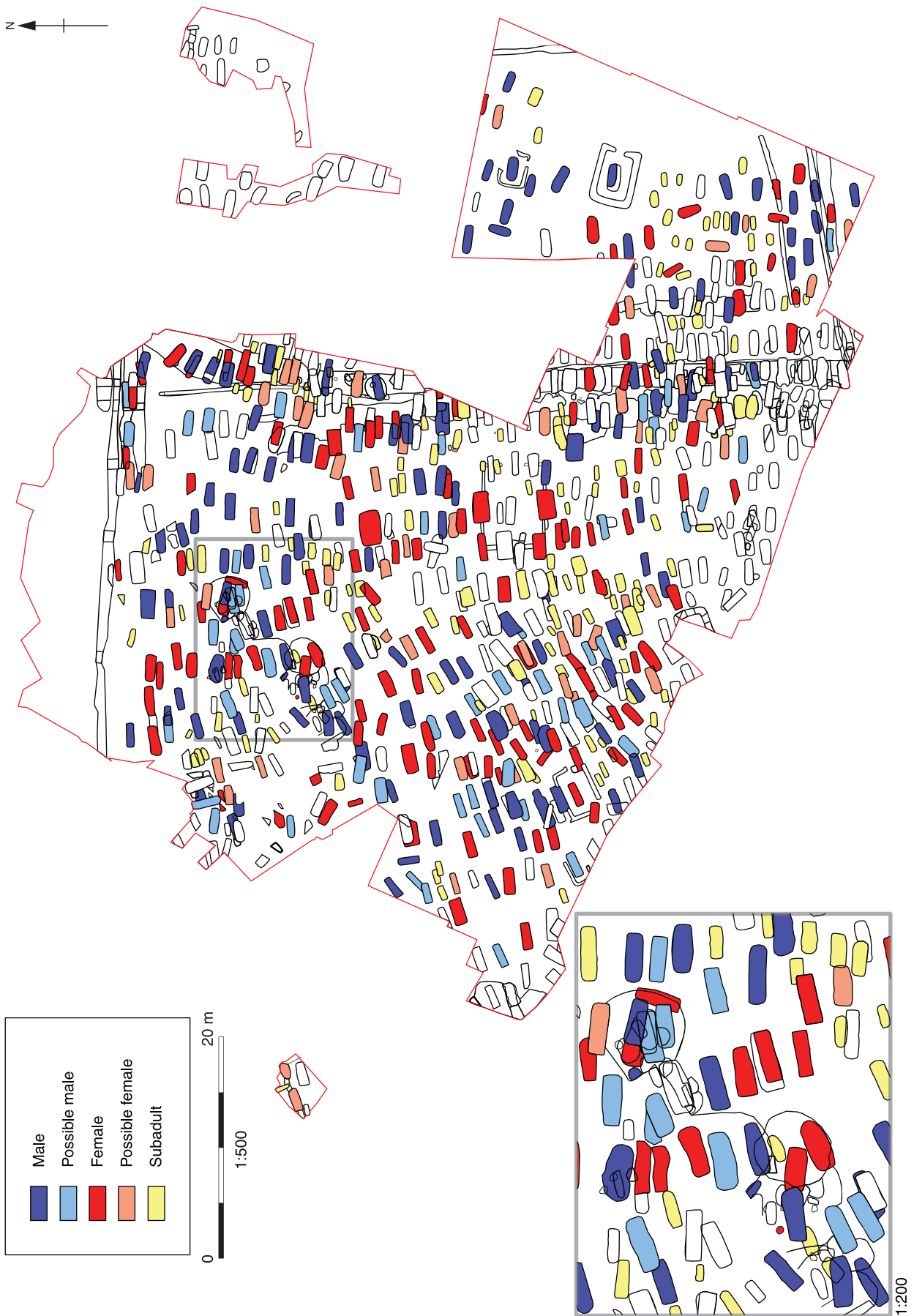*Fig. 7.3   Distribution of stepped graves and graves within enclosures*

Fig. 7.4 Distribution of osteologically sexed graves

have been located to the east of ditch 450/F.12, beyond the limits of the site. However, all three adult graves containing coins dating from AD 388 or later were quite substantial, measuring 1.1-1.2 m in depth, so it is clear that there is no simple correlation between a late date and reduced grave depth.

Distribution by age and sex

The broad distributions of burials in terms of age and sex do not seem to reveal particularly clear cut patterns, particularly when possible 'balancing up' effects, taking account of those burials where the individual could not be sexed, are allowed for. Trends detected by Clarke (1979, 126-7) in the 1967-72 sample included a concentration of male burials west of the north-south boundary F. 12 in the early stages of use of the cemetery, followed by later use of this area mainly for women, and a particularly marked concentration of male burials east of that boundary in the later part of the 4th century. The OA excavations can shed no light on the latter aspect, but it is notable that on the basis of Gowland's reassessment of the osteological material the numbers of males and females in this area now appear much more evenly balanced, and while there are small clusters of male burials in the northern and southern parts of this area the character of male domination identified by Clarke is not sustained (Fig. 7.4).

Localised clusters of male and female burials can be seen elsewhere across the site, but none of these appears to be extensive enough to suggest clear segregation based on sex, although this is an area where further analysis would be desirable. The distribution of subadult burials certainly appears to have been widespread and although, again, possible clusters may be discerned, there is no part of the cemetery in which, on present evidence, such burials were really concentrated, or from which they were clearly excluded. The distribution of other age groups likewise showed little clear patterning and most analyses of these are not discussed in detail here. Two contrasted groups are shown in Figure 7.5, however. These are the much older adults (only identified as such in the OA sample) and neonates. The former distribution, involving only 15 individuals, shows no meaningful clustering either overall or in relation to sex. The distribution of neonates appears to be more clearly patterned, with an identifiable concentration of *in situ* remains in the vicinity of the north-south boundary feature F.12/450 and perhaps a secondary group east of this feature, although scattered examples are seen elsewhere, particularly in the southern part of the excavated area. Redeposited remains of neonates are less obviously clustered, and when combined with the *in situ* burials produce a less focussed distribution, but the extent to which neonatal remains were moved from their original location makes the significance of this difficult to judge. The concentration of neonate burials in the vicinity of F.12/450 may reflect a tendency for such

burials to occur in marginal locations, but this would only apply in the earlier phases of use of the cemetery, before the north-south boundary became a major focus for burial.

The overall picture is consistent with the evidence from other major late Roman cemeteries in Britain which suggests little or no segregation of cemetery populations on the basis of sex or combinations of sex and age (eg Keegan 2002, 66). Keegan (ibid.) follows Clarke in defining a degree of segregation of males and females in Clarke's excavation sample, but her analysis was based on the age and sex data presented in the original report, whereas the reassessment by Gowland, combined with the present dataset, suggest a pattern more closely comparable to that of the other major cemeteries.

A managed cemetery?

It is uncertain how funerals in Romano-British towns were organised, or to what extent the cemeteries associated with such towns were centrally managed. Contemporary sources record a wide range of specialists working in the funerary industry in Rome, including undertakers, morticians, grave-diggers and pall-bearers (Bodel 2000, 135-144), and there is some evidence for the existence of such trades at other cities in Italy also (Bodel 2004). No documentary or epigraphic evidence survives for funeral professionals in Britain, but the similarity of burial evidence observed within and between cemeteries, particularly at the larger towns, may indicate that they existed. The involvement of the same individuals in directing many burials would certainly be consistent with the rather prescriptive range of funerary practices and grave goods encountered. On the other hand, it must be doubted whether the towns in Britain, with their rather smaller populations, would have produced sufficient demand to maintain such professionals on a full-time basis. In addition, employment of the services of such specialists may have been beyond the resources of a large proportion of the population; it is known that during the Republic mass graves had existed at Rome for the burial of those who were too poor to afford a proper burial (Varro *De Lingua Latina* 5.25), and later on Nerva introduced a funeral grant for the Roman plebs (Hope 2007, 88). It is therefore likely that in many instances financial constraints forced mourners to carry out funerals without professional assistance.

Perhaps the clearest indication of the involvement of municipal authorities in the functioning of cemeteries is in the location of the latter, which invariably lie beyond the limits of the town. The most famous exposition of this principle is to be found in the fifth century BC Law of the Twelve Tables, which forbade cremation or burial within the city of Rome (Toynbee 1971, 48). The siting of cemeteries throughout the empire outside the town to which they belonged indicates that similar stipu-
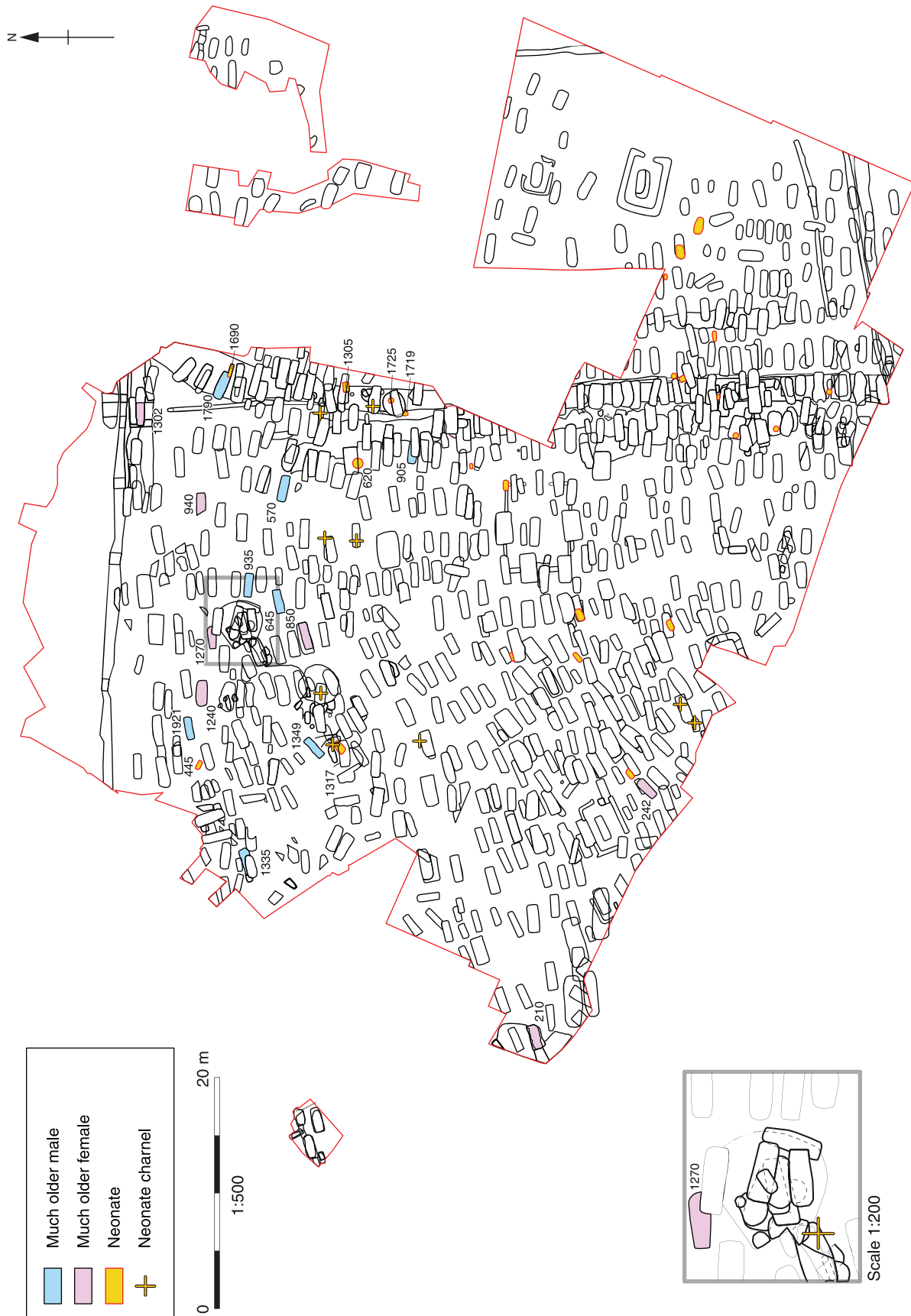
Fig. 7.5 Distribution of graves of neonates and much older adults

Much older male

Much older female

Neonate

Neonate charnel

20 m

1:500

0

1270

Scale 1:200

lations existed elsewhere, while direct documentary evidence comes from the *colonia* at Urso (Crawford 1996, no. 25). It is likely that all chartered towns, including civitas centres such as Winchester, maintained such statutes.

Burial was just one of a range of potential uses that were competing for space in the suburbs around Winchester, as at other Roman towns, including industrial activity, agriculture and domestic housing (Esmonde Cleary 1987), and consequently land is likely to have been at something of a premium. In order to resolve this conflict and ensure that sufficient land was made available for burial, it therefore seems likely that the allocation of specific parcels of land for burial was in the hands of the municipal authorities. The allocation during the late 3rd and 4th centuries of large areas of new land for burial at Winchester certainly has the appearance of a deliberate act of policy, designed to cope with the increase in the area required for burials resulting from the shift from cremation to inhumation as the primary means of disposing of the dead. At Lankhills, this may have entailed a change from agricultural use, if this was the function of the earlier plots, and a similar change in land-use has been identified at Victoria Road West, where the area given over to cemetery use toward the end of the 3rd century had previously been occupied by a group of timber buildings of unknown, but clearly non-funerary, function. The situation at Lankhills may also provide an illustration of the process by which the cemetery was expanded in piecemeal fashion, with the area west of ditch 450/F.12 being used first, and the enclosure to the east only later becoming available. Perhaps the process of obtaining this land was not straightforward, and the authority responsible for the cemetery may have had to negotiate to acquire land. The enclosure defined by ditch 450/F.12 is likely to have been in use, and the authority may have initially been able to acquire only the plot between the enclosure and the road, only later to purchase the enclosure as and when it became available in order to facilitate the eastward expansion of the cemetery.

Although it might be expected that the municipal authority was involved in determining which areas should be used for burial, it is less certain whether they took direct interest in the internal organisation of cemeteries, or whether these were run as private concessions. However cemeteries like Lankhills were owned, the ordered appearance of the layout and the consistency in funerary practices indicate that some form of controlling authority was present. Cemeteries displaying such evidence for internal organisation have been labelled 'managed cemeteries' (Thomas 1981) and are a typical feature of Romano-British towns. Although Thomas's suggestion (1981, 232) that they are evidence for Christian burials is contentious, they may be regarded as evidence for centralised control, the ordered layout being a practical response to the

need to accommodate large numbers of burials within the restricted space of an urban cemetery. Keegan (2002, 108) has also seen this as a deliberate strategy to present the cemetery as an expression of civic pride, the ordered layout of the burials serving as a reflection of the ordered community of the late Roman town. If the observed organisation in the use of cemeteries such as that at Lankhills is indeed an example of the involvement of the municipal authorities in such day-to-day affairs, then the apparent breakdown of this organisation at the end of the use of the cemetery may be a reflection of the failure of that authority. The role of the church as an organising force in the management of cemeteries might also be considered, but recent work (eg Rebillard 2009; Yasin 2009, 58-69) finds little evidence that the church showed much interest in such a role in relation to the 'ordinary dead'.

FUNERARY RITES AT LANKHILLS

Rites preceding the burial

Many aspects of funerary ritual will have left no trace in the archaeological record, because they were composed of actions or recitations that leave no archaeologically visible evidence, took place away from the grave site, or did not entail the deposition of the objects used. Contemporary accounts and depictions of Roman funerals (Toynbee 1971, 43-64) contain many such elements, and should caution us against treating the evidence excavated from the grave as representing the totality of the rites surrounding the individual's funeral. Our knowledge of these rites comes largely from written, epigraphic and iconographic sources and must be treated with care as it is biased both geographically toward Rome itself and the core provinces of Italy and the Mediterranean, and toward the upper echelons of society. Most of these sources were produced by and for the wealthy elite; those that were produced to commemorate the dead, such as *stelae* or inscriptions or reliefs decorating tombs or sarcophagi (eg Toynbee 1971, figs 9-11), will obviously have been intended to reflect favourably on the deceased, and on whatever mourner or other sponsor paid for the work, while written accounts of funerals tend to describe those of individuals of high rank and take little interest in the funerary practices of those of more humble station. Such artistic representations may also treat the funeral as something of a 'set piece' event, and may consequently present a rather idealised version of the actual rites surrounding the burial. Nevertheless, although varied in detail, they present a fairly consistent picture of the sequence of events that formed the basis of the funerary rites, which is likely to represent the core elements of funerary ritual, even if in a more elaborate form than would have been the norm for most of the population.

The rites described indicate that a Roman funeral was not so much an event as an extended process,

lasting over a period of days from the moment of death to the burial. During this time the body was prepared and dressed in clothes appropriate to the status of the individual, and laid out in his or her house for mourners to pay their respects. On the day of the funeral the corpse was carried in a procession to the cemetery, where valedictory speeches may have been recited and sacrifices made before the actual burial took place.

No such account survives of funerary practices in Britain to indicate whether a similar sequence of rites prevailed in funerals here, but it is possible that Romanised individuals throughout the Roman world shared, or at least aspired toward a common set of values and customs. The rites enacted at Lankhills may have been more modest in scale than many of the funerals described in the sources, but they are likely to have encompassed some of the same basic elements. The very location of the cemetery at Lankhills may itself have been a factor in determining the nature of some elements of the funerary rite. The corpse would have had to be carried out of the town, through the North Gate, and up the Cirencester road to the cemetery, and this would have provided a natural opportunity for the sort of procession described in the sources, intended as a spectacle to commemorate the deceased and as an opportunity for the mourners to express their grief publicly. Indeed, the practice of locating urban cemeteries throughout the Roman world beyond the limits of the town may have actively promoted an emphasis on this part of the funerary rites. In contrast, the act of burial itself may have been a relatively private affair. There would obviously not have been enough room at the graveside to accommodate a large number of people, and this would have been particularly true if it was intended that those present should be able to see (for example) grave goods in place in the grave.

The nature and location of these rites preceding the burial militate against direct evidence for them being recovered from the grave, although those aspects of the preparation of the body that relate to its appearance may have been intended, at least in part, for its display during the procession and the lying-in-state that preceded it. The evidence for the clothing of the body provided by hobnails, brooches and minerally-preserved leather and textiles, the arrangement of the hair attested by hairpins and combs, the wearing of items of jewellery, and the objects associated with status, such as official belts and crossbow brooches, may all relate to the display of the body during these parts of the funeral. For further discussion of these aspects see 'Body position' below.

Grave pits

The form of the graves at Lankhills, comprising rectangular pits with generally straight, vertical sides and square or rounded edges, was typical of the graves found in late Roman urban cemeteries (eg Barber and Bowsher 2000, 82; Clarke 1979, 134; Crummy and Crossan 1993, 34 and 100; Farwell and Molleson 1993, 44). The tapering toward the foot end noted for a minority of grave pits is a tendency that was also observed at Butt Road, Colchester (Crummy and Crossan 1993, 34), and a few graves had rounded ends (eg Graves 1220 and 1635), but both these variations appear to be incidental. Some of the graves may have been deliberately extended to allow space for grave goods to be placed at the end, beyond the coffin, and this too was observed at Butt Road, where grave goods had been placed in these locations in some of the Period 1 burials (Crummy and Crossan 1993, 34). At Lankhills grave goods were found at the foot end of two graves that may have been thus extended (Graves 256 and 575), although similar spaces were noted at the foot end of five other burials (Graves 10, 18, 231, 925 and 1020), as well as at the head end of two graves (1035 and 1230), and Grave 710 had a centrally placed coffin beyond which were spaces at both ends. These apparently empty spaces may originally have been the location of organic objects such as wooden items, food offerings or textiles, of which no trace has survived.

Consideration of the depths to which the graves were dug is hampered by the removal of an unknown depth of material during the construction of the School House. Although the extent of this truncation is unknown, it is unlikely to have affected different parts of the site evenly, owing to the slope of the natural topography. The effect of this operation will have been the removal of the upper part of each surviving grave, resulting in a reduction in the apparent depth. The shallowest burials may have been completely destroyed. Clarke (1979, 133) described a class of burials that he dubbed 'topsoil burials', typified by his grave 356, which was only 0.10 m deep and survived only because it had been dug into the hollow of the partly-silted ditch 450/F.12 and had subsequently been protected by its burial beneath the final fills of the ditch. If any similarly shallow burials had existed within the area of the OA excavations they would surely have been destroyed by truncation associated with the 1960s building operations. The truncation was most severe within the footprint of the basements of the School House, where the chalk bedrock had been removed up to a depth of up to 1 m, and consequently only the bases of the deepest graves in this area survived.

Clarke classified the burials recorded during the 1967-72 excavations as 'shallow' (0-0.40 m deep), 'average' (0.41-0.80 m), 'deep' (0.81-1.20 m) or 'very deep' (greater than 1.20 m), and for comparative purposes these categories have been used here. The majority of the adult graves from the OA excavations, like those from Clarke's excavations, fall into the middle two categories (Table 7.1). The greater number of burials from the OA excavations that are categorised as shallow may be explained by the

Table 7.1 Numbers of graves in grave depth categories

Depth	OA excavations		Clarke's excavations		Total	
	Adults	Subadults	Adults	Subadults	Adults	Subadults
Shallow (0-0.40 m)	41 (16.7%)	14 (25.5%)	34 (11.3%)	34 (29.5%)	75 (13.7%)	48 (28.2%)
Average (0.41-0.80 m)	75 (30.6%)	32 (58.2%)	114 (38.0%)	53 (46.1%)	189 (34.7%)	85 (50.0%)
Deep (0.81-1.20 m)	93 (38.0%)	8 (14.5%)	121 (40.3%)	24 (20.9%)	214 (39.3%)	32 (18.8%)
Very deep (>1.20 m)	36 (14.7%)	1 (1.8%)	31 (10.33%)	4 (3.5%)	67 (12.3%)	5 (3.0%)

greater truncation of this area, as the area investigated by Clarke's excavations was not affected by the construction of the School House. It is somewhat of a surprise, then, that the OA excavations contained a larger number of burials in the very deep category.

Comparing the depths of graves from different cemeteries is unlikely to provide any meaningful conclusions, as the effects of truncation differ and because the depth is likely to be constrained by the material into which they are dug. However, the average depth of adult graves at Lankhills of 0.84 m compares closely with the corresponding measurements from Poundbury, which was similarly located on chalk geology, and where the average depths varied from 0.76 m in the northern group (Farwell and Molleson 1993, 33) to 0.91 m in the main cemetery (ibid., 44), whereas at Butt Road, located on a sandy substrate, most of the graves were only 0.5–0.7 m deep (Crummy and Crossan 1993, 34), and the sides of several graves seem to have collapsed during digging or backfilling (ibid., 100).

Both the range of depths and the average depth were identical for the graves of males and females, and males and females were represented equally in the group of ten graves measuring more than 1.50 m deep. Grave depth was similarly consistent between the sexes at Poundbury (Farwell and Molleson 1993, 44). Clarke detected a tendency for the graves of females to be slightly shallower, with a greater proportion falling in the average rather than the deep category, but this trend is reduced following Gowland's re-assessment of the sexing of the skeletons, and his assertion that more male graves were very deep also no longer holds true. In fact, females were slightly more prevalent in this category in both excavations.

One of the conclusions of Clarke's excavations was that the amount of effort and care put into the digging of the grave pits declined over time, and particularly during the final phase of the cemetery (Clarke 1979, 144). This was reflected in an increase in the proportion of shallower adult graves and a decrease in that of deep ones. This pattern is also found in the results of the OA excavations when comparing the depths of those graves dating from before AD 350 with those from the latter half of the century, but there were insufficient graves of very late date for it to be possible to comment on the supposed deterioration in standards at the end of the life of the cemetery.

Body position

Bodies were found lying in a variety of postures, encompassing a number of variations in the disposition of the arms and legs. The position of the head also varied, with approximately equal numbers of examples of the skull resting on the back of the cranium and those lying on one or other side, but variation will have been affected by post-depositional displacement, particularly in burials that had been placed in a coffin and therefore had a space in which the skull could move during the decomposition process, and so may not provide evidence relating to the burial rite.

The majority of the burials, however, lay in a supine posture with the legs extended. The only group for whom this was not the case were the very young. The bones of neonates and infants survived less well as a consequence of their less robust nature, and so the posture in which the individual was buried could be established for only a fairly small proportion of these age groups, but a greater variety of positions was certainly apparent: two neonates (Graves 1719, 1725) and two infants (Graves 1464, 1880) lay in a crouched position on the left side, and three infants lay on their backs with their legs in bent or irregular positions, while six lay in an extended supine posture. Such young children do not normally lie in a flat, supine position in life, and the placing of them in the grave in these more irregular positions may either reflect the difficulty in manipulating them into such a position or a desire on the part of those burying them to place them in death in a position they would have adopted in life. The range of postures in which children aged four years and over were buried appear to have conformed with those of the adult population.

Excluding neonates and infants, 230 individuals were sufficiently well-preserved to allow the posture to be established, and of these 216 (92.6%)

Table 7.2 The disposition of the arms of all supine burials in which the positions of both arms could be established

Left arm	Right arm Straight	Flexed, across waist	Semi-flexed, hand on pelvis	On chest/shoulder	Other
Straight	24 (17%)	4 (2.9%)	26 (18.4%)	2 (1.4%)	1 (0.7%)
Flexed, across waist	6 (4.3%)	11 (7.8%)	1 (0.7%)	2 (1.4%)	
Semi-flexed, hand on pelvis	17 (12.1%)	3 (2.1%)	34 (24.1%)	4 (2.9%)	
On chest/shoulder		3 (2.1%)	1 (0.7%)		
Other					2 (1.4%)

lay in a supine position. An almost identical situation was recorded in Clarke's excavations, where 92% of adult burials were supine (Clarke 1979, 138, table 10). All but eight of the supine burials from the OA excavations lay with their legs straight, either with the feet together or with the legs parallel and the feet slightly apart. The remaining eight had been buried with their legs crossed at the ankle. The legs had clearly been placed in this position deliberately, but it is uncertain why this was done. The eight were a varied group, with no other obvious similarities that might explain why they should share this unusual trait. The group included males and females, a range of different ages, and individuals buried both with and without a coffin, grave goods and hobnailed footwear. No subadults had been buried with legs crossed, the youngest individual in this posture (Grave 1412) falling within the 'young adult' category (18-25 years). Clarke's excavations had recorded four individuals buried in this position, with a similar absence of subadults, but the significance of this, if any, is uncertain.

The greatest variation in the postures in which the dead were buried was in the disposition of the arms. The arrangement of the arms of the supine burials that were sufficiently well-preserved for this information to be established did not appear to be random, but conformed to a restricted range of positions: straight, beside the body; flexed with the hands lying over the pelvis; bent at a right angle with the hand lying across the waist; and tightly flexed with the hands on the chest or shoulder. No less than 14 of the 16 possible permutations of these positions were recorded, and although some were much more common than others, none was clearly dominant. Indeed, even the most popular combination was represented by less than a quarter of the burials in which the position of both arms could be established (Table 7.2).

The most common arm positions were those where the arms lay straight, beside the body, or semi-flexed, with the hands on the pelvis, with the combinations of these positions accounting for almost three-quarters of the burials. Approximately half the burials had the arms placed in an asymmetrical arrangement. Some disparity was present between the sexes, with females (13 instances, 22.4% of female burials) considerably more likely to be buried with both arms straight, beside the body, than males (3 instances, 4.9% of male burials), whereas burials with both arms lying across the waist were more common among males (7 instances, 11.5%) than females (2 instances, 3.5%). The arm positions of the subadults were dominated by burials with both arms straight (8 instances, 42.1%) and both arms semi-flexed (6 instances, 31.5%), but since the sample was small, with only 19 burials in which the skeleton survived sufficiently well for the positions of both arms to be established, these figures may not be significant.

The posture in which the body was placed in the grave was a matter of deliberate choice on the part of those conducting the funeral, and may have afforded an opportunity for subtle display of the status and identity of the individual, and the positions of the arms may have played a role in this. However, the apparent lack of coherent patterns in the arrangements recorded indicates that if this were so it is a code we are unable to read. Barber and Bowsher (2000, 87) have suggested that the asymmetric arm positions may mimic the 'toga position' of many Roman statues, with one arm folded across the waist and the other free, and classical sources specifically state that a Roman citizen would be buried wearing a toga (Toynbee, 1971, 44). Togas were no longer worn when the cemetery at Lankhills was in use, nor was simple citizenship a mark of status, but it is not unreasonable to suggest that the asymmetrical arrangement of the arms may have been a consequence of the arrangement of the clothes in which the deceased was buried, if indeed they were buried clothed rather than shrouded.

Reference has already been made above to the possible significance of clothing in relation to the display of the body prior to burial, but this raises the more fundamental question of the nature of the evidence for clothing and its possible interpretations. The recent work has added some evidence to inform the question about whether the deceased were buried in their 'normal' clothes or were treated differently. This is an issue at least partly related to that of Christian burial practice, regardless of whether or not the latter can be defined, let alone identified archaeologically, in this period. The argument that we would expect late Roman burials

to be conventionally clothed has been put forcefully by Samson (1999), although Walton Rogers (Chapter 4 above) has put a different case (see also Swift 2000b, 36 and 69, but the basis for her assertion is not clear), suggesting that for women, in particular, there is very little evidence for the accoutrements that would indicate the wearing of everyday dress in the grave. The best evidence for clothing from Lankhills involves the combination of objects with textile remains (see also discussion of brooches and belt sets below). Only in three graves could the fabric type be identified, and in two cases this was probably linen while the third was wool. Linen may be more likely to have been used for shrouds, and was prescribed for their use (eg Martorelli 2000, 244), but it was certainly not solely used in this way. There are examples of the use of linen in burials as early as the late Iron Age (Walton Rogers 2007b; 2008). Moreover, other materials were also used for shrouds. This question is discussed further below. In both the cases where linen was identified at Lankhills the way in which it was associated with the metal objects whose corrosion preserved the fabric does not suggest garments which were worn. In Grave 1075 the object in question was a crossbow brooch. This lay close to the poorly-preserved remains of the skull in such a position that it is unlikely that it was worn in the normal way at the time of burial (the fact that it was above the left rather than the right shoulder may also support this argument, but is not conclusive on its own – as Swift (2002b, 43) suggests, such a location may suggest that the wearer was left-handed). The strap end in this grave lay beside the left thigh in a position that means that it is unlikely to have been worn, but a dangling strap cannot be completely discounted. Grave 1846 provides further evidence, some clear and some less so. Here it is absolutely certain that the belt was laid between the legs of the deceased and that his riding boots were placed beside the right leg. The crossbow brooch, however, is placed in the classic position on the right shoulder, but in view of the other evidence it is possible that it lay upon a garment rather than fastening it (unfortunately the associated fabric type could not be identified). The occurrence of skin or leather as well as textile in association with this brooch may also suggest that it was not simply attached to a garment as it would have been in regular use, but equally suggests that this was not a shroud.

A further aspect of clothing may be represented by footwear, although this is clearly distinct from other aspects in that the surviving evidence was much more widespread in the cemetery. It is uncertain, however, if the same logic applied in the case of shoes as it may have done with clothes fastenings. At least 120 graves produced evidence of footwear in the form of hobnails. Shoes were considered to have been worn in a minimum of 14 instances (ie 12% of cases), but could have been worn in just over half, the hobnails occurring in the near vicinity of the feet bones but not in configura-

tions which made it certain that the shoes were worn at the time of burial. If shoes were placed against but not on the feet (in a manner comparable to that suggested for the crossbow brooch in Grave 1846) it would be very difficult to distinguish between the two practices. The former possibility was considered likely in many cases by Clarke (1979, 153, 370-371).

In the case of Grave 780 the combination of hobnail evidence and the textile remains associated with a penannular brooch have been suggested to indicate a clothed burial (Walton Rogers above). This is certainly possible. In contrast it may be noted that Grave 58 contained apparently worn footwear, but this consisted of a single shoe associated with the left foot and therefore clearly did not represent day to day reality. This occurrence perhaps supports the view that shoes could be placed right by but not necessarily on the feet (see above). It is notable also that with the exception of Grave 780 (and Grave 1846, arguably a special case, consisting of spurred riding boots rather than nailed shoes) footwear did not occur in association with items related to the fastening of clothing. This lack of a correlation may indicate the existence of different burial traditions.

Shrouds

The evidence for clothing in a small number of burials cannot necessarily be extrapolated to those graves for which evidence (eg of mineral preservation of textiles, recorded on a total of nine pieces of metalwork from six graves from the OA excavations) does not survive. On the other hand, is it possible to identify evidence for the most likely alternative, ie shrouding? Evidence for the use of shrouds is limited and to some extent equivocal, both at Lankhills and in other Roman cemeteries more generally, but there are partial exceptions. Shroud material was typically linen, and survives only under unusual conditions. The possibility that shrouds may be represented by linen fabrics has been noted above, but the association is tentative, at best. Similar textile remains had been recovered from four burials during Clarke's excavations (Crowfoot 1979). At a number of cemeteries, fragments of textiles that were probably parts of shrouds have been preserved in gypsum or lime plaster that was used to cover the body (Philpott 1991, 93). Examples include remains and impressions of linen that was almost certainly part of a shroud in the grave of a child buried in a lead coffin at Butt Road (Crummy and Crossan 1993, 129). At Poundbury almost all the textiles recovered – fragments from nine graves and impressions on gypsum from a further 18 – were of linen and were interpreted as 'shroud materials' (Crowfoot 1993, 111), and similar remains are known from York (eg Wild 1970, 95-96).

Equally, the suggestion that the presence of unworn grave goods is indicative of the use of shrouds is not conclusive. In the absence of

preserved textile remains, the use of a shroud may be indicated in some graves by the position in which the body lay, particularly when this appears to indicate that the body was tightly wrapped – especially suggested by constriction of the shoulders (Bonnabel 1996; Blaizot 2006, 313-316), although a similar situation could also result from containment within a narrow coffin (Duday 2009, 45). This line of argument has been used to suggest the use of shrouds elsewhere in Winchester's cemeteries at Andover Road (Teague forthcoming), as well as at Butt Road (Crummy and Crossan 1983,

110, 129) and the eastern cemetery of London (Barber and Bowsher 2000, 91). At Lankhills a number of burials may provide evidence for such a situation, best exemplified by skeleton 429, an older adult male in Grave 430 (Fig. 7.6), whose upper arms and shoulders were particularly tightly constrained. This may indicate the use of shroud, though it could perhaps have been the result of tight binding with fabric of a different character. A similar situation is seen in Grave 740, containing the burial of a mature adult female (Fig. 7.7). The latter individual, however, was also buried wearing

Fig. 7.6   Possible shrouded burial in Grave 430

Fig. 7.7   Possible shrouded burial in Grave 740

nailed shoes, a practice which seems inconsistent with the use of a shroud, although shoes were associated with one of the Poundbury gypsum-packed lead coffin burials (376) which produced possible textile remains (Crowfoot 1993, 112; Farwell and Molleson 1993, 265). In the case of Lankhills Grave 740 it may be that another factor has resulted in the constricted appearance of the skeleton, a situation which could have implications for the interpretation of other burials as having been shrouded. Such was the variety in recorded body positions (see above), with the possibility that some have been affected by post-depositional movement of bones, that it would be unwise to expect to be able to quantify the use of shrouds from this evidence, but 38 burials from the OA excavations were recorded as having the feet together, another possible, but far from conclusive, indicator of burial in a shroud. By contrast, in some burials the position in which the body was laid would not have been possible had it been wrapped in a shroud. The individuals buried in Graves 585 and 1349, for example, each lay with one arm angled away from the torso. It is notable, however, that at Poundbury, with the greatest number of examples of possible shrouded burials, all the bodies associated with linen remains are described as laid out in 'standard attitude', with no suggestion of constriction. Finally, it may be noted that in the Lankhills examples perhaps most likely to have been shrouded (Graves 430, 735 and 740 above) coffins were present in every case and of the 38 examples in the OA sample buried with the feet together all but five (ie 86.8%) were in coffins – that is to say a figure rather above the site average (78.3%, see Chapter 8 below) and there is thus no suggestion that the possible provision of shrouds might have been complementary to the use of coffins.

Why some people were or might have been buried in shrouds but others were clothed is uncertain (see eg Crummy and Crossan 1993, 129; the religious aspect of this is discussed further below). At Scorton, North Yorkshire, there was some indication that this disparity was based on sex, as the female burials all appeared to be shrouded while five of the male burials were clothed (Walton Rogers unpublished), but this pattern has not been detected at other cemeteries. In practice, definite evidence for shrouds is not usually preserved in sufficient burials for any clear pattern in their use to be identified.

Prone burials

The eight individuals buried in a face down, prone position are examples of a practice found among a minority of Roman burials at many cemeteries. Although they are considered to be more common in rural sites (Taylor 2008, 100), small numbers of such burials have also been recorded from urban cemeteries. A further 14 examples were recorded during Clarke's excavations (1979, table 2; ibid. 138

table 10 gives a figure of 12, but these are from 'intact graves only'), and this overall prevalence, representing 4.1% of the burials in which the posture could be established, is of the same order of magnitude as that recorded elsewhere. Some 14 (3.3%) of burials within the eastern cemetery of London were buried in this way (Barber and Bowsher 2000, 87), as were 33 of the 450 graves (7.3%) excavated at the Bath Gate cemetery, Cirencester (Viner and Leech 1982, 78), and six of the 64 burials (9.4%) excavated at 120-122 London Road, Gloucester (Simmonds *et al*. 2008, 21). Prone burials are usually typified by liminal locations, near the edge of the cemetery (Taylor 2008, 101), and this is certainly true of the burials at Lankhills (Fig. 7.9). The prone burials recorded in the two excavations all lie close to its northern and eastern boundaries. The graves of three of the prone burials had been dug into the group of backfilled pits in the central part of the excavation. Although the significance of these pits is uncertain, the prone burials formed the initial phase of a sequence of burials that appear to have been deliberately placed within this small area. It is possible that the placing of the prone burials here was in some way significant in making this location appropriate or desirable for the subsequent burials.

The treatment of these burials was also different as regards the depth and orientation of the grave itself. No less than five prone burials were aligned at right angles to the prevailing west-east orientation of the majority of burials, and in five further instances the usual orientation of the corpse was reversed, with the head lying at the eastern end. The graves of these individuals were also typically shallower, as, although they included a range of depths, 17 of the 22 fell into Clarke's 'shallow' and 'average' categories, and none into the 'very deep' category.

The prone burials from the area of the OA excavations made a number of contrasts with those recorded during the previous excavations. Half the prone burials from the OA excavation had been placed in coffins, compared to only two in Clarke's excavations, and hobnailed footwear was also more common, with five of the eight burials from the OA excavations having been buried with shoes as against only three of the 14 burials from Clarke's excavations. The location of the footwear was also different, as in all five burials from the OA excavations the footwear was associated with the feet, and probably worn, whereas none of the shoes accompanying prone burials from Clarke's excavations were worn. In addition to this, half of the prone burials from Clarke's excavations were accompanied by grave goods, compared to only one of those from the OA excavations, and this contrast may in fact have been starker still, as the objects with this individual were a ring and a pair of bracelets that may have been part of her everyday dress rather than items specifically placed as grave goods. It is possible that these differences are coincidental, and

it may be unwise to draw too many inferences from apparent patterns observed in so small a number of burials. However, if an attempt at an explanation is to be made, it may be related to chronological differences between the two groups. The prone burials recorded in Clarke's excavations appeared to be late in date: ten of them were located in the area east of ditch 450/F.12, where burial did not begin until the 360s or 370s, in addition to which burial 356 was stratified above grave 357, which contained a coin dated to AD 350-64, and burial 441 cut grave 443, which had a dolphin-head buckle dating from after *c* AD 370 (Clarke 1979, 270). The prone burials east of ditch 450/F.12 also contained objects dating from the later half of the 4th century, including Valentinianic coins from graves 310 and 381, two Theodosian coins from burial 378, and a comb in burial 297, indicating that they were buried after the area had come into general use and are not the graves of individuals placed outside the cemetery at an earlier date. The examples from the OA excavations, on the other hand, are undated, although Graves 665, 970 and 1070 are all located early in the sequence of late burials in the central part of the excavation, and so a date around the middle of the 4th century would be appropriate. It is possible, then, that over the course of the second half of the century there were changes in the rites associated with prone burials, with coffins and worn footwear becoming less frequent and the placing of grave goods becoming more acceptable.

From a demographic perspective, the individuals selected for prone burial were very similar to the population of the cemetery generally, with males and females represented more or less equally, and the representation of subadults only slightly less than in the overall population. There was, however, a pronounced bias toward individuals aged between 25 and 45 years, who accounted for 11 prone burials, or 61.1% of such burials, but only 35.6% of the overall population. These figures are rather different from those obtained from the eastern cemetery at London, where females and subadults were both twice as common among the prone burials as they were in the rest of the cemetery (Barber and Bowsher 2000, 87).

It has been suggested that some prone burials may have been bound when they were placed in the grave (Philpott 1991, 72; Taylor 2008, 109-110), and this may have been the case for several of the individuals at Lankhills. Perhaps the clearest example was Grave 735, in which a female aged 26-35 years had been buried, in a coffin, with her arms bent behind her back, and her shoulder blades pulled together in a manner that suggests that she was pinioned at the elbows (Fig. 7.8).

Although extended, her legs were angled so that her feet were close together, raising the possibility that she was also bound at the ankles. A burial interred in a similar posture was recorded at the Bath Gate cemetery, Cirencester (Viner and Leech 1982, 78-81). The burial of a male aged 36-45 years in Grave 1345 may have been very similar. The arms of this individual were somewhat disturbed, but appeared to have been behind his back, and again the feet were together. The individuals in Graves 665, 905 and 1350 were all buried with their hands together beneath the pelvis, and it is possible that in these cases the wrists had been bound in front of the individual. In the latter two burials the feet were

Fig. 7.8   Possible pinioned burial in Grave 735

also close together. Burial 995 may have been similar, but the upper parts of the arms were too poorly preserved to be certain. The prone burials from Clarke's excavations were more varied and included a number of irregular postures, such as in grave 297, in which the body was bent to the right (Clarke 1979, fig. 64) and grave 332, where the individual had been buried with the legs turned to right (Clarke 1979, fig. 49), but the individuals buried in graves 405 (Clarke 1979, fig. 64), 411 (Clarke 1979, fig. 64) and 412 (Clarke 1979, fig. 49) all lay with the hands together beneath the pelvis and the feet together, and like the examples from the OA excavations, may have been bound at wrist and ankle. It is possible that some of the variation in body position in these burials reflects the late date of many of them, concentrated as they were in the area east of feature F.12. Some of these postures, however, particularly those in which the hands lay beneath the pelvis, are similar to those of supine burials placed with the hands resting on the pelvis, and may represent no more than the normal (but inverted) position in which the body was buried.

The individuals buried in a prone position were clearly treated differently from the majority of the cemetery population. Their burial in (on average) shallower graves, located at the edges of the cemetery and often on aberrant orientations may indicate that these were the burials of outcasts, or at least of individuals of low status, and there is some evidence from the skeletons themselves to support this. Seven of the eight individuals involved produced quite striking evidence of pathologies, including three instances of fractures (the crude prevalence rate of fractures in this population was 13.7%, whereas among those individuals buried prone it was almost three times as high (37.5%)). The osteophytosis recorded on the vertebrae of the individuals buried in Graves 665, 735 and 905 are likely to be the result of hard manual labour from a young age, while the female buried in Grave 1350 suffered from curvature of the sacrum that may have been caused by carrying heavy loads. In addition to this, four of the prone burials (Graves 665, 970, 1070 and 1350) were sampled for carbon and nitrogen stable isotope analysis and were found to be relatively depleted in carbon compared with average values for the cemetery, suggesting that they consumed less marine fish and perhaps had a more restricted diet generally (Cummings and Hedges this volume). This evidence for a combination of manual labour and poor diet would be consistent with a low, perhaps even servile, status, and it is possible that this was a factor in these individuals being buried in this unusual manner. Another possibility is that prone burial was a punishment, intended either as a display of disrespect toward the dead person or as a means of ensuring that the wrongdoer continued to suffer after death. Completion of the correct funerary rituals was thought to be essential to ensure the passage of the soul of the afterlife, and so prone

burial may have been a deliberate subversion of the usual rites intended to continue the individual's punishment beyond death. Such punishment after death was a not uncommon practice in the Roman world (Hope 2000, 112-125), and the apparently low status of these individuals may have meant that they were particularly exposed to such treatment.

Some of these individuals, however, were clearly buried with some degree of respect (and the fact that they were buried in the cemetery at all might also be argued to support this). This is demonstrated by the provision of grave goods accompanying the child in Grave 1070 and in six of the 14 prone burials from Clarke's excavations. This is unusual as prone burials with grave goods, although not unknown, are typically very rare (Philpott 1991, 74). Three of these individuals were buried with a coin certainly or probably placed by the mouth, two, including one of those with coins, were accompanied by combs, an iron pin lay beneath the pelvis of burial 405 and burial 378 (of a child) was accompanied by a group of five coins and an iron arrowhead. With the exception of the arrowhead, these items are consistent with the range of items accompanying those buried in a more normal, supine position, and this presumably indicates that it was expected that they would have the same destiny as the rest of the population. Indeed, it is possible that the circumstances that led to these individuals being buried in a prone position were believed to make their transition into the afterlife more difficult, and that these objects were intended to ease their passage. The provision of combs in two graves, both of adult females, is also interesting, as these may have been prestige items belonging to wealthier women (Cool, Chapter 4 above), in contrast with the likely status of some of the individuals buried prone in the OA excavations. This contrast may indicate that prone burials were not the result of a single, consistent practice, but were carried out for a range of reasons, perhaps dependent on the circumstances of the particular individual or the nature of their death.

Burials lying on their sides

In six burials the body was definitely or probably lying on its side. The only one in a true crouched position was the male aged 45+ years buried in Grave 1515. This was the most common position for inhumation burials before the Roman conquest (Whimster 1981, 11), and occurrences during the Roman period are often regarded as a survival of native practice (Philpott 1991, 55), particularly as it is most frequently found at rural sites, where exposure to Roman practices may have been less and communities consequently more conservative. In addition to being buried in a crouched position, the individual in this grave had also been decapitated, and the head placed between the legs. Decapitation is also thought to be a tradition that was mainly practiced among rural communities
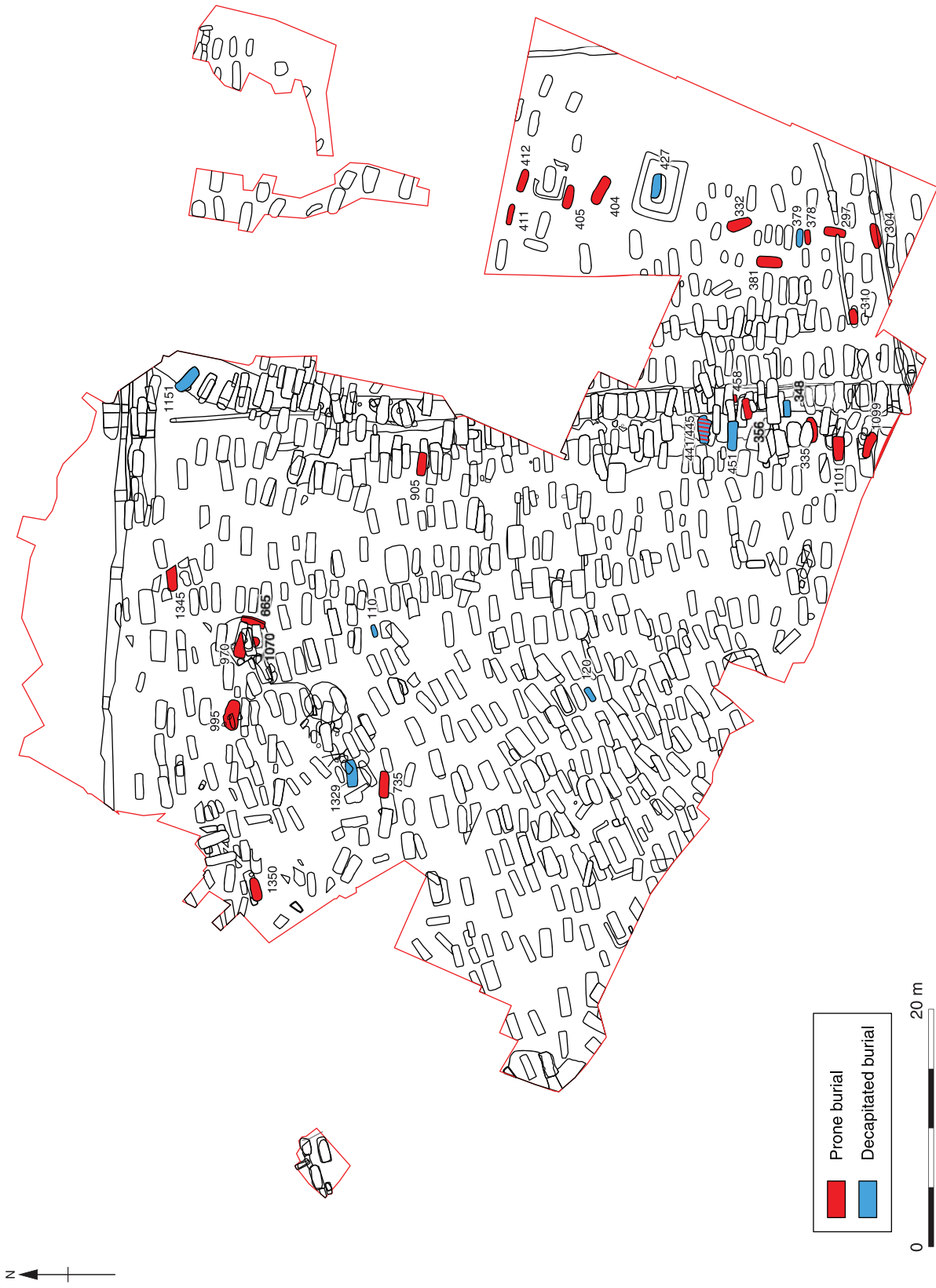
Fig. 7.9 Distribution of prone and decapitated burials

	Prone burial
	Decapitated burial

1:500

0 — 20 m

(Philpott 1991, 81; see below). A small minority of burials in urban cemeteries were buried in a crouched position, including one each from the excavations at Victoria Road East, Victoria Road West and Hyde Street (Browne *et al*. forthcoming). The example at Hyde Street was very similar to burial 1515, comprising a male of a similar age who had also been decapitated.

The position of the individual buried in Grave 1351 may not have been deliberate. The legs were in the correct, extended position for a normal, supine burial, and it is possible that the turning to the left of the upper part of the body occurred accidentally while the coffin was being carried to the cemetery or lowered into the grave. The individual in Grave 1915 was not sufficiently well preserved for the posture to be certain, although the positions of the surviving parts of the legs suggest that they were turned to the left. In the remaining three instances the placing of the body on one side was certainly deliberate, as the disposition of the body is too ordered to be accidental. The reasons for these unusual postures are unknown, although in the case of the adolescent in Grave 640 it is possible that this position was chosen because the individual was unable to lie supine in life due to a deformity of the spine. A further 11 burials on their side were recorded in Clarke's excavations (1979, table 10). Burial of adults in this position is an occasional occurrence elsewhere at Winchester, four instances having been recorded at Victoria Road West (Browne *et al*. forthcoming) and two at Andover Road (Teague forthcoming).

Decapitated burials

The OA excavations produced evidence for five instances of decapitation, comprising four burials (Graves 110, 1150, 1329 and 1515) in which the head had been removed and placed on the feet or legs, and the remains of a child recovered as charnel ('Grave 2064') from the fills of Graves 1735 and 1740, which exhibited a deep cut on the left side of the mandible that would be consistent with an accidental injury caused during the removal of the head. To these can be added a group of seven decapitated burials recorded during Clarke's excavations (1979, 141, 342-4). Curiously, no examples have been found at Winchester outside the northern cemetery, the only other instances being at Victoria Road East, Hyde Street and Andover Road, at each of which a single decapitated burial has been recorded.

Cut marks observed on the vertebrae of two of the individuals from the OA excavations and four of those from Clarke's excavations indicate that the head was severed from the front, and this was probably the case in all 12 instances. In both examples from the OA excavations the damage was to the fifth vertebra and appears to indicate that the spine was severed between the fourth and fifth vertebrae, whereas the cut was made between the third and fourth vertebrae in all four instances from Clarke's excavations. Severing the spinal column so precisely at these joints would have necessitated the removal of the overlying soft tissue to expose the vertebrae, which were then sliced or prised apart with a sharp, narrow-bladed knife to allow the removal of the head. The precision with which the decapitations were carried out suggests that the individuals were already dead, as it would have been extremely difficult to achieve with a subject whose blood was still flowing (Harman *et al*. 1981, 166). This is consistent with the method of removal recorded at other cemeteries (eg. Boylston *et al*. 2000), and contrasts with beheadings accomplished by hacking into the neck from the back, which are more likely to be instances of judicial execution, examples of which have been claimed at York (eg Gore and Tucker 2006; Hunter-Mann 2006), Cambridge (Alexander *et al*. 2004) and Dunstable (Matthews 1981). It seems probable that post-mortem decapitations of the sort found at Lankhills were part of the funeral rite for these individuals.

Macdonald (1979, 414-21) discussed the significance of the rite of decapitation at length in the report on Clarke's excavations, where it was concluded that these individuals represented some form of sacrifice. He argued that these burials were each located in close proximity to a richer burial, often with military associations, and that the decapitated burial was that of an individual of low or servile status who had been treated in this way as an offering to facilitate the passage of the soul of the other individual into the afterlife. However, there are several objections to this idea. Human sacrifice was illegal under Roman law and, notwithstanding Isserlin's (1997) argument that the practice continued, it seems unlikely that 12 individuals could have been killed in a public cemetery without the authorities noticing and taking action. Furthermore, the decapitated burials include individuals of a range of ages, including one from the OA excavations aged 45+ years and three from Clarke's excavations aged 35-49 years, indicating an age profile consistent with the rest of the cemetery rather than that of individuals whose lives were cut short by sacrifice. Perhaps most profoundly, the provision of grave goods with four of these burials suggests that they were expected to have the same destiny after death as the rest of the individuals buried in the cemetery – a difficulty that MacDonald had acknowledged (1979, 419-20). Indeed, in the case of Grave 1150 from the OA excavations and grave 427 from Clarke's excavations, which were each furnished with a single coin, and grave 120 from the earlier excavation, in which hobnailed shoes had been placed beside the body, the grave goods appear to specifically reference the journey that the deceased was expected to take to reach the afterlife. There was other evidence that the decapitated individuals had been given similar funerary rites to the majority of the burials. Three of the decapitated burials from the OA excavations and two from Clarke's excavations were buried in

coffins, and unlike the prone burials the graves themselves were similar to those of the 'normative', supine burials, all but two being aligned west-east, and the grave pits were generally of greater depth than those of the prone burials. Males and females were represented equally, there being four decapitated individuals of each sex, and the individuals from the OA excavations had no pathological conditions associated with manual labour that might indicate that they were of low status. Indeed, apart from the fact that they had been decapitated, there was no evidence that these individuals were any different from the rest of the population of the cemetery and their spatial distribution (Fig. 7.9) does not suggest any particularly unusual pattern. It is unlikely, then, that this rite is evidence for any form of disapproval or mistreatment of the individual, although the placing of such burials near the edges of the cemetery may indicate that they were to some extent marginalised.

Most interpretations of the rite of decapitation associate it with a fear of the dead, and suggest that it was intended to prevent the dead person from rising from the grave to haunt the living (Philpott 1991, 84; Taylor 2008). The head was believed in both Classical and Celtic religion to be the seat of the soul (Henig 1984b, 203), and it may be that the removal of the head was thought to prevent the reanimation of the corpse. Alternatively, the rite may have been intended to release the soul and facilitate its passage to the afterlife if the circumstances of the individual's death were thought to have made this transition problematic.

The chronology of the decapitation burials is not completely clear, but of the four undisturbed examples in the OA excavations Graves 110 and 1150 can be assigned to the second half of the 4th century on artefactual evidence, while Grave 1515 was in the middle of a sequence of three intercutting burials, the latest of which (Grave 1373) had a *terminus post quem* of at least AD 388, and it lay parallel to Grave 1400, itself the earliest of a sequence of three graves also ending with 1373 and containing a pot dated AD 340-400. Grave 1515 may therefore date around the middle of the 4th century, though earlier and later dates are also possible. Only Grave 1329, the earlier of a sequence of two otherwise unassociated graves, is really undated. The decapitated burials from Clarke's excavations

were assigned to 'the later years of the fourth century' (Macdonald 1979, 414). The OA evidence, while not quite certain, is potentially consistent with such a date range.

Coffins

The majority of the burials recorded during the OA excavations had been placed in coffins or probable coffins (see further below for this qualification), as had been the case for those in the area investigated by Clarke's excavations. The coffins were exclusively made from wood. Coffins, cists and related structures made from stone, lead and tiles are widely attested elsewhere (Philpott 1991), but none have been found at Lankhills, and they are rare at Winchester as a whole. Positive evidence for the presence of a coffin was recorded for 245 graves from the OA excavation, giving an overall total for the cemetery of 593 coffins from 751 excavated graves (Table 7.3). All of the coffins identified in the OA excavations were represented by the nails, and in three instances coffin fittings, used in their construction, the disposition of which approximately defined the outline of the coffin, although it is to be expected that some limited dislocation of nails will have occurred consequent upon the decay and collapse of the coffin.

In 36 instances the outline of all or part of the coffin was also defined by a dark stain resulting from the decomposition of its timber element. In all instances this material crumbled to nothing on excavation, and so could not be collected for analysis, but similar stains recorded elsewhere have been identified as wood replaced by manganese salts (Whytehead 1986, 58). Fragments of desiccated wood were noted in 11 other cases, all in the southern part of the site examined in 2000. In 43 burials, including six graves that had coffin stains, a coffin fill could be identified that contrasted with the surrounding chalk backfill in having a much larger component of light brown silt, and few sizeable pieces of chalk (See for example Fig. 2.34). Such deposits were interpreted as being composed of soil that had percolated into the coffin before its collapse, either between the planks of which the coffin was constructed or through openings created by its gradual decomposition. Positive evidence was identified for lids secured by nails in 98 burials

Table 7.3 Provision of coffins by broad age and sex categories

	Males	*Females*	*Unsexed adults*	*Total adults*	*Subadults*	*Indeterminate*	*Total*
OA excavations	83 (90.2%)	76 (85.4%)	28 (87.5%)	187 (87.4%)	46 (69.7%)	12	245 (78.3%)
Clarke's excavations	81 (84.4%)	85 (80.2%)	78 (83.9%)	244 (82.7%)	98 (74.2%)	12	354 (78.3%)
Total[1]	164 (87.2%)	161 (82.1%)	101 (84.2%)	426 (81.5%)	144 (72.7%)	23	593 (78.1%)

[1] The total has been adjusted to allow for six burials that were excavated partly during Clarke's excavations and partly during the OA excavations

from the OA excavations, with a further 47 possible examples. It seems likely, although it cannot be absolutely certain, that all of the coffins were originally provided with lids, but not all were necessarily secured by nails. Some lids may have simply been placed upon the coffin and held on by the weight of the overlying grave fill, while in some cases it is possible that the nails that secured the lid had become displaced as the coffin decayed. It is not certain, however, that all coffins had lids, and it may be worth considering the possibility that some of the structures interpreted as coffins could have been biers, with low sides or no sides at all. While all of the main identified coffin types (see Powell, Chapter 4 above and Fig. 4.19) are reconstructed with nails at the upper corners the recorded nail positions do not guarantee that every example assigned to each of these types was necessarily a three-dimensional structure, although this is probable in at least the great majority of cases.

In the burials where no evidence for a coffin was found, this need not necessarily imply that no such container was provided. Coffins may have been constructed using joints and pegs rather than being secured by nails, and in such circumstances it is possible that no evidence for the presence of the coffin would survive. That such techniques were used for the construction of a minority of coffins during this period is not in doubt, as no less than 20 examples have been identified within the eastern cemetery of Roman London, where the survival of a coffin stain indicated the presence of a coffin in graves from which nails were absent (Barber and Bowsher 2000, 92). Seven similar examples were noted at Poundbury (Mills 1993b, table 14) and six at Butt Road (Crummy and Crossan 1993, 34). The report on Clarke's excavations at Lankhills mentions that 'a few coffins were made without nails' (1979, 142), but unfortunately gives no further details, though it is likely that the observation was based on the presence of mineralised wood (S Esmonde Cleary pers. comm.). No definite evidence was recorded from the OA excavations for un-nailed coffins in the form of coffin stains without nails, but since such stains were only preserved in a minority of the coffins that had nails, it is possible that this is due to the non-survival of the evidence rather than an absence of such coffins. The number of coffins evidenced by the presence of nails can therefore only be taken as a minimum, as an unknown number of burials may also have been placed in coffins for which no evidence survives, albeit that this number is likely to have been small.

The overall proportion of burials from the OA excavations for which definite evidence for a coffin could be identified was identical to the corresponding figure for Clarke's excavations at 78.3% of all burials (Table 7.3). Slightly more males than females were buried in identifiable coffins, although the discrepancy was not large and so may not be significant. Coffins were provided less frequently

Table 7.4 Proportion of burials in each age group provided with coffins

	OA excavations	Clarke's excavations	Total
0-1 month	1/6 (16.7%)	15/34 (44.1%)	16/40 (40.0%)
1 month-3 years	16/22 (72.7%)	25/27 (92.6%)	41/49 (83.7%)
4-7	14/20 (70.0%)	22/26 (84.6%)	36/46 (78.3%)
8-12	5/8 (62.5%)	6/7 (85.7%)	11/15 (73.3%)
13-17	9/9 (100.0%)	8/9 (88.9%)	17/18 (94.4%)
18-25	13/13 (100.0%)	52/55 (94.5%)	65/68 (95.6%)
26-35	24/27 (88.9%)	45/58 (77.6%)	69/85 (81.2%)
36-45	34/40 (85.0%)	37/49 (75.5%)	71/89 (79.8%)
45+[2]	40/48 (83.3%)	18/24 (75.0%)	68/87 (78.2%)
60+[3]	10/15 (66.7%)		
Adult	66/71 (93.0%)	92/109 (84.4%)	153/175 (87.4%)
Child	1/1 (100.0%)	22/29 (75.9%)	23/30 (76.7%)
Indeterminate	12/33 (36.4%)	12/25 (48.0%)	23/57 (40.4%)
Total[1]	245/313 (78.3%)	354/452 (78.3%)	593/759 (78.1%)

[1] The total has been adjusted to allow for six burials that were excavated partly during Clarke's excavations and partly in the OA excavations

[2] For the purpose of comparison this category encompasses the individuals from the 1967-72 excavations classified in Gowland 2002 as aged 50+ years

[3] No corresponding category was recorded in Gowland 2002

for subadults, particularly neonates, who were the only group for which un-coffined burials were in the majority (Table 7.4). For the rest of the subadults buried at Lankhills the proportion buried in coffins remained high, although somewhat lower than was the case for adults, rising to a peak during adolescence and young adulthood. There is some evidence that coffin provision declined with age, with a third of individuals from the OA excavations aged over *c* 60 years being buried without one.

The coffins were constructed from planks that extended for the full length of the coffin. The base and lid presumably consisted of one or more wide planks, although only in Grave 550 was it almost certain that the base was formed from two planks that were nailed together down the middle of the long axis of the coffin. If coffin bases and lids were typically formed of a single wide board this has implications for the nature of timber supply in late Roman Winchester, suggesting the ready availability of substantial pieces of wood for coffin construction. Analysis of a sample of minerally preserved wood adhering to coffin nails from 23 burials, and desiccated wood from the coffins in 11 burials indicated that all the samples were definitely or probably oak (Challinor, Chapter 4 above). Oak has also been found to be the preferred timber in coffin construction at other cemeteries, being the only wood identified in the coffins of Winchester's northern cemetery (Rees forth-

coming), as well as at Poundbury (Mills 1993b, 114) and Trentholme Drive, York (Wenham 1968, 39). Only one of more than a hundred samples examined at Butt Road was of another species (Crummy and Crossan 1993, 120). It is therefore quite possible that oak was used for all of the coffins at Lankhills. Investigating the shape of the coffins from the distribution of their nails is somewhat problematic because of the post-depositional movement of many of the nails, but where the shape could be established with any confidence the coffins were consistently found to be rectangular, with parallel sides (Powell, Chapter 4 above). This is the shape most commonly recorded at Roman cemeteries (Barber and Bowsher 2000, 93; McWhirr *et al*. 1982, 88), although a minority of coffins tapered toward the feet. Clarke (1979, 337) noted the presence of tapered coffins in his excavations, but was unable to quantify their prevalence since coffin shape could only be established for a small number of graves.

The form and manufacture of individual coffins does not seem to have varied according to the sex or age of the individual interred within, except for the obvious provision of smaller containers for the burials of children. Coffins containing male and female burials were of identical manufacture as regards the dimensions, construction techniques, and the number of nails used. Although it was possible to identify a number of different nail patterns representing slight variations in the construction, each coffin type was provided equally for men, women and children, with the possible exception of Type D (fastened at the corners and ends), which was not associated with male burials. However, the number of coffins of this type was very small and so this may not be significant (Powell, Chapter 4 above). The number of nails used in manufacturing the coffins formed a continuum up to the low thirties, although four coffins (in Graves 73, 475, 890, 1140) had more nails. These presumably represent more elaborate construction techniques, although there was no other evidence that these burials were in any way special, the only grave goods other than hobnailed shoes being a flagon and jug in Grave 890. Similarly, the burials containing coffins constructed with particularly large nails or with very thick planks, while striking in these respects, were not in any other way unusual. It is possible that larger or more elaborate coffins were used as an indication of relatively higher status, but this need not necessarily have been the case as two of the individuals from the OA excavations (Graves 1760 and 1921) and one from Clarke's excavations (283) which were accompanied by belt fittings, potentially another aspect of status expression, were buried without coffins.

The results of Clarke's excavations suggested that the provision of coffins declined after *c* AD 390 (Clarke 1979, 143, 353-4). Only four inhumation burials recorded in the OA excavations were certainly of this late a date, but it may be of significance in this respect that two of these were uncoffined (Graves 1373, 1760). These burials did not lack for care or the provision of grave goods, however, as the individual buried in Grave 1373 was accompanied by a New Forest ware jug, a glass beaker and a group of seven coins in a leather pouch (see below), and the child in Grave 1760 was buried with a glass *tettine*, a New Forest ware beaker, a knife, a buckle, a ring, and a single coin, all placed in a group to the side of the upper part of the body. The absence of coffins from these burials may therefore be the result of a change in practices rather than reflecting a lack of expenditure on the funeral.

The high proportion of burials at Lankhills provided with coffins is extremely unusual in comparison with the other cemeteries at Winchester (see Table 8.2). Only approximately half as many burials were provided with coffins elsewhere within the northern cemetery, the highest provision being recorded at Victoria Road West, where 56 of the 126 excavated burials (44.4%) were in coffins (Browne *et al*. forthcoming, table 7). At Andover Road 15 of the 38 excavated burials (39.5%) had been provided with coffins (Teague forthcoming), and at Hyde Street only two burials from a total of 30 may have had coffins (Browne *et al*. forthcoming, table 8). At Chester Road, in the eastern cemetery, 54 coffins were recorded from 121 burials (44.6%, Browne *et al*. forthcoming, table 13). Major cemeteries associated with Roman towns elsewhere in southern England have produced results more consistent with Lankhills, with 87% of the burials in the main cemetery at Poundbury being in coffins (Farwell and Molleson 1993, 228), 90.9% of those in Period 2 at Butt Road, and 68.6% at Alington Avenue, Dorchester (see Chapter 8). The provision of coffins for the vast majority of burials in urban cemeteries would appear to have been the normal practice, and this only serves to emphasise the contrast with the burials at Winchester other than Lankhills.

The use of a coffin has obvious implications for the nature of the funerary rites. If the body was displayed before being brought to the cemetery, it may have lain in the coffin during this time, and is in any case likely to have been carried to the grave in the coffin. The lowering of the coffin into the grave would have been a major focus of the burial rite itself. If the grave goods were put in place during the funeral, or were at least intended to be visible to those attending the funeral, the coffin must still have been open for at least part of the ceremony. Barber and Bowsher (2000, 310) have suggested that coffins were not closed until the last possible moment, as it is recorded that it was usual among the Roman elite for mourners to address valedictory orations to the deceased until the coffin was finally closed. This is plausible, regardless of the status of the deceased and mourners.

Packing

Four graves had flint packing placed around the burial. In none of these burials did the packing completely encircle the body/coffin. Burial 1150 had the most packing, with stones placed along the western half of both sides of the coffin, while in Grave 735 occasional stones had been placed around the body, adjacent to the left shoulder and hip and at the feet, and in Graves 233 and 1335 only a small number of stones were noted on one side of the grave. This practice was more prevalent in the area of Clarke's excavations, where 38 graves were recorded as having such packing (Clarke 1979, 143). It differed from the provision of stone coffins or cists found at many cemeteries (Philpott 1991, 61-8) in that the stones had been placed loose in the grave and did not form any sort of structure. In some instances the packing had been placed all around the coffin, or around the body in graves without a coffin, but there were also graves, like burial 233, in which only a few packing stones were present (Clarke 1979, 355). A similar variation in the quantity of packing stones used was noted among the five graves with such packing at Andover Road (Teague forthcoming). The function of this packing is somewhat obscure. Clarke argued that it could not have been used to support inadequately constructed coffins because in some of the graves in which it was found there was no evidence for a coffin (Clarke 1979, 356), but Ottaway and Rees (forthcoming) disagree, suggesting that stones may have been used 'to hold the boards of some sort of non-nailed coffin in place'. The use of 'packing' stones may of course have been of more symbolic significance, or based on a tradition with no obvious practical purpose.

GRAVE GOODS FROM INHUMATION BURIALS

The unusually large proportion of burials at Lankhills that had been provided with grave goods marks this cemetery out as being quite different in character from the other cemeteries of Roman Winchester. A total of 88 of the 313 burials (28.1%) recorded during the OA excavations had been provided with grave goods of some sort, excluding those only with hobnails. Combined with the 157 furnished graves from Clarke's excavations (Clarke 1979, table 22) this gives an overall total of 245 graves with grave goods (32.6% of excavated and partly-excavated graves). If burials that were provided only with footwear are included, these figures rise to a total of 161 burials (51.4%) from the OA excavations and 398 (53%) overall (see also Table 8.2). Although still more common than at most cemeteries of this date, burials provided with grave goods were slightly less numerous in the area of the OA excavations than they had been in the area of the earlier investigation, and where they were present the assem-blages were generally less rich, both in the number and range of items.

The grave goods provided with the burials investigated by the OA excavations are discussed according to their functional categories below. In order to facilitate comparison between the assemblages from the two investigations, the categories used area based on those in the report on Clarke's excavations, and as far as is practical they are dealt with in the same order as in Part III of that report.

Coins

Coins had been deliberately placed with 24 burials, in addition to the 42 instances recorded during Clarke's excavations (1979, 147). As with the examples from the earlier excavations, more than half of these graves, in this case amounting to 15 instances, contained only a single coin. Groups of three coins had been placed in five graves and groups of two, four, five and seven coins were each encountered on one occasion. Individual coins recovered from the backfills of Graves 22, 1000 and 1491 may have been deliberately deposited (Philpott 1991, 212), but this is not certain.

All but one of the coins were of bronze, and were of low denominations. A similar pattern was observed in the coins from Clarke's excavations, where only two graves contained silver coins, leading Reece (1979, 203) to observe that 'the silver coins of the later 4th century which one might reasonably expect, especially from the House of Theodosius, are conspicuous by their absence'. Indeed, it is striking that these groups appear to represent very small quantities of money, mere loose change in contrast to the contents of contemporary coin hoards, which indicate that a large quantity of gold and silver coinage was in circulation at the time (Robertson 2000). Perhaps the deposition of high value coinage in graves was deliberately avoided or considered inappropriate. It seems likely that the coins deposited in graves, consisting of small numbers of coins of low denomination, were not meant as a display of wealth, but were intended as a token payment, perhaps to assist the deceased's passage to the afterlife.

The only coin of precious metal was a silver denarius of Hadrian placed in Grave 3029, which is likely to have been two centuries old at the time of deposition, and certainly would not have been considered legal tender, although it would obviously have retained its value as bullion. This coin presents such a contrast with the other coins that it may not have been deposited as part of the same custom. Perhaps it was treated in its deposition not as a coin, but as a piece of bullion, or as an antique or heirloom.

Coins were placed in a limited number of locations within the graves, which clearly represented customary or traditional practices. The archetypal tradition of placing a single coin in the mouth is likely to have been represented in six

burials (Graves 635, 660, 1020, 1080, 1175 and 1362). Half of these instances date from the early part of the use of the cemetery, before *c* AD 340, in contrast to the evidence from Clarke's excavations, which appeared to indicate that this practice dated from after this time (1979, 167). The evidence of the two excavations together seems to show that burials with a coin placed in the mouth occurred throughout the 4th century. In one other Grave (3029) a single coin had been placed in the area of the skull, and in burial 1805 three coins had been placed in this area. In four burials (Graves 1010, 1150, 1240 and 1755) the coins, whether individual or in groups, were placed on the chest, and this may also have been the case in Graves 870, 1440, 1547 and 1705, but the preservation of the skeletons in these cases was insufficient to be certain of the location in relation to the body. Three coins had been placed in the right hand of the female buried in Grave 710, and four in the left hand of the male in Grave 1638. The dates of issue of these coins indicate that both these burials are likely to date from no earlier than the 360s, which would be consistent with Clarke's (1979, 167) assertion that this became one of the predominant locations from around this date. Burials 1370 and 1373 were accompanied by groups of three and seven coins respectively, placed by the individual's left foot. In only one burial were coins placed in separate parts of the grave: in Grave 1403 one coin (SF 3623) was found in association with the skull and two (SF 3624 and SF 3625) with the chest, although it is possible that they were deposited together and had become separated during post-depositional disturbance resulting from the decay of the body. These preferred locations are identical to those recorded during Clarke's excavations, although there is some variation in their frequencies, particularly regarding the placing of coins in the mouth, which was much more common in the graves recorded during the earlier investigation, where 19 of the 42 graves containing coins had them in this location (Clarke 1979, 148).

Several graves provided evidence that the coins had been placed in some form of purse. Minerally-replaced fabric was attached to the coin from Grave 3029 and to one side of one of the three coins from Grave 1805, and the groups of coins in Graves 1370 and 1373 were both located within patches of dark, organic soil that are likely to represent the decayed remains of a purse or pouch in which they had been deposited. Although no direct evidence for such containers was recovered from Graves 1440 and 1755, the groups of coins from these burials each included a pair of coins that had become fused together, indicating that they had been deposited, and remained, in close proximity.

Coins were not placed predominantly with either sex, there being eight definite or probable males buried with coins and an identical number of definite or probable females. The number and location of the coins also appears to have been unaffected by the sex of the individual. Most of the burials containing coins were of adults, with only three children accompanied by coins. The three child burials were all unusually well-provisioned: burial 1547 was that of a neonate with a horse skull placed, presumably deliberately, in the backfill; Grave 1760, that of a child aged 4-7 years, was accompanied by a New Forest ware beaker, a glass *tettine*, a knife, a ring and a belt, all placed to the right of the upper part of the body; and three bracelets had been placed, with the three coins, at the foot of the burial of a child aged 8-12 years in Grave 1370.

The number of graves from the OA excavations that contained coins was too small for any detailed chronological patterns in their deposition to be established, but some comment can be made regarding the patterns observed in Clarke's excavations. Ten of the coin-dated graves from the present excavations can be assigned to the second quarter of the 4th century and 12 to the third and fourth quarters of the century, with one uncertain. On this basis there is no evidence for a significant change of practice around the middle of the 4th century with regard to coin deposition within the part of the cemetery considered here, in contradiction of Clarke's (1979, 357) view that the placing of coins became twice as frequent during the second half of the century. Clarke also argued that the locations in which the coins were placed became more circumscribed over the course of the 4th century, with later coins mostly being placed in the mouth or hand, and this receives some support from the results of the OA excavations. Certainly, deposition in other locations, particularly on the chest, seems to have stopped at some time around the AD 360s if one disregards the group of late burials represented by Graves 1373, 1440 and 1760, which have coins in more varied locations but appear to represent the introduction of new funerary practices with more richly furnished graves (see below, section on changes in funerary rites). In both parts of the site the latest grave groups tended to contain multiple coins, sometimes with a relatively wide chronological spread (Booth chapter 4 this volume; Reece 1979, 202).

Glass vessels

Glass vessels were placed with only three of the burials investigated during the OA excavations (1373, 1440, 1760). This contrasts somewhat with the results of Clarke's excavations, which recovered a fairly substantial and important assemblage from a total of 17 graves (Harden 1979). Both assemblages consisted entirely of vessels for drinking or containing liquids (cups, beakers, flagons etc) and included a wide range of different forms. The vessels from the OA excavation, comprising a small conical beaker from burial 1373, a hemispherical cup from burial 1440 and a *tettine*, a type used to feed infants or perhaps to fill oil lamps, recovered

from the burial of a child aged 4-7 years in grave 1760, were all of forms that were not encountered in the earlier investigation (Cool, chapter 4 this volume). The practice of placing glass vessels in burials appears only to have become frequent at Lankhills during the second half of the 4th century (Harden 1979, 209), and the three instances from the OA excavations were particularly late, all coming from graves that contained coins dating from after AD 388. These burials appear to be quite different from the majority of the burials as regards the range of grave goods, not least in the inclusion of the glass vessels, and the consistency in their locations within the grave. In all three burials the glass vessel had been placed beside the head, with a pottery vessel placed on the other side of the head in the two adult vessels and beside the glass vessel in Grave 1760.

Pottery vessels

Excluding footwear, pottery was the category of grave good that was most frequently provided. Pots had been placed with the burials in 39 graves, and in addition one vessel had been placed, inverted, in the mound covering Grave 1622. Most of these burials were provided with a single vessel, but six graves each contained two vessels. There were no graves with more than two vessels, in contrast to the area excavated in 1967-72, which contained two graves with three vessels and one that had four. The vessels were not representative of the range of types in use at contemporary sites within Winchester, but were restricted to a narrow range of fabrics and forms. Most of the assemblage from both parts of the site consisted of products of the New Forest industry, which was represented by both colour-coated fine wares and coarse wares in reduced fabrics.

The vast majority of the forms were associated with drinking, comprising either drinking vessels or containers for liquids variously categorised as jugs, flagons and flasks. Only four vessels that were probably associated with eating food were identified, in the form of two dishes and two bowls, and interestingly three of these instances were in graves that contained two vessels, the other vessel in each case being a jug or flask. The only burial that had been provided solely with an 'eating' vessel was Grave 560, which contained a dish made in a local coarse ware. This was also one of a number of vessels that exhibited evidence for use prior to being selected for inclusion in burials. Sooting on the outside of the dish indicated that it had been used in cooking, and numerous other vessels had chips missing from rims and footrings, typical of damage suffered during everyday use. More serious damage was noted to the flask/jug in Grave 745, the neck and rim of which were missing, as was the rim of the flagon in Grave 1200, which had broken off above the flange, and the jug in Grave 1362 had no handle. One of the pair of unguent bottles in stepped Grave 82 had also been deposited

incomplete, with the rim and part of the shoulder apparently broken off in antiquity, but presumably the exotic origin of this vessel, or its contents, was more significant than any superficial damage. Damage that is more likely to have been deliberate was observed in the case of the flask in Grave 545, which had been punctured by a small hole at the girth, and the flagon in Grave 680, which had been holed in a similar location, resulting in the body of the vessel fracturing into two main parts. Such damage may have been inflicted deliberately when the vessels were dedicated to the burial, and it is not impossible that some of the more minor damage noted on other vessels had been caused deliberately with the same symbolic purpose.

In 22 burials the vessels had probably or certainly been placed within the coffin, and 14 burials had vessels outside the coffin. In a majority of burials the vessels had been placed in the lower half of the grave, that is in the area from the waist down around the feet and legs. Of the burials with vessels inside the coffin, nine were located around the feet, five beside the legs, and eight at the head, and in graves where the vessels had been placed outside the coffin five were near the feet, four beside the legs and five at the head. There was no preference for vessels to be placed on either the left or right side of the body, and where two vessels were provided they were located together. In three burials (82, 575, 1205) the vessels may have been placed on top of the coffin. The unguent bottles in Grave 82 were located awkwardly between the coffin and the side of the grave pit, with one lying on top of the other, while the vessels in Grave 575 had clearly been disturbed, presumably as a result of the decay and collapse of the coffin. The jar lay on its side at the foot of the grave, while the beaker, also on its side, was located next to where the legs are likely to have lain, although no skeletal material was preserved. The vessels in Grave 1205 had been similarly disturbed, the bowl lying on the pelvis and a jug situated roughly between the knees. The bowl was resting the right way up, having perhaps simply dropped vertically to its new position as the coffin decayed and collapsed, but the jug was tilted noticeably to the north.

Some patterns emerge regarding which members of the community had vessels buried with them. Children were more frequently provided with vessels than were adults, a tendency that was also observed in the results of Clarke's excavations, although there the disparity was slightly less pronounced. No neonates were accompanied by pottery, although one example was recorded during Clarke's excavations, In the OA excavations, pots were less frequently placed with infants than with older children, and children were also more likely to be provided with two vessels, accounting for three of the six burials of this sort. The provision of vessels peaked during adolescence, when a third of the population received such items, after which the proportion of the population for which this was

done reduced steadily with age. Very rarely were vessels buried with older individuals. Fewer males than females were buried with vessels, as was also the case for the burials excavated during 1967-72. No pattern could be discerned in the form of vessels provided in relation to the age or sex of the individual.

As the most frequently provided grave good other than footwear, vessels were inevitably sometimes placed in burials that also contained other items, and associations were recorded in a total of 13 burials. The other items with which vessels were placed were varied, and in general did not seem to form deliberate, persistent associations. The exception to this was a group of three very late burials, each of which also contained a glass vessel and included coins that provided a *terminus post quem* of AD 388 (1373, 1440, 1373, see above). In two instances the pottery and glass vessels had been placed on opposite sides of the head, and in the third they had been placed together on the same side of the head. It was notable that burials that had been provided with belt equipment or brooches did not include pottery, with the exceptions of the slightly unusual burials of an adolescent in Grave 745 and a child in Grave 1760, and it would appear that the burial rites of the adult individuals with these forms of equipment did not include the provision of such vessels and their contents.

Animal remains

Three burials contained faunal remains that are likely to have been deliberate deposits. The only instance in which the animal remains had clearly been placed with the burial was in Grave 870, in which a complete domestic fowl had been placed beyond the head end of the coffin. Domestic fowl were by far the most common species placed in burials at Lankhills, and accounted for six of the 10 deposits of animal bone found in burials in Clarke's excavations. In burials of the Roman period generally, although animal deposits occur only occasionally, domestic fowl are typically the most numerous: at the eastern cemetery of Roman London, domestic fowl was recovered from 15 of the 19 graves that contained animal remains (Barber and Bowsher 2000, 130), and all three animal bone deposits from London Road, Gloucester (Worley 2008, 120) were domestic fowl, as was the only such deposit at the Bath Gate cemetery, Cirencester (Viner and Leech 1982, 129). They were also present at Poundbury, but were outnumbered by sheep/goat, possibly due to a continuation of a local pre-Roman tradition of providing burials with food offerings of sheep/goat or pig (Buckland-Wright 1993, 110). The bird in Grave 870 was female, as were five of the examples from Clarke's excavations, with only a single cockerel. The locations in which the deposits of domestic fowl at Lankhills were placed were rather varied. Two burials from Clarke's excavations had birds placed inside the coffin and three outside, and

grave 234 contained two birds, one inside the coffin and one outside. In grave 193 the bones had been scattered in the fill above the feet. The animals could be placed at either end of the grave, or in the middle. What this means as regards the place of such offerings in the sequence of funerary rites is uncertain. Birds that had been placed inside the coffin were obviously killed, and perhaps prepared and cooked if they were intended as food, before the coffin was closed, and in all probability before it was placed in the grave. Perhaps they had already been prepared before they were brought to the funeral. Those that lay outside the coffin, however, may have been freshly slaughtered at the graveside as part of the funeral, and it is open to question whether they represent food offerings for the deceased, sacrifices to the spirit of the deceased or to the chthonic deities, or some combination of these concepts (see further below).

The presence of horse skulls in the backfills of two Graves (530, 1547), and placed on the cremation deposit in cremation burial 655, is particularly intriguing, as it provides evidence that the funeral rites, and the deposition of offerings, did not necessarily end with the insertion of the coffin, but may have continued during the backfilling of the grave. The absence of the mandibles from the skulls in Graves 655 and 1547 suggests that these objects were deposited as skulls rather than fleshed, although there is no direct evidence for defleshing, for example in the form of cut marks on the bones. Horses are not commonly associated with funerary contexts, the most frequently deposited species being domestic fowl, sheep/goat and pig (eg Philpott 1991, 203-4). However, there is a growing body of evidence for at least an occasional association between horses and cemeteries. Within the northern cemetery of Winchester, two horse inhumations were recorded at the early cemetery at Victoria Road East, one of a complete animal and the other containing two partially articulated specimens, as well as a pit containing the disarticulated remains of a man and a woman buried with the sacrum, pelvis and femur of a horse (Browne *et al*. forthcoming). A large horse skull and hoof had also been placed in the particularly substantial late Roman grave of an infant at Victoria Road West (ibid.). Further afield, horse remains, including at least one group of 14 bones, were reasonably common at Trentholme Drive within the Mount cemetery, York, although none were certainly associated with any of the burials (Wenham 1968, 104-9). Also at the Mount cemetery, a 'large amount of horse bones' was recovered from the coffin of a decapitated burial at Driffield Terrace dating from the late 3rd century (Hunter-Mann 2006). Horse was over-represented in grave backfills and non-burial deposits at the eastern cemetery of Roman London in comparison to its frequency at sites within the town (Barber and Bowsher 2000, 79), and included an apparent ritual deposit of a horse, a dog and a deer arranged nose-to-tail at the base of a pit (ibid.,

19-20). Butchery marks are rare on these remains, in contrast to cattle bones from similar contexts, and Barber and Bowsher have dismissed most of the horse remains at the eastern cemetery of Roman London as the result of the dumping of carcasses, and suggested that the area of the cemetery was also used as a knacker's yard (ibid., 80). This interpretation, however, seems somewhat doubtful as it is suggested that most of the animals appear to have been deposited intact, with no evidence for dismembering or use of the carcasses (ibid.). An explanation of these deposits as forming part of some practice related to the funerary use of the cemetery seems more plausible. Away from the major towns, the occurrence of four horses and a dog with human burials in the south cemetery ditch at Dunstable is particularly noteworthy (Matthews 1981, 11). In the rather different context of cremation burial the occurrence of horse is generally rare, with the 3rd-century cemetery at Brougham forming the only significant exception to this at present (Bond and Worley 2004, 325-6, 330-1).

At Lankhills a dog mandible recovered from the backfill of Grave 710 and a sheep/goat mandible from Grave 950 may be incidental inclusions, although the apparently deliberate placing of the horse skulls within the backfills of Graves 530 and 1547 serves as a warning that objects within the filling of graves may have formed part of the funerary process. The dog mandible can be paralleled by a similar bone from a grave fill in the eastern cemetery of Roman London that exhibited a cut mark on the lingual surface possibly inflicted during defleshing (Barber and Bowsher 2000, 77), and the complete dismembered remains of a dog were recorded in the backfill of cenotaph 400 at Lankhills during Clarke's excavations, as well as an intact dog lying on the coffin (Clarke 1979, 150). Although not an exact parallel for the sheep/goat mandible, a rib of this species had been placed under a flagon in grave 47 of Clarke's excavations (1979, 150), and at Poundbury many of the animal deposits similarly consisted of no more than ribs or partial limbs (Buckland-Wright 1993, 110).

Equipment

Combs

Combs had been deposited as grave goods in five burials (Graves 530, 810, 1270, 1280 and 1355; comb fragments were also recovered from the fill of Grave 136), a considerably lower frequency than was recorded for Clarke's excavations, which recovered combs from 21 graves. Of the burials from the OA excavations that contained combs, four were located near the southern edge of the area investigated, and it appears from this that they were provided less frequently in the northern part of the cemetery. However, twelve of the graves with combs recorded by Clarke's excavations were located east of ditch 450/F.12, and it is possible that

further examples were located in the corresponding area east of the OA area of excavation. Their prevalence east of this boundary (Fig. 7.10) suggests that there is a chronological aspect to their distribution, and is consistent with Cool's suggestion (Chapter 4, this volume) that they are rather late in date, coming into use during the last third of the 4th century. This suggestion also receives support from the stratigraphic evidence, since only two such burials from the OA excavations and one from Clarke's excavations were cut by subsequent burials, indicating that they were interred toward the end of the use of the cemetery.

Three of the combs were buried with adult females, one with an adult of undetermined sex, and one with a child aged 4-7 years. Two of the females were aged over 45 years (the age of the third could not be established), which supports the suggestion that combs were often deposited with older females (Cool Chapter 4, this volume). Eleven of the burials from Clarke's excavations that contained combs were of adult females, and only two of males, the sex of one of whom was not a definite identification. The combs had been placed in a variety of locations: the comb in Grave 810 was near the head, those in Graves 530 and 1280 on the chest, the one in Grave 1270 lay beside the right hip, and the comb in Grave 1355 was located in the bottom corner of the coffin. They were, however, always located within the coffin, as would befit such a personal effect.

According to Cool (Chapter 4, this volume) 'combs may have been prestige items and indicated that their owners came from the wealthier echelons of society'. None of the graves from the OA excavations that had been provided with combs contained any other grave goods that might indicate the status of the occupant, although three of those from Clarke's excavations (63, 333, 369) were quite richly furnished. It is possible that most of the graves with combs lacked other grave goods because the items most commonly buried with female burials, particularly items of jewellery, were not thought appropriate for individuals of the age and status of those who were buried with combs. If burial with a comb was, indeed, an indicator of status, it is possible that the virtual absence of these items toward the northern limits of the cemetery indicates that this area was reserved for the burial of individuals of lower status, although as discussed above the distribution of combs may also have been influenced by chronological factors.

Spindle whorls

Shale spindle whorls had been placed with five burials from the OA excavations (785, 1000, 1590, 1705 and 1930 (Fig. 7.11), a further example from the upper fill of Grave 595 was not securely associated with this grave), and presumably represent the surviving element of spindles that were originally deposited intact, the wooden distaff having decom-
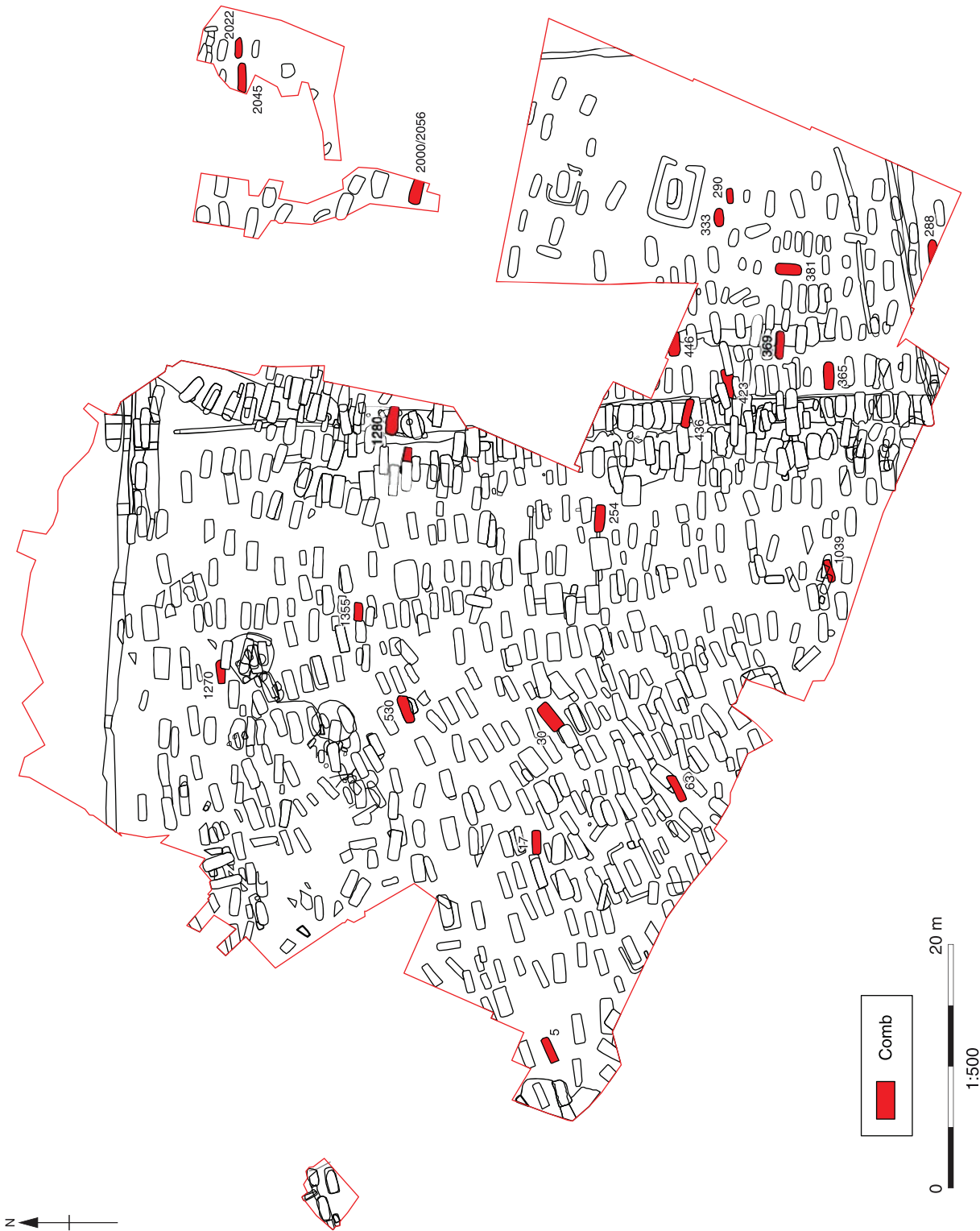
Fig. 7.10   Distribution of graves with combs

Comb

1:500

0   20 m

posed (distaffs occasionally occur in graves in other materials, such as an ivory example from Hürth-Hermülheim, near Koln (discussed with other examples in Gottschalk 1996)). Like combs, they appear to have been placed only with female burials. Two of the five burials (1000, 1590) were certainly of females, and the remaining three were of unsexed adults (785, 1705 and 1930). Clarke's excavations recorded nine individuals buried with spindle whorls, comprising four females, three unsexed adults and two subadults. One of the unsexed adults (396) was buried with other grave goods appropriate to a female, namely a bracelet worn on each arm. The two individuals from the OA excavations that could be assigned a more specific age range were older adults, aged 36-45 years (785) and 45+ years (1000), but the age ranges of the burials from the earlier investigation were more varied, the most common age range being 18-25 years, which accounted for four individuals. The locations in which spindle whorls were placed within the grave appear to have been quite circumscribed, particularly compared to those for combs, with all but one of the spindle whorls from both excavations having been placed near the legs or feet, regardless of whether they were placed within or, more rarely, beside the coffin. The one exception was the example from Clarke's grave 329, which had been placed in the general area of the chest, although the extremely poor skeletal preservation in this grave precludes being more specific.

The evidence from sites where spindle whorls have been found in more closely dated contexts suggest that they came into use around or shortly before the middle of the 4th century, and were predominantly an artefact of the second half of the century, rather than being evenly distributed in both halves of the century as Clarke (1979, 248) suggested. The dating evidence from the Lankhills graves with spindle whorls is consistent with this, comprising a coin of AD 330-48 from Grave 1705 of the OA excavations, and from Clarke's excavations a coin of the House of Constantine (AD 350-64) from grave 329, a group of six coins from grave 336, the latest of which are two issues of Constantius II (AD 350-61), and a single coin of Valentinian I (AD 364-75) from grave 396. It is notable that none of the burials with spindle whorls was associated with coins of the House of Theodosius, and this may suggest that the placing of these objects had ceased before the final part of the century. This suggestion receives some support from the spatial distribution of these graves, which contrasts markedly with the distribution of burials with combs in being scattered throughout the area west of ditch 450/F.12, with only one instance in the area of later burials to the east.

Cool (Chapter 4, this volume) has suggested that spindles had been buried with these individuals because they were considered to be an appropriate accoutrement for the mistress of the household, perhaps symbolising her responsibility for domestic production. Their potential importance in this regard is supported by their occasional appearance in tomb iconography, as for example on the tombstone of Regina at South Shields (Phillips 1977, 91). The possible loom weight placed with the adult female buried in Grave 1015 may have had similar associations. On occasion, spindle whorls were certainly placed with individuals of status and wealth, as in examples from Dorset with burials that had been placed in lead coffins or stone cists (Philpott 1991, 184), or the burial within a mausoleum and accompanied by jewellery of precious metals at Normangate Field, Castor (Wilson 1969, 219), but whether this means that the individuals at Lankhills were of such status is uncertain (see Cool, Chapter 4). The coin from Grave 1705 and a pot in Grave 1830 were the only other grave goods from burials with spindle whorls in the OA excavations, but the instances from Clarke's excavations provided a much larger and more varied assemblage of goods, notably the collections of jewellery placed with the younger individuals in graves 117, 326, and 336. These latter groups are likely to reflect the social identity of these individuals as girls or young women rather than necessarily indicating wealth.

Knives

The total of seven burials accompanied by knives from the OA excavations (930, 1175, 1310, 1760, 1805, 1921 and 3030) was identical with that recorded during Clarke's excavations. In most cases only the iron blade was preserved, although in the example in Grave 1310 the antler handle survived, as did a bone handle and silver guard in the case of the knife in Grave 1805. It is likely that the other knives were fitted with wooden handles, which have not survived. Two of the knives (in Graves 1310 and 1760) were everyday domestic knives, but the remainder, including all seven from Clarke's excavations, may potentially have been considered as weapons. They are referred to here for convenience as 'fancy knives'.

The latter were frequently associated with belt sets, and it is likely that they were worn, during life and in at least two instances at burial, in a sheath suspended from the belt. This was apparent in Graves 1175 and 1921, in both of which the knife was located near the right thigh of an individual buried wearing a belt. The burial of the child in Grave 1760 was accompanied by a knife that had been placed to the right of the head, with a group of other grave goods including a belt and an iron ring that may have formed part of the fastening that attached the knife sheath to the belt. The knife in Grave 3030 may have been in a similar position, although it is difficult to be certain as the skeleton did not survive. The knife in Grave 930 appears to have been placed on the lower part of the torso, and that in Grave 1805 lay beneath the lower part of the left leg. Clarke (1979, 151) interpreted three of the
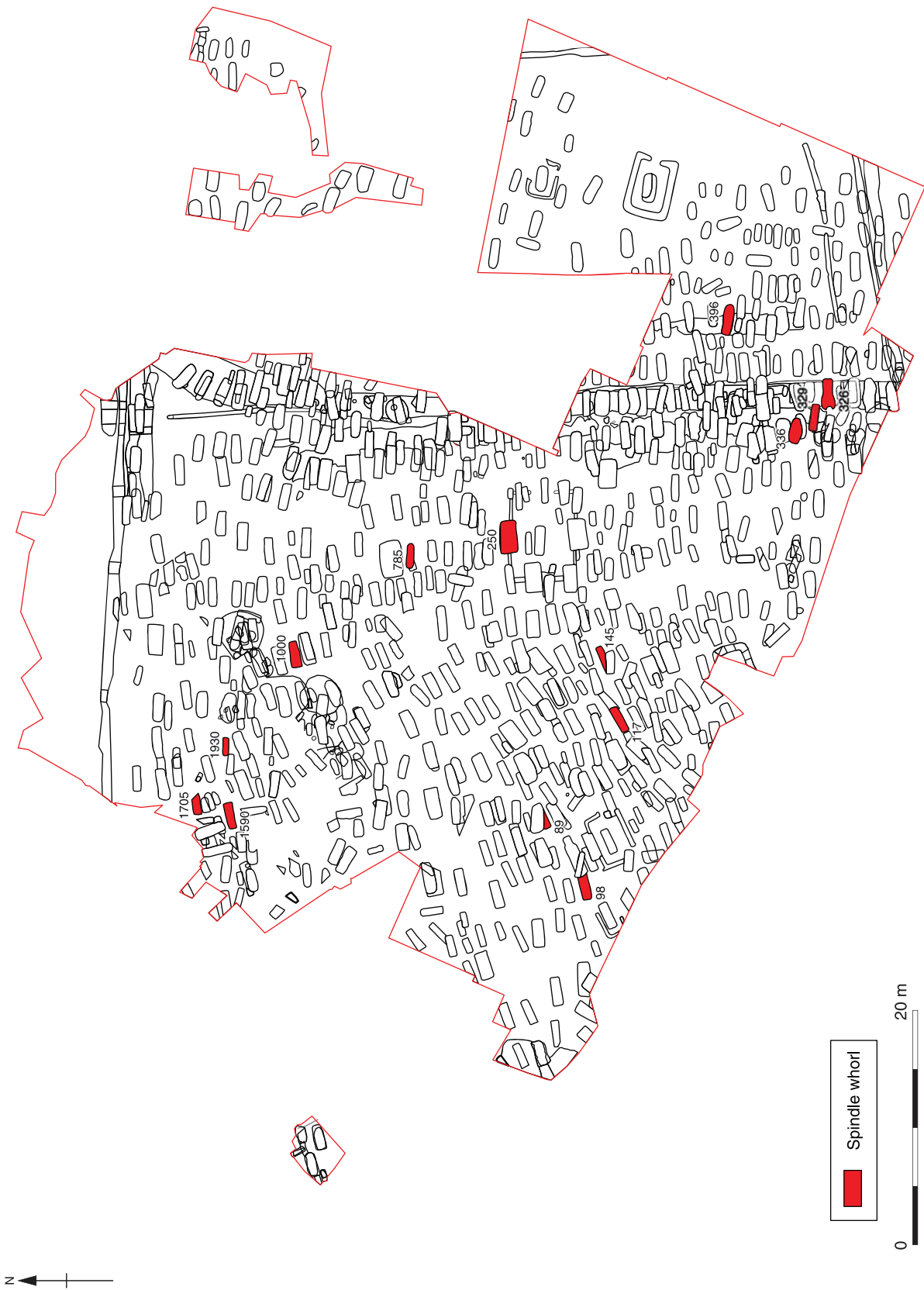
Fig. 7.11   Distribution of graves with spindle whorls

Spindle whorl

1:500

0   20 m

knives from the 1967-72 excavations as having been worn on belts at burial, while a further two had been placed at the foot of the coffin underneath belts to which the sheath was presumably attached.

Knives appear to have been exclusively associated with burials of males. Five of the seven from the OA excavations had been buried with adult males (930, 1175, 1310, 1805, 1921), one with a child aged 4-7 years (1760), and one came from a grave in which no skeletal material was preserved (3030), but which also contained other typically male accoutrements in the form of a crossbow brooch and belt buckle. All but one of the knives from Clarke's excavations were associated with a male individual, the exception being an unsexed adult in grave 418. It is striking that the 'fancy knives' from both excavations were exclusively associated with adults, none of them younger than 25 years, and it seems likely that possession of these items was both a sign of status and an age marker. The association of three of these items from the OA excavations (Graves 1175, 1921, 3030) and six from Clarke's excavations with belt sets, which are themselves an indication of rank, would suggest this, as would the incidence of crossbow brooches with one of these individuals from the OA excavations (Grave 3030) and two from the earlier investigation. A knife was found buried with a possible female burial at Hyde Street (Rees *et al*. 2008, 150), but as this was a domestic utensil it may have little bearing on the placing of the other types with the burials of distinguished males.

The child in Grave 1760 and the adult male in Grave 1310 had both been buried with everyday domestic knives rather than 'fancy knives'. It is possible that the child was from a high status background and would in time have been expected to merit a 'fancy knife' but, at so young an age, had yet to do so, and that consequently a substitute was provided for the funeral. Grave 1310 was one of only three from the two excavations that contained a knife but no other grave goods, and it is possible, and perhaps likely, that the deposition of this item did not share the symbolism of other knife burials.

The custom of placing knives with burials appears to have been practised during the latter part of the use of the cemetery. None of these graves demonstrably dates from the first half of the 4th century, and some certainly dated from the end of the century, if not the early part of the 5th century. Two of the burials from the OA excavations (1175, 1760) were accompanied by a coin of the House of Theodosius (AD 388-402), and Grave 1805 contained three coins of the House of Valentinian (AD 364-378), while the latest of three coins in one of the graves from Clarke's excavations was an issue of the House of Theodosius and two other graves had coins dating from the second quarter of the 4th century. Stratigraphically, all except grave 443 of Clarke's excavations were the latest burials in their respective sequences, indicating that they belong to the final phase of the cemetery. The antler

handle of the knife from Grave 1310 is also characteristic of a date during the late 4th century or later as antler became a more commonly-used material at that time.

Belt equipment

Belts were not worn by the bulk of the population of the later Roman world, but were an accoutrement generally reserved for individuals of rank. Belt equipment was recovered from eight inhumation burials during the OA excavations (745, 1075, 1175, 1760, 1846, 1921, 1925 and 3030; Fig. 7.12), as well as from cremation burial 1180. Only two of these belts, in Graves 745 and 1846, were represented by both a buckle and a strap end, and the former grave also contained a second strap end that may have formed part of a second belt or of an attachment for a knife sheath (see below). Five burials (1175, 1760, 1921, 1925 and 3030) contained belts that comprised only a buckle, including two graves (1921, 1925) that each had two such belts, and in Grave 1075 only a strap end was recovered, presumably representing a belt that lacked a buckle and was secured simply by tying it in a knot. A similar range of types had been recorded by Clarke's excavations, which had additionally uncovered a belt with neither buckle nor strap end, represented only by a line of studs (Clarke 1979, 31).

Belts appear to have been predominantly an accoutrement associated with adult males. Only two of the graves for which they were provided were burials of subadults, comprising a young child and an adolescent, and the two adults that could be assigned a sex were both male. Although no body was preserved in Grave 3030, the size of the grave pit is such as to suggest that it was dug for an adult. The individuals from Clarke's excavations that had belts were even more overwhelmingly male: seven of the 14 adults were male and one was possibly female. The individual assigned by Gowland (2002) to the '?female' category had been sexed as male in the original publication (Clarke 1979, 24) and so this identification should be regarded with some caution. Alternatively, it is possible that it was acceptable among the Roman population of Winchester for some females, such as this individual, to adopt certain traits that were more commonly associated with a male persona.

The two adult individuals for whom an age could be established were 45+ years (Grave 1175) and 60+ years (Grave 1921) at death, and this forms part of a clear association of belts with older individuals that was apparent in the results of Clarke's excavations: of seven adult individuals for whom an age could be established, only one was aged less than 35 years. This may indicate that these items were obtained through merit or associated with seniority and were placed in the grave as a symbol of the status gained by the individual. In the case of the child in Grave 1760 and the adolescent in Grave 745 this is of course unlikely, and it may be that the belts placed
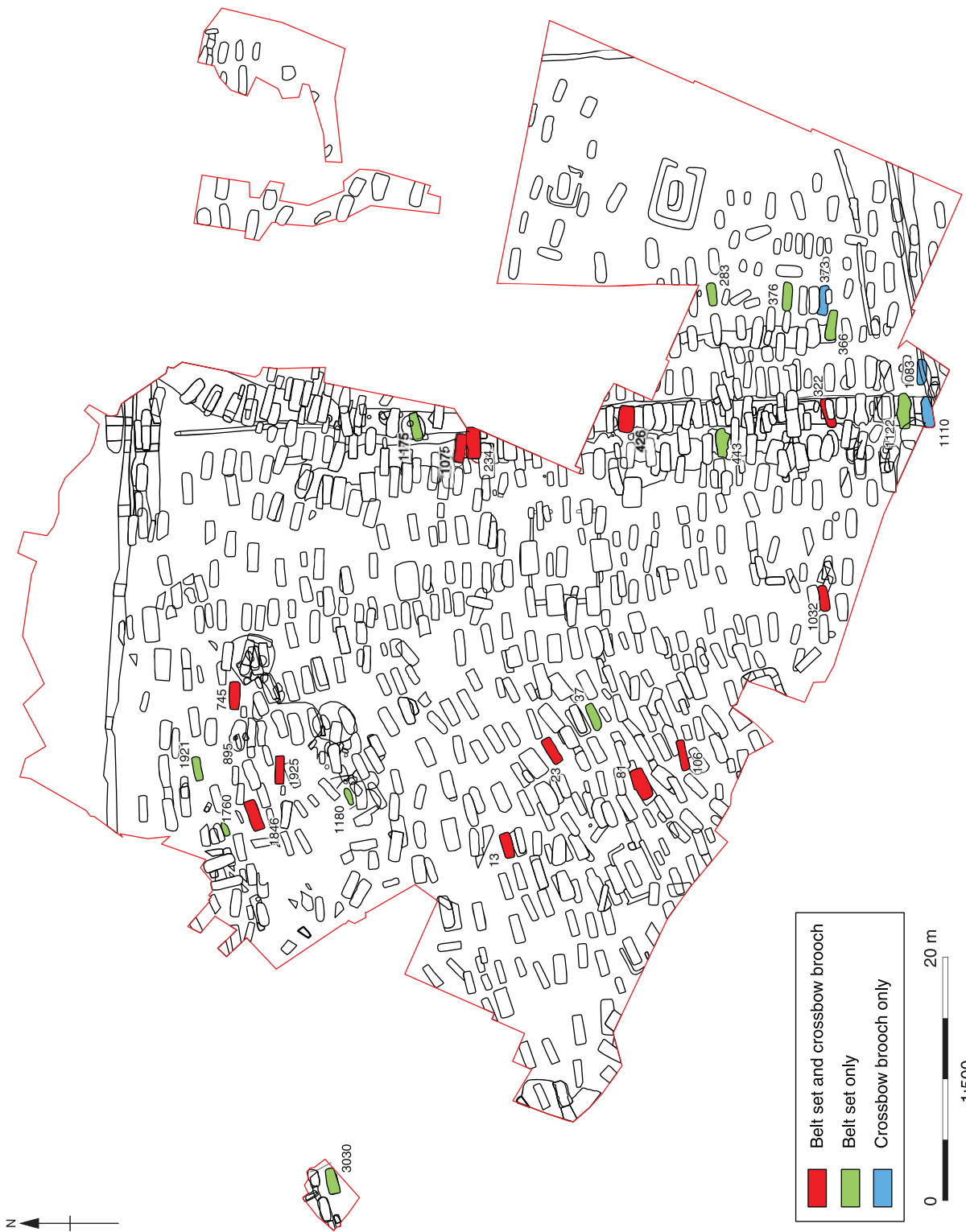
Fig. 7.12   Distribution of graves with belt sets and crossbow brooches

Belt set and crossbow brooch

Belt set only

Crossbow brooch only

20 m

1:500

0

with them had been the property of a senior member of their family, or symbolised the manhood that they had not attained. The belts in Grave 745 had been placed at the feet, and that in Grave 1760 beside the head, but in all but one of the adult graves from the OA excavations with belts these were probably worn at burial or were in a position consistent with having been worn (in the case of Grave 3030 the evidence is unclear since the skeleton did not survive), as was the case with eight of the 14 adults from Clarke's excavations. The exception to this pattern from the OA excavations was Grave 1846, in which the belt had been placed on or between the legs, perhaps because the body was clothed in a way that would otherwise have hidden the belt from view. The recognisably older individuals seem all to have been buried wearing their belts, although this apparent pattern should be treated with caution on account of the number of individuals that could not be aged any more specifically than 'adult'.

The belts recovered from the OA excavations are all of types that were current during the second half of the 4th century and the early part of the 5th century (Cool, Chapter 4, this volume). The evidence from Grave 745 was slightly at odds with this, as it contained a New Forest ware flask/jug dated to AD 300-350, but this probably indicates no more than that the vessel was deposited some time after its probable date of manufacture. Graves 1175 and 1760, on the other hand, both contained coins of the House of Theodosius and provide a clear indication that belt equipment continued to be deposited with burials down to the end of the 4th century, if not beyond. The dating evidence from Clarke's excavations was similar; one burial contained an issue of the House of Theodosius and four had coins issued during the third quarter of the century. There were also four burials that could be attributed to the second half of the century on the basis of pottery, two of which were unlikely to date before the final quarter of the century.

Four of the burials that contained belts also included knives (Graves 1175, 1760, 1921 and 3030), and it is likely that the knives were usually worn in a sheath suspended from the belt, as discussed above. Burials 1760 and 3030 both contained plain metal rings that may have had some role in attaching the sheaths, although in both instances the knives were not worn at burial but were placed beside the body, presumably in their sheaths. Four similar rings found in grave 443 of Clarke's excavations had mineralised leather preserved in their corrosion products and a buckle and a knife in positions that would be appropriate for them to have been attached to a sheath in which the knife was placed. In Grave 1760 the belt and ring, along with the knife, lay to the right of the upper part of the body, and are likely to have been placed in a pile with the sheath attached to the belt. In Grave 3030 the knife, and probably the ring, appear to have been in a similar position to their equivalents in

Grave 1760, but it is uncertain whether the belt was similarly placed beside the body or whether it was worn at burial. The location of the knives in Graves 1175 and 1921 is consistent with their having been attached to the belts worn by the individuals in these graves, although no evidence survived for the means of attachment, which was presumably therefore constructed entirely from organic materials. Burial 745 contained a ring similar to those in Graves 1760 and 3030, as well as a second strap end that could also have been part of the suspension for a sheath, but no knife was present. It is possible that the absence of the knife in this case was connected with the young age of the individual, who was an adolescent.

Brooches

Crossbow brooches

Five of the eight burials furnished with belt sets had also been provided with a crossbow brooch (745, 1075, 1846, 1925 and 3030; Fig. 7.12) and the same combination was also seen in cremation burial 895. There were no crossbow brooches in burials without belt sets. This association between the two items was also observed during Clarke's excavations, which recovered a total of eight crossbow brooches, all but one of which came from burials that had also been provided with belt sets. All the brooches were bronze, although the example from Grave 1846, which was by far the largest, was originally gilded all over and had an inscription on either side of the bow. The inscription is carried out in black lettering that is normally described as being of niello (in this instance copper sulphide). One side of the brooch has the wish VTERE FELIX ('good luck to the user'), and the other reads VENE VIVAS. VENE is thought to be a variant for BENE, with the inscription intended to read BENE VIVAS ('live well') (Cool, Chapter 4, this volume). A single gilded crossbow brooch, which was similarly of unusually large proportions, was also recovered during Clarke's excavations (1979, 259).

It is well known from pictorial and burial evidence that crossbow brooches were worn at the (right) shoulder, fastening cloaks with the foot pointing upwards (Swift 2000a, 3-4). The locations of the brooches at Lankhills in relation to the bodies with which they were buried indicate that some were worn at burial, but others were placed in the grave unworn. The examples in Graves 1075 and 1846 were both located in approximately the correct position to have been worn in this way, the former on the left shoulder and the latter on the right, although in both instances the preservation of the skeleton was too poor to be absolutely certain. Mineralised textile remains found on the brooch from Grave 1075 are likely to derive from the garment that it secured, and a few fibres were also found on the head of the brooch in Grave 1846 (Walton Rogers, Chapter 4, this volume). Four of

the brooches from Clarke's excavations were in the correct positions to have been worn, although three of them were the 'wrong way up', that is with the foot pointing downward. Two of these items were also associated with mineralised textile remains. The brooch in OA Grave 1925 lay on the individual's torso, as may have the one in Grave 3030, although in this burial no skeletal material survived. Although not in the normal positions, it is possible that these brooches were also used to pin items of clothing, as mineralised remains of cloth of unknown type were attached to the brooch in Grave 1925, and the pin of the brooch in Grave 3030 pierced a leather strap. Whether the items to which they were attached were worn at burial is less certain. Three of the four unworn crossbow brooches from Clarke's excavations were also located on the torso, and it is possible that the brooches in this position were attached to items of clothing that had been placed in a pile on the body. This may have been a practical way of displaying particularly sumptuous garments or those associated with a specific status, particularly if the body was shrouded or clothed in a cloak or other item that would obscure such garments had the individual been dressed normally in them for burial. Securing the brooch to the top of such garments would have ensured that it was clearly visible, which may have been considered important because, as a symbol of the individual's status, the brooch may have been included in the grave for more than practical reasons. The brooch in Grave 745 was definitely not used to secure clothing, however, as it had been placed against the side of the coffin, to the left of the individual's knees.

Crossbow brooches had been provided for the burials of three adults whose sex could not be determined, a probable adult (in Grave 3030) and an adolescent. It is likely that most, if not all of these individuals were male, as these items and the associated belts are typically a male accoutrement. The examples from Clarke's excavations accompanied the burials of three adult males, a possible adult female, and four unsexed adults. As mentioned above, there may be some doubt regarding the sexing of the individual described as a possible female. None of the adult individuals from the OA excavation could be aged with any precision, but the evidence from Clarke's excavations suggests that, like the practice of wearing belts with which it was associated, crossbow brooches were worn by older men. One of the three adults from that investigation who could be attributed to a specific age category was aged 35-49 years at death and two were at least 50 years old at death. It may be worth noting that one of the older individuals, buried in Clarke's grave 13, was accompanied by one of the two gilded examples, and this may suggest that the most senior individuals were marked out by the size and showy nature of their brooches. It is particularly unfortunate in this

context that the remains of the individual buried with the gilded brooch in Grave 1846 were too poorly preserved to allow ageing or sexing.

The practice of placing crossbow brooches with a small number of burials appears to be characteristic of the later part of the use of the cemetery. All six brooches from the OA excavations (including the example from cremation burial 895) can be attributed on typological grounds to the last two thirds of the 4th century and the early 5th century (Cool, Chapter 4, this volume), and the independent dating evidence is consistent with this. The only brooch recovered from a grave that contained other datable artefacts was the example buried with the adolescent in Grave 745. This was associated with a New Forest ware flask/jug dated to AD 300-350, although a later date was suggested by the presence of two strap ends datable to the second half of the century. Rather more examples associated with dating evidence were forthcoming from Clarke's excavations. The brooch in grave 13 was associated with a coin of the House of Constantine dating from AD 350-60, grave 81 contained two coins of Magnentius (one a copy dated AD 350-64) and a copy of one of Constans (AD 348-64), while a coin of Valentinian I (AD 364-75) was recovered from grave 322. Pottery vessels dating from the second half of the century had been placed in three burials that contained brooches, including a bowl from grave 373 that dated from the very end of the century. Some of the brooches may have been in use for a considerable period of time before they were deposited with these burials, as is demonstrated by evidence for wear and repairs. The pin of the brooch in Grave 1925 had been replaced, as had that of the example in Grave 1075. The latter also lacked both the central knob and its safety bolt, as did the gilded brooch in Grave 1846. The brooch in Grave 745 was missing its foot. It is likely that the gilded brooches were particularly prized possessions, and both the example from Grave 1846 and the one from Clarke's excavations were noticeably worn.

The brooches did not, of course, exist in isolation, but formed part of the costume of the individual. This would have been true even in the instances where brooches had been placed on or beside the body rather than being worn at burial, as the garments with which they were normally worn may have been placed with them. By the time the cemetery at Lankhills came into use, forms of clothing that required fastening with a brooch had largely gone out of use (Croom 2004, 294), and so the individuals who were buried with these brooches may have been distinguished both by the display of such ostentatious ornaments and by the unusual clothing with which they were worn. The association of brooches with belt sets (above) is very marked, and together they seem likely to have been part of the equipment of probable officials or (perhaps less likely) military personnel (see further below).

Penannular brooches

The two penannular brooches recovered during the OA excavations are the first such items to be discovered in the cemetery. Both appear to have been worn at the time of burial rather than deliberately placed with the body, and, in contrast to the crossbow brooches, may have been regarded as entirely practical items rather than having any symbolic significance. The bronze brooch buried with the remains of an adult female in Grave 780 was located at the waist, and Walton Rogers (Chapter 4, this volume) has suggested from its position and from textile remains preserved in corrosion products on the pin that it secured a woollen mantle. The example in Grave 1440 was of iron, and accompanied an adult male. This brooch also preserved some textile remains and is likely to have secured a cloak at his right shoulder. The presence of the brooches indicates that both individuals were clothed at burial rather than wrapped in shrouds.

Penannular brooches were in use throughout the Roman period, but are unusual finds in 4th-century cemeteries (Cool, Chapter 4, this volume). Grave 1440 was one of the group of late burials that contained coins of the House of Theodosius (AD 388-402) and provides evidence that these items were still in use in Winchester down to the end of the Roman period. Their use in burials elsewhere continues through the 5th-7th centuries, and both copper alloy and iron examples occur locally, for example in the early Anglo-Saxon cemetery at Worthy Down (Hawkes with Grainger 2003, 34, 65). Brooches of this type can be considered as 'culturally undiagnostic' in a post-Roman context (Carver *et al*. 2009, 81-82).

Personal ornaments

Personal ornaments are defined here as bracelets, necklaces and finger rings which, in contrast to the belt sets and brooches, were associated with the burials of females. They occurred in a total of 14 burials, comprising nine subadults, three adult females and two unsexed adults. This is consistent with the association of such items with the burials of children and females observed during Clarke's excavations (1979, 152) and more widely. All but one of the 14 burials that contained personal ornaments included bracelets. The number of bracelets in each grave varied from one to 16, although most instances were toward the lower end of this scale, and only four graves contained eight or more bracelets. Four of the burials containing bracelets had also been provided with bead string necklaces, and four, including two with necklaces, also had rings. Three of the four burials that had necklaces were also among the four with the largest assemblages of bracelets, and included the only two graves that contained both necklaces and rings. The only burial that contained an item of personal ornament but did not contain any bracelets was in

Grave 885, the burial of an unsexed adult provided with a single finger ring.

Only in two instances were the ornaments definitely worn at burial, and these were both the burials of children (Graves 1070 and 1866). The child in Grave 1866 wore a bronze bracelet on the right arm and two bronze and two bone bracelets on the left, and wore two bronze rings on the first finger of the left hand. The child buried in a prone position in Grave 1070 wore a bronze bracelet and a shale bracelet on the left arm and a silver ring again on the first finger of the left hand. It is not known whether the latter burial also had ornaments on the right arm, as the part of the grave containing this arm had been destroyed by the digging of subsequent graves. The arrangement of the bracelets in Grave 1866 was particularly interesting as all five of the individuals from Clarke's excavations who were buried wearing bracelets on both arms likewise had only a single bracelet on the right arm, in each case of bronze. Two individuals recorded in those excavations had bracelets only on the left arm. A bracelet in OA Grave 87 and a ring in Grave 885 may also have been worn; both items were located in the area of the pelvis, where the hands lay in a large number of burials, but insufficient bone was preserved to be sure whether this was the case in these burials.

In the burials in which personal ornaments had been placed unworn, they were placed in a single pile, irrespective of whether they included more than one type of object. The locations in which they were placed were varied: in three burials the ornaments had been placed within the foot end of the coffin, in three they were on the torso, two burials had ornaments placed beside the skull, one beside the left hip, and in Grave 495 a pair of bracelets had been placed under the upper part of the right arm. Beads only occurred in burials in which the ornaments were placed in the graves rather than worn.

The deposition of personal ornaments, with a particular emphasis on patterns associated with the age of the individual, has been discussed in detail by Cool (Chapter 4 above). Younger individuals were generally accompanied by the larger assemblages, the bulk of which consisted of bracelets; most of the graves with ten or more bracelets contained the body of an adolescent or child, whereas older women tended only to have only one or two bracelets. No simple pattern was identified regarding whether the items were worn or placed unworn. Bracelets could be either worn or unworn with an individual of any age, but beads were more commonly worn when accompanying adult women (although this was seen only in Clarke's burials and not in the OA excavation) but placed separately when the burial was of a child or adolescent.

Hairpins

Bronze hairpins were recovered from the burials of two adolescents (Graves 545, 985) and a bone example from the burial of an adult female (Grave

82). The adult was buried with a single pin, located near the feet, while the adolescents had three and two pins respectively, situated close to the skull. A further seven burials containing hairpins were recorded during Clarke's excavations, containing up to five pins and including two examples made from silver. The proximity to the skull of the pins that had been buried with the adolescents suggests that they were worn in the hair at burial. Such items were a necessary device for holding in place the elaborate hair styles that were sometimes popular in the Roman world, and their presence in these graves indicates that the arrangement of the hair formed part of the preparation of the deceased for burial. They may also have been used to secure headdresses: the pin in the burial of a child in Clarke's grave 323 was associated with fragments of glass and gilt bronze around and corroded to the skull, which are likely to be the remains of such an ornament, and it was also suggested that the disposition of one of the sets of beads in grave 336 was more consistent with their having been used to decorate the hair than with their being a necklace. No positive evidence for headdresses was found during the OA excavations. Hairpins were very much a fashion for girls (Cool Chapter 4, this volume). Few adult women were buried with them, and those that were tended to be younger adults. There is a negative correlation between the occurrence of hairpins and that of combs.

Pendant

A silver buckle pin in Grave 1355 appears to have been re-used as a pendant, and was found in the neck area of a child aged 4-7 years, where it was presumably worn at burial. Though it is of cruciform shape and thus to modern eyes possibly a Christian symbol, in antiquity it would not have had this meaning as the cross was yet to become the diagnostic image for the religion, and it is more likely that it had been selected for re-use due to the material and its convenient shape. This burial was also unusual in being the only non-adult burial that was accompanied by a comb.

Other grave goods

Four miscellaneous items appear to have been placed as grave goods: a pair of shears (Grave 730), a possible stylus (Grave 1940), a loom weight (Grave 1015) and a bone plaque (Grave 620). All of these items are rare in a burial context, and none had parallels in Clarke's excavations.

The shears had been placed with a poorly-preserved burial of which sufficient survived, however, to suggest that it was of an adult male and that the item lay on the left side of the body. There is evidence that the few known examples of these objects were buried with adult males (see Chapter 4 above), suggesting that they are male grooming tools.

The possible stylus was recovered from the burial of an individual aged 13-17 years, in which it had been placed near the right foot. Such items occur very rarely in burials in Britain, and in the absence of known associations there is little that can be said about it.

The loom weight, a chalk disc *c* 60 mm in diameter, had been placed within the foot of the coffin of a probable adult female. If its identification as a loom weight is correct, it is possible that it carried similar symbolism to the spindle whorls recovered from other graves, and that its association with textile production made it an appropriate accoutrement for the mistress of the household.

The bone plaque (SF 1536) from Grave l620 was an incomplete object with the inscription DIVV[, which has been expanded as DIV VIVAS. The reading seems almost certain. Inscribed objects of this nature are extremely rare in Romano-British burial contexts and the parallels have been discussed by Hilary Cool (Chapter 4 above). Among the closest are two objects from York which mirror different aspects of the Lankhills piece. The openwork strip (RIB II.3, 2441.11) with the motto SOROR AVE VIVAS IN DEO is undoubtedly of Christian significance, and presumably indicates something of the woman with whom it was buried, notwithstanding the presence of other grave goods (Toynbee 1968, 190-1; Hartley *et al*. 2006, 156-7). The second object (RIB II.3, 2441. 7), a simple bone plaque with the inscription DOMINE VICTOR VINCAS FELIX, is closely comparable to the Lankhills one in the general character of the lettering and the 'serrated' edges, the main differences being that the letters of the York piece are larger and arranged on two lines. A third piece, a plaque fragment from Richborough (RIB II.3, 2441.18), 23 mm high, with notched edges like the Lankhills and the York examples, has the legend]S VIVAS, here enclosed within lines scored inside the notched edges.

It is notable that four of the five examples (including the Lankhills piece) of what can loosely be termed 'motto plaques' do derive from burials. Only the York openwork piece is unequivocally Christian in character. The other York example is presumably not, and the status of the remaining pieces in this regard is uncertain. It is of course possible that the Lankhills example originally carried a longer legend, such as (perhaps) DIV VIVAS IN DEO, but this is highly speculative. This specific word combination is not found in RIB II; VIVAS IN DEO (or variants) occurs five times on its own, as well as being included in the longer York motto, while VIVAS as a single word or in combination with another (eg PIE VIVAS or PIVM VIVAS, RIB II.3, 2417.34 and 2420.36 respectively) is very common, although only one other example of DIV VIVAS is noted in Britain, on a spoon from St Neots, Cambridgeshire (RIB II.3, 2420.25).

The location of the Lankhills object is curious. It lay beside the right foot of the adult female placed

in Grave 620, in an area occupied by the remains of a pair of nailed shoes (unworn) and the fragmentary remains of a neonatal infant, of which only parts of the skull and torso survived. The bone plaque could therefore be seen as associated with the neonate rather than with the adult, although in this case the significance of DIV VIVAS might presumably be a hope in relation to the afterlife rather than of earthly relevance. Is it possible that this is indicative of Christian belief? The loss of part of the plaque, which might have provided further indications, is particularly unfortunate in this regard; it was presumably a result of the extreme and sometimes very localised variation in burial environment seen elsewhere in the cemetery (see above Chapter 5), which probably also accounted for the loss of significant parts of the neonate skeleton – there is no indication of disturbance to this or indeed any other part of Grave 620.

Footwear

Quantifying the provision of footwear in the burials is somewhat problematic, as organic materials such as leather were not generally preserved, and so only in those instances where items of footwear had an inorganic component did any evidence survive. Footwear was identified in 112 burials from the OA excavations, comprising 111 instances represented by hobnails, 20 of which also had boot plates, and one burial (1846) in which footwear was represented by a pair of copper alloy spurs, attached to one of which was some mineralised leather. Whether this provides an accurate representation of the frequency with which footwear was placed in the grave is uncertain, however, as shoes could also be made without hobnails or other metal components. At New Fresh Wharf, London, for example, 33% of the assemblage of *c* 150 shoes dating from the 3rd century were not nailed (MacConnoran 1986, 218), and at the adjacent Billingsgate Buildings site, dating from the 1st and 2nd centuries, 79 of the 147 shoes recovered (46%) had no metal components (Rhodes 1980, 103). Although the shoe assemblages from these sites may provide some indication of the relative proportions of nailed and un-nailed shoes in use in Roman Britain, it is possible that particular types, whether with or without hobnails, may have been considered appropriate for placing with burials at Lankhills. This is particularly so as the shoes appear to have had more than a merely practical significance, as is demonstrated by the relatively common practice of placing items of footwear in the burials in addition to those that were worn.

The burials of males were slightly more likely to be accompanied by hobnailed footwear than those of females. Shoes were present in the graves of 47 males (50% of the graves sexed as male) compared to 37 (41.1%) of female graves. Clarke (1979, 180 and 370) attributed a similar pattern in the data from the 1967-72 excavations to a decline in the number of

female graves accompanied by shoes during the later 4th century, and although the results of the OA excavations may be consistent with this, insufficient graves with footwear could be closely dated to confirm this chronological development. Only two infants were provided with hobnailed footwear, perhaps because such young children usually went unshod, but older children were as likely as adults to be buried with shoes. Indeed, subadults aged over three years were slightly more likely to be buried with shoes than were adults, with 45.9% of this aged group being treated in this way compared to 43.5% of adult burials, but the difference is so small that it is unlikely to have been significant. The frequency with which footwear was provided for adults is almost identical to the figure recorded by Clarke's excavations, in which hobnails were recovered from 43% of intact adult graves (Clarke 1979, 180, table 28).

Only in 16 graves was it possible to be certain that the shoes were worn at the time of burial, although in a further 55 graves hobnails were located in close proximity to the feet, and it is likely that most, if not all, of these represent footwear that was worn. In the graves where footwear was worn at the time of burial it is difficult to be certain what, if any, significance these items had, as it is probable that the bodies had been buried clothed, and that the shoes were included merely as part of the individual's normal attire. Indeed, in such circumstances it is questionable whether the shoes should be considered to be grave goods at all, if these are to be defined as objects deliberately placed in the grave for some conscious reason, be it practical or symbolic. Of course, even if the dead were buried dressed in their 'normal' clothes it is still possible, and perhaps likely, that specific items of clothing were selected, and need not have represented their everyday wear.

Items of footwear that were definitely not worn had been placed in 40 burials, and clearly indicate that the provision of footwear formed a significant element of the funerary rites. These graves include one (1015) in which one or more items were placed beside the right leg of an individual who was buried wearing shoes, and two burials (Graves 277 and 570) in which additional shoes had been placed beside the coffins of individuals who had been buried with shoes which may have been worn. In 18 burials the unworn shoes had been placed inside the coffin, and in 16 instances they were outside the coffin. In two instances shoes were located so close to the edge of the coffin that it was not possible to be certain whether they were inside or outside, and unworn shoes were provided for three burials without coffins. They were generally placed in the vicinity of the legs; in graves where the shoes had been placed inside the coffin, they were under the feet or the lower part of the legs in four instances, on either side of the legs in two, and otherwise either beside the legs or at the foot of the coffin, while in the graves where they were outside the coffin they

were placed either at the foot of the grave or beside the part of the coffin where the legs were. Shoes were placed at the head end of the grave in only two burials (Graves 685 and 990). Two graves each contained a pair of shoes placed in different parts of the grave; in Grave 635 one shoe had been placed at the foot of the grave and one beside the left side of the coffin, and in Grave 1941 one shoe was located under the right leg and the other beside the left thigh. An unusual example was provided by Grave 590, which contained an adult male who, in addition to a pair of shoes placed beside the coffin, had been buried with a single hobnail held in his left hand and another placed on his chest.

Offerings in grave fills

Objects found in the fills of a number of graves may have been deliberately deposited during backfilling. The presence of these items may indicate that the funeral rites were not considered complete until the grave had been fully closed, and that rituals which on occasion included the deposition of artefacts continued during the backfilling. Alternatively, these objects may have been used during earlier parts of the ceremony, and were now consigned to the grave because their association with the funeral rites was believed to have rendered them unfit for use by the living (Lindsay (2000) has discussed in detail the concept of ritual pollution resulting from contact with death).

The best evidence for this practice was in the form of horse skulls that had been placed in the backfills of three burials, the most striking example being cremation burial 655, a *bustum* burial of an adult ?male in which the horse skull had been placed on the surface of the cremation deposit immediately prior to backfilling, with the lower part of a large jar inverted over the nose and a small jug placed beside it. These and other animal remains have been discussed above.

Coins were recovered from the fills of Graves 22, 1000 and 1491 and may also represent deliberate deposits (as eg Philpott 1991, 212). However, as in each case only a single coin was found, it is impossible to be certain whether they were placed during the funeral or were incorporated accidentally.

Clarke's excavations also identified numerous instances of objects within the grave fills that may have been deliberate deposits (Clarke 1979, 145-6 and table 15). The most compelling of these were the bones of a domestic fowl that appears to have been dismembered during backfilling and its remains scattered over the feet of the burial in grave 193, a cluster of bracelets, beads and pins placed in the fill of grave 100, the remains of three glass vessels in grave 398, and two pewter bowls from grave 408. Individual coins interpreted as deliberate deposits were recovered from the fills of graves 376 and 401, the former being a rare coin of Licinius II in particularly good condition. A variation on this practice was encountered in graves 329 and 451, in which disarticulated bones disturbed from earlier graves had been reburied, in each case accompanied by a pottery vessel. In the former instance a flagon had been placed next to the bones (originally from grave 328), and in grave 451 it was noted that the bones and a jar, originally from grave 447, lay in a particularly compact pile, as if they had been deposited in a sack (ibid., 91).

That the process of backfilling the grave was regarded as an integral part of the funeral rites should elicit no surprise. Classical sources, albeit of earlier date, emphasised that it was the covering of the body with earth that was considered to be the essential element of the funeral (Cicero, *De Legibus*, 2. 22. 55; Varro, *De Lingua Latina*, 5.23). An insistence on the completion of the backfilling forming part of the funeral would also be characteristic of the nature of Roman religious ceremonies, with their emphasis on correct recitation and performance.

Commemorating the dead

The closing of the grave did not necessarily mark the end of the obsequies. Classical writers recorded that it was customary for the family of the deceased to eat a funerary feast, the *silicernium*, at the grave-side and to return on the ninth day after the funeral for another meal, the *cena novendialis*, at which a libation was poured to the spirit of the deceased (Toynbee 1971, 50-1). Mourners also visited the grave on several other occasions throughout the year to commemorate the dead, both at public festivals, the most important of which was the *parentalia*, a festival of the dead lasting from February 13th to 21st, and for more private observances such as the birthday of the deceased (ibid., 50–54). These celebrations usually took the form of a meal eaten at the grave-side, a portion of which may have been set aside for the deceased and libations poured. It was not unusual for individuals to leave money in their wills to be spent on such commemorations (Hopkins 1983, 233). The sources that record this information were generally of an earlier date than the burials at Lankhills, were concerned primarily with the practices current among the upper echelons of Roman society, and were geographically biased toward Rome and Italy, but there is some evidence that such traditions were also imported into Britain. A number of tombstones bear reliefs that depict scenes of dining presumably intended to represent funerary or commemorative feasts, such as Tombstone 1 from London Road, Gloucester (Henig and Tomlin 2008, 116-7) and examples from York (Tufi 1983, 25-29, nos 40-43) and Chester (Henig 2004, 14-16; for the wider context see Stewart 2009). The pouring of offerings to the dead person, whether during such commemorations or on other occasions (eg Toynbee 1971, 52) is evidenced in Britain by graves excavated at Colchester and Caerleon that were constructed with holes or pipes through which food and drink could be physically poured down into the grave (Wheeler 1929; see also

Philpott 1991, 29). It is possible that the two complete imbrices found in the fill of Grave 256 (see Poole, Chapter 4 above) had been used to form an opening for this purpose, as seen for example at Chichester (Down and Rule 1971, 72), although they might also have served as a grave marker (for an imbrex fragment used as a marker at Butt Road, see Crummy and Crossan 1993, 102) or even as packing. At Lankhills, several deposits may be interpreted as offerings placed to commemorate the dead after the funeral. The pit dug into the fills of Grave 1110 may have been intended to facilitate the placing of such offerings, and Clarke (1979, 145-146, table 15) has suggested that the deposits recovered from the fills of graves 100, 398 and 408 from the 1967-72 excavations, discussed above, could have been buried in pits dug into the grave fills but not recognised during excavation. Offerings may also have been placed on the ground surface around the grave. Groups of pottery and coins were recorded around the mound sealing Clarke's grave 323, and similar objects may have been associated with other nearby graves. Unfortunately, due to the greater truncation of the area investigated by the OA excavations, the Roman ground surface did not survive here and so the potential for the discovery of such deposits was much less, but a New Forest ware jar was found in an inverted position within a layer of soil (1696) interpreted as being the mound over Grave 1622.

CREMATION BURIAL

The 25 cremation burials encountered in the OA excavation (Fig. 7.13) form a significant addition to the smaller group of seven such burials already identified from Lankhills (Clarke 1979, 128-130, 350-351). Their concentration in the north-western part of the excavated area emphasises the particular character of the spatial distribution of this rite. In addition to this location, a few cremation burials were located at or close to the original eastern boundary of the cemetery, with only two examples (Clarke's burials 26 and 60) lying in the main part of the cemetery west of this feature. Clarke (ibid., 129) did stress, however, that cremation burials of 'topsoil burial' type might not have survived across much of the site, and that numbers could therefore be underestimated (and distributions skewed). Nevertheless it may be noted that very little cremated human bone was recovered during the OA excavations except from the identified cremation burials and a very small number of other features (see Boston and Marquez-Grant, Chapter 5 above). This does not mean that truncation was not a problem, but the widespread occurrence of fragmentary cremated material that might have been expected if large-scale truncation had taken place was not identified.

The concentration of cremation burials in the north-western part of the cemetery (see Chapter 2) was not straightforward, however, as this activity seems to have occurred in two distinct stages. At least four cremation burials (1742, 1798, 1806 and 1904) were assigned to a stratigraphically early phase of activity in this area. All were un-urned, but Burials 1742 and 1806 incorporated the remains of animals burnt on the funeral pyre and Burials 1798 and 1806 both contained nails suggesting that footwear was also placed on the pyre, although in the latter case the nails were from a 'backfill' layer rather than the principal deposit containing cremated remains. With the possible exception of the absence of cremation urns there is nothing that distinguishes these burials from the main group of cremation burials found here and elsewhere on the site. Chronology is a slightly open question since so few of the pits which were stratigraphically linked with these early burials produced useful dating material. Pottery associated with two of the burials, however, included sherds in fabrics for which a 4th-century date is most likely. Burial 1904 also produced a radiocarbon date calibrated at 95% confidence to AD 84-254 and 308-312 (see Chapter 6). The majority of this range falls considerably earlier than the likely date of the burial, although the discrepancy is not so extreme as with Burial 1845, perhaps also to be assigned to the stratigraphically early cremation burial group, cremated bone from which produced a calibrated radiocarbon date (95% confidence) of 38 BC-AD 60, despite the presence of sherds of pottery in fabric SG which appears to be fairly consistently of 4th-century date. It is difficult on present evidence to resolve the problem presented by these apparently anomalous radiocarbon dates, and their significance remains uncertain, although it is perhaps worth considering the possibility that cremated remains of some antiquity were moved to the present site and redeposited as part of some rite of establishment of the cemetery.

It is not clear if cremation-related activity continued consistently in the north-western part of the site once the practice was established there. It was certainly maintained in this area in the later Roman period although, as already mentioned, occasional examples of the practice were encountered further south and, more particularly, adjacent to the original eastern boundary of the cemetery. A majority of these examples were dated after AD 350 (Clarke 1979, 129-130).

In total, just over half of the 25 OA cremations consisted of simple, apparently un-urned, depositions of cremated material, typically in small pits. Grave goods were rare, although evidence for items placed on the pyre was more consistently present. This consisted principally of animal remains, including most notably an example of a complete dog (in Burial 1845), and hobnails derived from footwear. The occurrence of a crossbow brooch and probable belt fittings as pyre goods in Burial 895 is also particularly noteworthy. It indicates, inter alia, that the cremation rite did not exclude members of the distinctive group of probable officials/military personnel (eg Reece 2007, 155-157) whose presence is reflected by these objects.
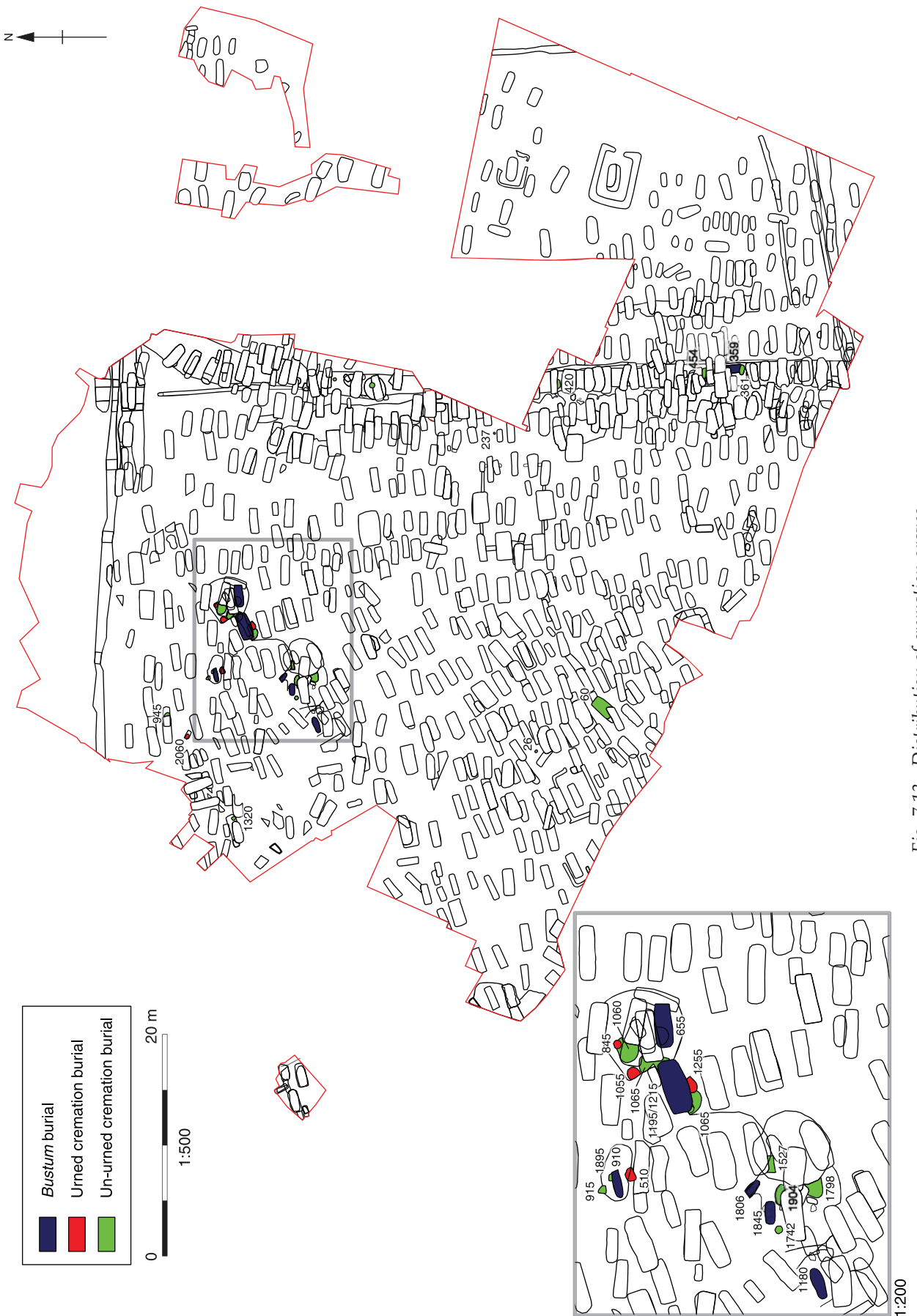
Fig. 7.13   Distribution of cremation graves

The other cremation burials included five urned burials and seven *bustum* burials. The urned burials were generally simple – indications of pyre debris among the associated burnt remains were slight, and only in Burial 510 was there additional material, a fragment of a flanged bowl, that might have been a grave good. This burial was later than an inhumation which contained a coin of AD 364-378, but the other urned cremation burials were not closely dated, either on the basis of stratigraphic associations (845 cut an earlier cremation 1060 which in turn cut inhumation Grave 970; 2060 cut inhumation Grave 445) or the urns themselves, which were only broadly dated to the 4th century.

The use of pottery in relation to the cremation burials is of some interest. Of the five cremation urns, three were in the local grog-tempered fabric SG and the other two were in New Forest grey ware. There was only a single fine ware ceramic grave good from a cremation burial, a fabric TR jug in Grave 655. This was associated with a horse skull, and the base of a very large jar in fabric SG (see above). The only other possible ceramic grave goods associated with cremation burials were also in fabric SG. A small jar in this fabric came from Burial 1180. Only part of this vessel survived so its status is slightly uncertain, but truncation of the grave (which only survived to a depth of 0.13 m) is as likely an explanation for the fragmentary nature of this jar as the suggestion that the sherds were simply redeposited in the backfill from elsewhere. A further vessel in fabric SG, a flanged bowl in Burial 510, may also have been a grave good, or possibly served as a cover for the cremation urn in that burial.

A further characteristic of the cremation-related pottery is the occurrence of three more fabric SG jars apparently as pyre goods, in Burials 1060, 1195 and 1215. Again, uncertainties about the degree of truncation of the burial deposits make interpretation of these vessels difficult (see Chapter 4 above), as it is impossible to say if they were originally deposited as complete, albeit fragmentary, vessels. These vessels have signs of cracking and differential discoloration of joining sherds. Some warping is also evident, but this does not seem as extreme as might be expected had the vessels been placed directly upon the pyre. It is perhaps as likely, therefore, that they were set closely adjacent to the pyre, rather than upon it. Such an action could be interpreted in two ways. It may simply have been the way in which all pots intended for inclusion as grave goods were treated. It may be, however, that the vessel placed beside the pyre was the intended container for the cremated remains, as has been suggested for some of the black-burnished ware jars at Brougham (Evans 2004, 358). Whether such placement represented an act of purification of the vessel, or simply emphasised the association between the cremation urn and the deceased, is unknown. Equally uncertain is the question of how the vessels were used if they became fractured as a result of

being placed too close to the pyre – were they still employed as containers of cremated remains, or were they placed in the grave anyway on the basis that this was their assigned place, whether or not they were still performing their originally intended function?

The association of cremation burials with vessels in fabric SG is thus very marked. That it should contrast markedly with the pattern seen in the inhumation burials is explained principally by the functional differences between the two assemblages, but the almost total absence of fine ware vessels as grave goods in the cremation burials is notable and suggests a very different emphasis in grave furnishing, underlining the potentially fundamental difference between cremation and inhumation burial traditions. Fine ware beaker sherds did occur in cremation burial deposits in reasonable numbers (see Table 4.5), but at levels comparable to those in the fills of pits and ditches, so it is perhaps most likely that they were redeposited. It is just possible, however, that beakers played a role in the cremation-based burial rite that did not, in contrast to the inhumation burials, culminate in their deposition as complete vessels within the grave.

Busta

Seven possible *busta* (655, 910, 1180, 1195, 1215, 1806 and 1845, summarised in Table 7.5) were identified in the OA Lankhills site, to add to the one (grave 359) identified by Clarke (1979, 129) and accepted by Struck (1993b, 82, 92) as being of this type. Identification of this burial type can be problematic, but the examples in question here can be regarded as '*Grubenbusta*', involving a pit beneath the cremation pyre, in Struck's terminology (ibid., 82). Clarke's grave 359 and most of the OA Lankhills examples showed evidence for *in situ* burning, with typical salmon-pink colour changes at least to the upper sides of the grave pits. The carbonised remains of tubers, low growing grassland weeds and molluscs also indicate burning of exposed soil in the sides of the pit rather than of uprooted material which could have been placed on a pyre in any location. The reducing atmosphere likely to result from the condition of burning within the pit rather than in an above-ground pyre structure would also help to explain the excellent preservation of tubers and small rootlets in some of the samples (Challinor, above Chapter 6).

In the four cases where the cremated bone was collected in a number of samples from the head to the foot of the grave (cf. Bel *et al.* 2008), *in situ* burial could be demonstrated. The bone usually appeared to lie upon a spread of charcoal, and charcoal and *in situ* nails (the latter probably in at least three examples) suggest that the pits were possibly wood-lined or, perhaps more likely, that they contained the remains of a wooden bier or coffin on/in which the corpse had rested above the pyre fuel, unless it was the case that the nails simply derived from

Table 7.5: Summary of evidence for bustum burials

				Grave			
Characteristic	655	910	1180	1195	1215	1806	1845
Length (m)	1.95	1.19	1.45	2.20	2.44	>0.80	1.00
Width (m)	0.73	0.39	0.55	0.60	1.14	0.40	0.40
Depth (m)	0.43	0.39	0.13	0.68	1.20	0.25	0.30
Burning of pit sides	Y	NR	NR	Y	NR	NR	Y
Significant deposit of charcoal at base	Y	?Y	Y	Y	Y	?Y	?Y
Quantity of human bone (g)	1641	1277	1567	1308	1156	1052	171
Max fragment size of human bone (mm)	82	65	42	95	70	70	33
Human bone distributed anatomically	Y	NR	Y	NR	NR	Y	Y
Sex	M?	F?	M?	?	M?	M	-
Age	Adult	36-45?	18-25	Adult	Adult	Adult	c 2
Nail patterns suggest coffin/bier	?N	-	?Y	?Y	-	?N	?Y
Pyre goods: artefacts	glass		buckle & plate;poss belt plate	coin AD 364-378; hobnails			
Pyre goods: animal	bird and cattle	sheep mandible /head	large and medium-sized mammal			bird bone, large and medium-sized mammal	dog and sheep
Grave goods	horse skull and 2 associated pots on surface of grave fill				bird bone in backfill?		jar in backfill - possibly incidental

NR - not recorded

structural timbers reused for the pyre. One certain and two possible cases of burnt wooden linings, the former involving nails hammered into the walls of the pit, were noted at Brougham, Cumbria and were tentatively linked with a process of burning of the pit for purification prior to the placement of deposits of cremated bone and other burnt and unburnt objects (Cool 2004, 465). There is no suggestion of comparable processes at Lankhills, however.

In terms of their form the Lankhills examples appear more straightforward than the Brougham burials. They are possibly problematic with regard to charcoal, because while significant quantities of charcoal would normally be expected to be recovered from the bases of *bustum* burials, only one of these burials (1806) produced enough charcoal to merit analysis, and this assemblage was still small and poorly preserved (Challinor above). It is clear from the site records, however, that significant quantities of charcoal were present in all these features, as indicated by the observations (above) about the relationship of the cremated bone to underlying charcoally deposits, but it seems that this material was typically very highly fragmented and that in most cases it was decided on site not to sample the deposits.

Despite this problem, there seems little doubt that the rite of cremation burial of *bustum*-type was practised in 4th-century Winchester. The quantities of cremated bone (see Table 5.55) recovered from these graves are certainly consistent with this inter-

pretation. The significance of the rite is less clear. Superficially it appears isolated in both geographical and chronological terms (eg Struck 1993b, 83), but this is less the case as a result of recent work, which has broadened the evidence base in both these respects as well as in relation to the types of site (essentially military sites and major towns) with which Struck (ibid.) considered the rite to be associated. Notable early Roman examples include those from the 'small town' cemetery at Pepper Hill, Springhead, Kent (Biddulph 2009).

The site at Bray, Berkshire, included in Struck's (1993b) survey, provides interesting parallels for the late Roman *bustum* burials at Lankhills, and, at a distance of roughly 65 km to the north-east, is physically the closest site with analogous, approximately contemporary burials. Excavated in 1969-1971 (Stanley 1972), the site has never been published, although various draft reports exist in Reading Museum, despite which many aspects remain unclear. Among other elements, however, a small group of burials comprised 12-14 inhumations (various numbers are given) and 7 cremations. The majority of burials were aligned roughly NW-SE, with a smaller number approximately perpendicular to these (NE-SW). Most of the burials described as cremations (labelled C1-C7) are features of comparable size to the inhumation graves and of rectangular or sub-rectangular form, although one large but less regular pit (C3) contained what appears to have been a standard

cremation burial placed in an Alice Holt grey ware jar of later 3rd- to 4th-century type. Photographs suggest that at least some of the features claimed as *busta* appear to have burnt edges, and a sample of burnt (adult) human bone from C2 includes large fragments (up to *c* 100 mm in length) of variably burnt bone very similar in character to some of the material from Lankhills. If this is representative (not all the human bone was seen) then there could have been as many as six burials of this type, interspersed with inhumation burials. Two of the cremation burials (C5 and C6) are described at one point in the draft report as being of infants, but this is not mentioned elsewhere and the graves in question were at least 1.2 m long and probably larger. While there are difficulties with the detailed chronology of the site and, as might be expected, very little material can be specifically linked with individual graves (although mortaria associated with one of the inhumations (Stanley 1972) appear to be standard late Oxfordshire white ware types), there is no particular reason to doubt a late Roman date. A very narrow date range of AD 325-350 is given in one account (Wilson 1971, 301), while the inhumations included examples that were thought to be both earlier, contemporary with and later than the *busta*. The reason for assigning five of the inhumations to a phase dated by Anglo-Saxon pottery is not clear. There is no obvious Roman or post-Roman material from these graves, so the question must remain open. On balance, the cemetery, which is unlikely to have been completely exposed, contained late Roman inhumations and perhaps as many as six *bustum* burials, likely to be of 4th-century date, plus a further cremation burial.

More recent excavation by Cotswold Archaeology at The Lea, Denham (Berkshire), some 15 km ENE of Bray, has revealed part of a mixed rite cemetery including inhumation and cremation burials and perhaps as many as 20 *busta*, mostly aligned NE-SW (Coleman *et al*. 2004; L Coleman pers. comm.). Dating evidence is limited, but one of the *busta* contained a miniature pottery vessel dated 'no earlier than the second quarter of the 3rd century' (Coleman *et al*. 2004, 16) and another produced pottery of mid 3rd- to 4th-century date, while one of the adjacent inhumation graves contained late 3rd- to 4th-century pottery. Rather further north, an isolated burial of this type has been recorded recently just west of Bedford. This comprised a rectangular pit with burnt sides; its lower fill contained abundant cremated human bone, charcoal and nearly one hundred nails. Two complete pottery vessels from the burial were a large, locally manufactured jar and a smaller Nene Valley beaker dated to the 4th century (Chapman *et al*. 2009, 247). A further isolated example of this rite, potentially of later Roman date, is known from adjacent to a small villa at Didcot, Oxfordshire (Cotswold Archaeology 2003, 28-29).

The wider significance of these burials remains uncertain, but the relative proximity of the examples at Bray and Denham could suggest the existence of a local/regional tradition. Whether the Lankhills examples can be seen as part of the same tradition is questionable, but the more or less contemporaneous juxtaposition of conventional inhumations, urned cremation burials and *busta* is seen at all three sites and suggests broad similarities of practice. Part of the interest of the Bray and Denham cemeteries lies in their rural location, which contrasts with the military and urban associations considered by Struck (1993b, 83) to be typical of burials of this type, albeit mainly in the early Roman period. The settlement context of Bray is uncertain, but there is nothing at Denham to suggest the presence of high status rural settlement in the immediate vicinity (Zeepvat and Radford 2006). Inference from this limited evidence is speculative. There is no particular reason to suppose that the rite in these contexts and at this time is an intrusive one, in contrast to the situation in the mid 1st century AD when it first appeared in Britain (Philpott 1991, 48; Struck (1993b, 84) considers the possibility of a pre-Roman origin in Britain, but this does not convince). Nevertheless, its apparently *de novo* re-emergence in the late Roman period is surprising and raises questions which cannot be answered on present evidence.

Apart from the *bustum* burials, the excavated remains provide a paradoxical picture in terms of the possible status of the cremated individuals, represented by small features containing simple assemblages of charcoal and burnt bone. In these burials the expenditure of resources was arguably on the process of cremation itself, in the provision of materials for the pyre and, in some cases at least, offerings upon it, and the (probably specialist) expertise involved in operating it, in contrast to the effort expended in inhumation, represented by the excavation of the grave and (sometimes) the placement of valuable items within it.

OTHER RITUAL ACTIVITY WITHIN THE CEMETERY

The area of the cemetery exposed within the OA excavation was notable for the number of pits revealed. Clusters of pits were located in the central part of the site and at the south-western corner, and individual examples were found elsewhere. The digging of these features appears to have been a significant, if occasional, activity within the cemetery. Indeed, it is possible that the digging of the pits in the central part of the site was a particularly significant act, as the area thus defined was subsequently used for two unusual groups of burials, comprising a group of cremation burials dating from the early part of the 4th century and a dense cluster of burials dating from the later part of the use of the cemetery that included further cremation burials and three prone burials, as well as more conventional inhumation burials. The consistency of the spatial correspondence between the pits and

these later burials was too exact to be a coincidence. Pit 847 was dug into the backfill of Grave 1110, which formed part of this cluster of later burials. A substantial pit (1671) was also dug into the silting of ditch 450/F.12. This pit, like the group of pits in the central part of the site, had subsequently been used as the location for one of the latest group of burials (Grave 1175), and it is tempting to see this association as deliberate. None of these pits contained artefactual evidence regarding their function, however, the only finds being a few items such as small quantities of undistinctive pottery that appear to have been incorporated into their fills incidentally.

The digging of these pits within the cemetery was clearly not done accidentally, and may be associated with a distinctly Romano-British practice of ritual activity involving wells and shafts that Webster (1997) has argued resulted from the syncretism of an existing native practice of propitiatory rites associated with storage pits and other subterranean locations (Cunliffe 1992) with a Graeco-Roman tradition of chthonic ritual. The use of such features as a means for communicating with the underworld is well attested in the Graeco-Roman world. It is possible that at least part of the population of Britain was familiar with such practices. The pits at Lankhills may have been receptacles for libations or other offerings involved either in attempts to communicate with the dead or with chthonic rituals intended to harness their power (see also Ross 1968; Luck 1985).

Offerings were also made to the dead on specific occasions, and the apparently deliberate association of pit 847 with Grave 1110 (see above) may be an example of this practice. This grave contained no evidence for a body and may have been a cenotaph. It is therefore possible that special care in delivering offerings was deemed necessary because of the absence of the body.

Two other possible votive pits have been recorded within Winchester's northern cemetery at Victoria Road West (Browne *et al*. forthcoming). These pits were grave-like in form and contained assemblages of four and five pots but no human remains. These assemblages were considerably larger than those accompanying burials, none of which contained more than one vessel, and were interpreted as ritual deposits. Beyond Winchester, features have been identified at the Wotton cemetery, Gloucester (Simmonds *et al*. 2008, 137-8) and the cemetery accompanying the fort and *vicus* at Brougham, Cumbria (Cool 2004, 457-460) that may have been ritual rather than strictly funerary in nature. Similarly, an apparently structured deposit comprising a complete heron skeleton, remains of more than 80 frogs or toads, a number of shrews and voles and two broken but complete flagons was recorded in a pit within a cemetery at Clare Street, London (Merrifield 1987, 36). An East London cemetery pit containing remains of a horse, a dog and a deer (Barber and Bowsher 2000, 19-20) has been discussed above. Other features at

Verulamium, both at Folly Lane (Niblett 1999) and St Stephens, also contain deposits of funerary material. The lack of finds from the Lankhills pits makes it uncertain how far they should be seen as comparable in character to those discussed here, but their close association with other cemetery features suggests that they were related in some way.

Changes in funerary rites

Although the burials that have been excavated at Lankhills probably took place over only a few generations, the rites conducted here were not static, but evolved, at times very quickly. If we are to use the evidence from the cemetery to better understand the community that used it, and the population of Roman Winchester and Roman Britain more generally, it is important that we appreciate its essentially dynamic nature. The funerary rites of this community were not an ahistorical constant, but were reworked in sympathy with the changes and stresses affecting the population during this turbulent and eventful century. The chronological dimension of these practices must be central to any narrative of the cemetery and its community.

There are, however, certain caveats that must be acknowledged in discussing the development of the funerary practices. Most of the observable changes relate to changes in the provision of grave goods, which inevitably results in a very partial interpretation, since it excludes the majority of the burials. Almost half of the burials did not contain grave goods, and this rises to nearly two thirds if those containing only items of footwear are excluded, and in the absence of stratigraphic relationships with independently dated burials the majority of these graves are inherently undatable. Their place within any chronological trajectory of the cemetery therefore cannot be assessed, and any changes over time in the prevalence of unfurnished burials remain undetectable. Although we may study changes in the practices that are archaeologically visible, the predominance of this silent majority of unfurnished burials should not be forgotten. Their weight of numbers demonstrates that they are likely to have represented the most common form of burial throughout the use of the cemetery, as they are at most cemeteries of the time (and, indeed, overwhelmingly so in many cases), and we should exercise caution in favouring the more 'interesting' furnished burials over them in our interpretations simply because those graves appear to offer more comprehensible information. Nevertheless, the changing pattern in the provision of grave goods is a genuine phenomenon and can make a significant contribution to understanding the rites practised here.

When burial started at Lankhills (see above), the prevailing late Romano-British inhumation rite, comprising burial in an individual grave, usually with the body placed in a supine position and often in a coffin, had already been securely established.

These basic elements of the burial rite did not change throughout the use of the cemetery. Of the 28 burials within the area of the OA excavations that could be attributed on the basis of associated coins or pottery to the early part of the use of the cemetery, before *c* AD 350, a total of 26 (92.9%) had been placed in coffins represented by iron nails. This is significantly higher than the proportion of coffined burials recorded for the cemetery as a whole, but of course relates only to graves containing datable grave goods. It is possible that this indicates no more than that grave goods and footwear were more frequently placed with burials contained in coffins, rather than necessarily implying that coffins were more common during the first half of the century. The results of Clarke's excavations, however, suggested that the provision of coffins was almost universal during this early period (1979, 143). Items of footwear were also commonly provided, being recorded in 14 (50%) of the burials attributed to this period, but of course the same caveats apply to these items also.

Apart from footwear, coins and pottery were the only grave goods that appear to have been placed with burials with any frequency during the early part of the use of the cemetery, although the number of graves thus equipped was small, and it is likely that the majority of the population went to the grave without grave goods. Coins issued before AD 350 had been placed in a total of ten graves from the OA excavations and 11 graves within the area of Clarke's excavations, and pottery dating from the same period was found in 28 burials excavated by OA and 30 by Clarke. Five graves from the OA excavations and two from Clarke's excavations contained both pottery and coins. The results of Clarke's excavations had appeared to indicate that the placing of coins was largely a phenomenon of the later part of the century (1979, 167), but in the OA excavations issues of the early part of the period were equally common. As at Lankhills, pottery was the most common grave good at Chester Road and Oram's Arbour, the two other cemeteries at Winchester that are believed to have been in use during the first half of the century. At those sites, however, graves provided with vessels were far less common than was the case at Lankhills: pots had been placed with only three of the 121 burials excavated at Chester Road and two of the 62 at Oram's Arbour (Ottaway and Rees forthcoming). Clearly, these items were placed with the burials of only a very small proportion of the population, but the graves of those individuals appear to have been concentrated at Lankhills.

Although other grave goods were rare during this period, a few were recorded. The adolescent in Grave 545 was buried with three bronze hairpins in her hair, the remains of a domestic fowl were placed at the head of the burial of the unsexed adult in Grave 870, and an adult female with a neonate, perhaps mother and child, were interred with the bone plaque in Grave 620. It was also during this period that a horse skull, lacking its mandible and therefore probably already defleshed, was placed over the burial of a neonate in Grave 1547. Among the graves excavated during Clarke's excavations that contained coins or pottery indicating a date during the first half of the century, the richest was grave 188, in which the remains of a child aged 4-7 years had been accompanied by a flagon, four bronze bracelets, two bronze rings and a bead necklace. Beads had also been placed in grave 199, and there was a bronze ring in grave 362, while animal bones occurred in three graves: a sheep/goat rib placed under a flagon in grave 47, and domestic fowl placed in graves 150 and 212.

During the second half of the 4th century radical changes took place in the assemblages of grave goods being placed with the dead at Lankhills. Whereas the range of objects that had been placed with burials during the early part of the century had been rather restricted, a much wider variety of types was included in burials from the middle of the century onward. This conclusion rather contradicts the findings of Clarke's excavations, which indicated that burials with grave goods became less common from the middle third of the 4th century onward (Clarke 1979, 371), but it is possible that some graves were dated too early in that report. Some of the diagnostic artefacts were attributed somewhat earlier dates than is now considered likely, although some of the artefact chronologies remain subject to debate, and it is also arguable that the dates assigned to some of the graves on the basis of the scoring of the vertical stratigraphy (ibid., 120-122) were rather more precise than the evidence would support.

The range of objects placed with burials during the later part of the 4th century included spindle whorls, combs and, in one instance, a loom weight placed with the burials of adult females, and items of jewellery including bracelets, necklaces and finger rings that were buried with females of all ages, while some adult males were buried wearing or accompanied by belts, brooches and knives. Many of these were items associated with the status, identity or role of the individual, and it would appear that, at least for some part of the community, the selection of grave goods was increasingly becoming a means by which mourners could express the social identity of the deceased (see 'Status and social identity' below).

At the same time as the range of grave goods placed with the dead was expanding, the deposition of pottery, formerly the most common type of grave good, became less fashionable, and vessels dating specifically from the middle or later part of the century were recovered from only nine graves (see Chapter 4). A similar decline had been observed during Clarke's excavations (1979, 371). The provision of coffins and footwear may also have become less common. The proportion of burials containing nailed footwear after *c* AD 350 fell to little over 30%, less than two thirds of the frequency with which

shoes were placed during the early part of the century. In the case of coffins, the initial reduction may not have been very significant. Some 82.9% of burials that contained grave goods indicating a date between *c* AD 350 and AD 388 had been placed in coffins, although as with the earlier period it is possible that coffins were less common in contemporary burials that lacked grave goods, and which consequently cannot be assigned a close date. However, there may have been a sharp decline in the proportion of burials provided with coffins near the end of the century. Clarke (1979, 143, 353-4) suggested that as few as half the burials interred after *c* AD 390 were placed in a coffin, and of the four burials certainly of this date recorded in the OA excavations, only two were coffined. Coins continued to be deposited more or less as regularly as during the early part of the century, although the locations in which they were placed within the grave became more circumscribed, with coins now mostly in the mouth or hand of the deceased.

The 'new' object types found in the later 4th-century graves need not have been introduced into the cemetery at precisely the same time, although they clearly came into use here over a period of only a few decades. The placing of an initially more limited range of artefacts was seen as legitimising the practice, leading to an expansion in the variety of items considered to be acceptable. Spindle whorls, placed predominantly with the burials of adult females, may have been among the earliest items to be introduced, as they appear to have come into use during the 340s (Cool Chapter 4, this volume), and one from the OA excavations had been placed in a grave (1705) that contained a coin dated AD 330-48. The deposition of bone bracelets may have started only a little later, but the combs are likely to date from no earlier than the final third of the century, and some of the bead types from the necklaces similarly indicate a date toward the end of the century (Cool Chapter 4 above). There is a hint that, in addition to possibly having started before that of most of the other types of artefact, the deposition of spindle whorls may also have petered out before the cemetery ceased to be used, since none of the instances from either excavation was associated with coins of the House of Theodosius, and only one spindle whorl was recovered from a grave located in the area of Clarke's excavations to the east of ditch 450/F.12, where the later burials were concentrated.

The results of Clarke's excavations suggested that there was a general decline in the standard of burials toward the end of the use of the cemetery, particularly after *c* AD 390: graves were shallower, with less care taken in squaring the corners and straightening the sides, coffins were provided more rarely, and the orientation of graves became less consistent (Clarke 1979, 144). The OA excavations were able to add little to these conclusions, as insufficient graves of very late date were found within this area.

A group of three burials located in the north-western corner of the excavation appeared to represent the adoption of a distinct set of funerary practices toward the end of the use of the cemetery. Graves 1373, 1440 and 1760 were sufficiently similar to each other, and sufficiently different from the other burials, that they appeared to form a coherent group. The burials, of two adults and a child aged 4-7 years, were located close together. The two adult graves (1373, 1440), which lay side-by-side, were aligned north-south, at right angles to the prevailing orientation, and had been dug through a number of earlier, west-east aligned graves. The grave of the child, located close by, was oriented west-east, and formed part of a row of four very closely spaced burials, the only such row identified in this area of the OA excavations. These factors alone suggest that the graves did not form part of the overall distribution of burials, but they were also distinguished by the consistency of their grave good assemblages. Each of the three had been provided with vessels of both pottery and glass and one or more coins, and there appears to have been some standardisation regarding the locations in which the vessels had been placed. In the adult burials the vessels had been placed on either side of the head. In Grave 1373 the pottery vessel, a New Forest ware colour-coated jug, had been placed to the left of the head and the glass vessel, a small conical beaker, to the right, and in Grave 1440 these locations were reversed, with the glass vessel, a hemispherical cup, on the left side and the pot, a New Forest ware colour-coated beaker, on the right. The vessels in Grave 1760, comprising a New Forest ware colour-coated beaker and a glass *tettine*, were not placed on either side of the head, but they were still located at this end of the grave, to the right of the head, where the other grave goods, comprising a coin, a studded belt and a knife, were also placed. Burials 1373 and 1440 were also unusual in having the largest groups of coins among the graves from the OA excavations, comprising seven and five coins respectively. Burial 1440 was the only one of these graves to contain a coffin, and none of the individuals possessed nailed footwear. It is uncertain, however, if these graves represent the burials of an intrusive group within the population of Winchester (see further below).

As well as contrasting with the practices seen at Lankhills during the first half of the century, these new patterns of deposition were also different from those in contemporary burials at the other cemeteries around Winchester, or indeed in known cemeteries elsewhere in Britain, which appear to have continued relatively unchanged from the earlier period. This is not to say that the objects themselves were unique to the cemetery at Lankhills. Combs, for example, had been placed in contemporary burials elsewhere at Winchester, with three recorded at Victoria Road West as well as individual instances at Andover Road and Hyde Street and one at St Martin's Close in the eastern

cemetery; jewellery was represented by bracelets from graves at Victoria Road West and Chester Road and hair pins from burials at Andover Road and St Martin's Close, and a knife had been placed with a burial at Victoria Road West (Ottaway and Rees forthcoming). Although some types of artefact, such as crossbow brooches, belt equipment and spindle whorls, have not been found in graves at Winchester except at Lankhills, they have been recorded as grave goods elsewhere in Britain (Cool Chapter 4, this volume; Philpott 1991). It would appear, however, that such items were placed in burials at Lankhills more frequently than was the case elsewhere, or, perhaps more pertinently, that individuals who were buried with such accoutrements were more likely to be buried at Lankhills than at any of the city's other cemeteries.

PEOPLE

Physical remains

The primary source of evidence for the people of Lankhills is the skeletal material itself, discussed in detail in Chapter 5 above. Some 284 individuals were represented by the inhumed remains, with redeposited 'charnel' material accounting for an uncertain number of additional individuals (see further below). A further 29 groups of cremated human bone (only 25 of which were from features characterised as cremation graves) comprised the partial remains of 16 adults, 10 adults or older adolescents and one infant, while the remaining two groups were too small to allow characterisation of the individuals represented; the adults included two certain and five probable males and four probable females. The remainder of the following discussion concentrates on the inhumed remains, however, unless specified otherwise.

The 284 individuals consisted of 215 adults and 69 subadults. The latter group included 7 neonates and 23 infants (aged 3 years or less), although it is possible that some of the individuals in the otherwise undefined 'child' group were also of this younger age. It is clear, notwithstanding the occurrence of neonatal bones among the redeposited material in eleven graves, that this group is underrepresented in the cemetery population, and particularly in terms of formal or semi-formal burial. This is a well-known characteristic of late Roman cemeteries in Britain and elsewhere and is usually interpreted in terms of the legal status of neonates, which were often buried in settlement contexts quite separate from formal cemetery locations (see eg Dasen 2009). Conversely, however, the presence of even small numbers of neonates and infants has been used to identify late Romano-British cemeteries as potentially Christian in character (eg Watts 1989).

The sexed individuals were exactly even in number, 94 males and 94 females, allowing for the inclusion of 'probable' males and females and also

of one male and four female adolescents assigned to sex. Issues of sexing have been discussed above (Clough and Boyle, Chapter 5). Inequality in the balance of the sexes has often been noted in relation to Romano-British cemeteries, particularly of urban character. In some cases the nature of a part of the urban population may explain such imbalances, but in other cases the reasons for it are less clear, despite attempts at interpretation (eg Davison 2000). For Lankhills, however, the present results are comparable with those arrived at by Gowland (2002) in her reassessment of Clarke's assemblage. The extent to which recorded differences in the ratio of the sexes reflect genuine differences in the nature of urban populations or recognised methodological problems (Weiss 1972; see also Davison 2000, 234) remains uncertain.

Assessment of age, also potentially problematic, has again been discussed in detail above. A feature of the population, however, was the relatively high proportion (almost 30% of the total population assigned to a specific age category) assigned to the 'older' (ie over 45) and 'much older' (over 60) categories. These figures suggest that at least some of the population enjoyed reasonable health, and this is borne out by other aspects of the osteological record. In terms of stature, the mean heights of Lankhills adults (1.69 m for males and 1.57 m for females) were close to the Romano-British means (1.69 m and 1.59 m respectively) noted by Roberts and Cox (2003, 163). As noted in Chapter 5 above, in certain aspects some of the female skeletons were notably gracile, and this, combined with the mean height slightly below the Romano-British mean may indicate a distinctive characteristic of at least some of the Lankhills women. Gowland (2007, 59) has made a comparable observation with relation to the women from Clarke's excavations and from Victoria Road, and interestingly contrasts them with the contemporary upper Thames Valley sample used in her study, suggesting that the differences should be seen in terms of local environmental factors.

Low levels of trauma and disease were recorded among the Lankhills population, and congenital defects were particularly scarce. Deficiency-related conditions such as rickets (five probable instances), scurvy (five possible instances), cribra orbitalia and dental enamel hypoplasia (DEH) were identified but were not particularly common. Scurvy, however, is not commonly reported in Romano-British populations, although its diagnosis in five subadults here is regarded as tentative, as it was in an additional case, in cremation Grave 1180. Cribra orbitalia and DEH were more common in females than males, but infection, fractures and arthritis were more common in males, suggesting that females were more prone to childhood illness and, in the case of adolescents with cribra orbitalia and DEH, perhaps more likely to die at this time (although these conditions are indicators of illness and emphatically not of cause of death), but less likely to develop physical deformities as adults.

Joint disease, spinal disease and fractures were more common in males and probably reflect a range of more physically strenuous activities undertaken by them. Joint disease levels were nevertheless low in relation to the recorded Romano-British average, particularly considering the relatively large proportion of the population in the older age ranges. Extraspinal osteoarthritis, found in 24 individuals, was most commonly encountered in the hand and elbow, with just four cases involving hip joints and two involving the knee. All the individuals involved were probably over the age of 30 and 15 of the 24 were aged 45+. It is not possible to say, of course, whether these observations reflect principally the range of occupations in which the people were involved, or more general consequences of reasonable living conditions, but while males were probably engaged in strenuous physical activity to a greater extent than females there is little indication that such activity was routinely experienced by a significant proportion of the population. Further indication of reasonable living conditions is provided by the relative lack of evidence for specific infections that can be associated with crowded conditions. These included a single possible case of tuberculosis. Sinusitis was significantly more common than represented in national figures (Roberts and Cox 2003, 112), with a crude prevalence rate of 9.2%, but this is because it was studied specifically (see Chapter 5 above) and there is no reason to believe that it was in fact more common here than elsewhere in Roman Britain.

Dental health at Lankhills was also considered to have been a little better than average in relation to contemporary assemblages (Clough and Boyle, Chapter 5 above) and can again be seen as a reflection of generally good levels of wider health. Dental disease is also specifically an indicator of diet, higher rates of disease resulting from a combination of poor dental hygiene with carbohydrate based diets and particularly the consumption of sucrose (eg Roberts and Cox 2003, 134-5 for some Romano-British data). The carbon and nitrogen isotope data do not provide specific information about the details of diet, but they indicate 'ready access to multiple sources of animal protein, including, for some people at least, small amounts of marine fish' (Cummings and Hedges, Chapter 5 above). Although it is not directly demonstrable, the likely corollary of this is that for many people the diet was fairly balanced and at an adequate level, a conclusion consistent with the osteological evidence. The meat component in the diet of the people of Roman Winchester has now been discussed by Maltby (2010) and in relation to fish it was concluded that, while present, the level of consumption was relatively low (Bullock 2010, 243). One possible indicator of a rich diet is Diffuse Idiopathic Skeletal Hyperostosis (DISH), the specific cause of which is unknown, but may be associated with obesity and Type 2 diabetes (Rogers and Waldron 1995, 48). Three individuals at Lankhills were affected, and of

the two that it was possible to analyse for carbon and nitrogen isotopes both had enriched values compared to those of the majority of the population, consistent with (but not absolutely conclusive of) a favoured dietary status. The graves of these individuals provide no particular clues to other aspects of their status, though the individual in Grave 1310 was one of the possessors of a 'fancy' knife (see above).

A few examples of congenital abnormalities were observed, but most of these would have had no obvious health-related impact on the individual concerned, or on their physical appearance to others. One exception to this, however, was a case of scaphocephaly, recorded in Grave 1070. This condition, which creates an abnormally long and narrow skull which may have looked slightly odd, affected a child of about five years of age, presumably female as she was buried with two bracelets and a silver ring. The burial, however, was uncoffined and prone, the latter characteristic perhaps related to the 'otherness' of the child perceived on the basis of her skull shape. The suggestion that physical difference or abnormality might result in different treatment in the grave is supported by the case of skeleton 861 in Grave 950. This was of a much older male, perhaps in excess of 60 years of age, who had suffered multiple injuries. On the basis of the skeletal remains, however, the most obvious would have been the fracture of his right elbow, which had resulted in complete fusion of the joint at an angle of approximately 100-110 degrees with the lower arm pronated. Like the child in Grave 1070 this man had been buried prone and without a coffin. The question remains open, however, whether this burial rite was simply a consequence of the man's physical appearance or whether it resulted from other characteristics (eg of personality or status) which may or may not have been related to that appearance.

Origins and ethnic identity

Questions of origins and identity, not often considered in relation to Romano-British cemeteries before Clarke's work, were brought to the fore by his analysis of the graves excavated in 1967-72, one of the most notable conclusions of which was the identification of two groups of burials interpreted as being those of intrusive elements within the population. Specifically these were a group of 16 individuals thought to have links to Pannonia, the area of modern Hungary, and a group of six Anglo-Saxon settlers (Clarke 1979, 174-5 and 377-403). These burials, particularly the former group, have featured widely in the literature of the late Roman period in Britain, and were seen by Clarke (ibid., 386-9) potentially as members of an official rather than a necessarily military community, while they have also been interpreted as the graves of comitatensian or federate troops and their dependants, a material manifestation of the barbarinisa-

tion of the Roman military indicated by the literary and other evidence (Esmonde Cleary 1989, 55; Mattingly 2006, 346; Millett 1990, 216; cf Elton 1996, 136-145).

The 'Pannonian' group were characterised by what was considered to be a consistent and distinct set of burial rites, defined by the range of grave goods and the locations in which they were placed within the grave, that set them apart from the rest of the burials within the cemetery, and their origin was sought through a comparison of these rites with known burial practices recorded elsewhere within the Roman Empire and surrounding territories. The specific criteria by which these burials were defined (Clarke 1979, 377) were:

- an abundant provision of different categories of object;

- consistency in what was provided and where it was placed within the grave;

- personal ornaments that were worn rather than placed with the burial, comprising a brooch and belt set for males and bead necklaces and bracelets for females;

- offerings placed beside the right foot, most often a single pot for males and two for females;

- coins placed other than in the mouth;

- equipment often provided, in the form of a knife for males and a spindle whorl or comb for females; and

- absence of hobnails.

The second group, which Clarke (ibid., 390) acknowledged was rather more heterogeneous, was identified largely on the basis of contrasts with the rites practiced in the rest of the cemetery rather than any internal consistency. These burials were described as having been well-provisioned with grave goods, particularly personal ornaments and coins placed in locations other than the mouth, but, with two exceptions, were not buried with pots (ibid.). They were interpreted as Anglo-Saxons on the basis of perceived affinities in the artefacts and burial rites with those of demonstrably Anglo-Saxon burials recorded elsewhere.

The criteria by which these groups were defined represent very much a composite model derived from the characteristics of the various burials, and in actuality a number of the individual graves differ in detail from this ideal arrangement. This is particularly the case with the supposed Pannonians, with their more detailed and more prescriptive list of characteristics, and Baldwin (1985) used this to argue that they did not form such a coherent groups as Clarke suggested. In particular, Baldwin pointed out that supposedly diagnostic artefacts were absent from some burials, that the locations of grave goods were more variable than Clarke had allowed, and that where there was consistency in the place-

ment of objects the precise nature of these objects varied. He also argued that the grave goods placed in these burials were British in origin, and that traits that had been regarded by Clarke as indicative of a foreign origin were also to be found in graves that had been interpreted as being those of locals. Similarly, Baldwin considered that the burials interpreted as being of Anglo-Saxons were too varied to be defined as a coherent group with a common origin, and that the parallels from which their ethnicity had been identified were not valid. Although Baldwin accepted that some of the 'Pannonian' burials were unusual insofar as they had been provided with more elaborate grave goods than the majority of the burials in the cemetery, he suggested that they fell within the normal diverse range of burial rites found in Romano-British cemeteries and need not represent a non-native enclave within the population. More recent commentators have not necessarily accepted all of Baldwin's reservations, and broad support for a connection of the larger intrusive group with the Danube area has come from Cooke (1998) and Swift (2000a).

Recent developments in isotope analysis offer the possibility of a new approach to the question of individual origins completely independent of artefact-based analyses. Unsurprisingly, Lankhills was one of the first Romano-British cemetery sites to be examined in this way, in an analysis of strontium and oxygen isotopes centring on a sample of the putatively Pannonian burials (Evans *et al.* 2006). Analysis of nine individuals from this group concluded that they were from a variety of geological areas. Four of the nine were found to fall within the isotope ranges predicted for the native, British population; one had an oxygen value within the range of British values and a strontium signature too high for someone raised in an area of chalk geology, but consistent with values in much of Britain and parts of western Europe; and only four were definitely non-British in origin, three of whom produced $^{87}Sr/^{86}Sr$ values 'within a range predicted for central southern Europe' and one potentially likely to originate from Hungary (ibid., 270). Interestingly, two individuals from a control sample of nine individuals interpreted on the basis of their funeral rites as being local in origin proved to have very depleted oxygen isotope concentrations suggested as indicative of Continental origin (ibid.).

Such diverse origins are clearly not consistent with the identification of these burials as being those of a single, coherent group, intrusive or otherwise. Further isotopic investigation of the Lankhills population, aimed at characterisation of both 'locals' and possible members of intrusive burial groups, was one of the research aims of the OA investigation. To this end, an analysis was carried out to identify burials exhibiting the diagnostic features of intrusive rites described by Clarke, and these individuals were included within a more wide-ranging programme of analysis of strontium

and oxygen isotope concentrations from burials from the excavation (see Chapter 5 (Chenery *et al*.); Eckardt *et al*. 2009).

In the event it proved difficult to identify individual burials from the OA excavations that conformed in detail with Clarke's criteria for intrusive burials. Three individuals satisfied the criterion of having been buried with belts and brooches that were both definitely or possibly worn rather than placed with the body (Graves 1075, 1925 and 3030), which Clarke seems to have treated as an absolute requirement for inclusion of male burials in his Pannonian group, but these burials generally met few of the other criteria. A fourth burial, and the only one in this group that could be described as abundantly provisioned, was that in Grave 1846, which had been provided with a gilded copper alloy crossbow brooch and a belt with a gilded silver buckle and strap end, and a pair of bronze spurs, but of these items only the crossbow brooch was probably worn rather than placed with the body. Burial 3030, which had a knife and ring, was the only other burial from this group with grave goods other than the belt and brooch. These were perhaps the two graves that most closely conformed to Clarke's criteria for consideration as Pannonians, and it is thus particularly unfortunate that neither could be included in the programme of isotope analysis as neither had teeth surviving. Burial 1075 also lacked teeth. The absence of grave goods other than a belt and brooch, however, suggested that this burial and Grave 1925 did not conform with Clarke's criteria.

In addition to these burials, Grave 745 had also been provided with a belt set and brooch, but they were not worn, having been placed at the foot of the grave along with a pot and a second belt. Despite lacking a brooch, the individual in Grave 1921 may have been a candidate for inclusion in this group as he was buried wearing a belt, represented by a buckle and a strap end, and also had a knife at the waist. Burial 1175 was very similar, although the belt was represented only by a buckle and had been displaced, lying on the left thigh rather than at the waist. Three other burials (930, 1310 and 1805) were also equipped with knives, but none had personal ornaments or any other grave goods, apart from three coins placed near the skull of the individual in Grave 1805. Samples from the skeletons in Graves 930 and 1310 yielded isotope ranges that indicated that both were likely to have been raised in the Winchester area, whereas the individual in Grave 1175 was unique among the OA sample in producing an isotopic signature potentially compatible with a Pannonian origin.

The female 'Pannonian' burials identified by Clarke were all characterised by bracelets and necklaces that were worn, but in the majority of burials from the OA excavation furnished with such items these were placed in a separate pile, which Clarke regarded as a native practice, and so did not satisfy his requirements for consideration as intrusive. Only three burials (in Graves 18, 1070 and 1866) had bracelets that were worn, and these additionally fitted Clarke's description in being mostly worn on the left arm, although none of them also had necklaces. Burial 18 was also accompanied by a pot, although it was placed by the left foot rather than the right. The individual in Grave 1070 had been buried in a prone position, which Clarke described as a native rite. The isotope ranges obtained for both this individual and the one in Grave 1866 were indicative of a local origin. Clarke described the provision of equipment in the form of spindle whorls or combs as also being characteristic of female members of his Pannonian group. Five burials were recorded accompanied by each of these objects, although hobnailed footwear, the use of which Clarke regarded as a native custom, was worn in three of the burials with combs and two of those with spindle whorls. One individual buried with a comb (Grave 1355) was included in the programme of isotope analysis, and was demonstrated to be of native origin.

Grave 99, containing a female aged 18-25 years, satisfied Clarke's criterion of burial with a pot placed beside the right foot, but lacked other grave goods. The oxygen isotope signature from this individual was too high to be consistent with an origin in either Britain or Pannonia.

Perhaps the most coherent group of graves in terms of the identification of potentially intrusive burials was represented by Graves 1373, 1440 and 1760, located together near the north-western corner of the excavation and discussed above. The only one of Clarke's criteria for 'Pannonian' identity that they did not satisfy was his emphasis on objects placed by the right foot. Unfortunately, it was not possible to include either of the adult burials in the programme of oxygen and strontium isotope analysis owing to their poor preservation, lacking the necessary teeth, but a sample from the child in Grave 1760 was submitted for analysis and produced isotope ranges consistent with a local origin. It is interesting to note that the combination of a pottery vessel and a glass vessel found in these burials was also a characteristic of four of the 16 burials from Clarke's excavations that were interpreted as having Pannonian origins (graves 63, 333, 351, 396). Three of these burials were included in the earlier programme of isotope analysis undertaken by Evans *et al*. (2006a), and produced rather diverse results, with two (63, 333) having isotope ranges indicative of a local origin and one (351) being potentially attributable to southern central Europe (ibid., 270). The evidence from the two programmes of isotope analysis does not therefore provide direct support for the suggestion that Graves 1373, 1440 and 1760 represent the burials of an intrusive element within the population of late 4th-century Winchester. Although the selection and placing of grave goods in these burials are quite distinct from those of the majority of burials, the most striking aspect is the consistency between the graves rather

than the burial rites themselves, each element of which has parallels with other graves within the cemetery. These may therefore be seen as the burials of a small part of the community, perhaps even a single family, which had adopted a very particular, peculiarly standardised set of burial rites. Alternatively, however, in the absence of isotopic data for the two adults, it could be suggested that this group comprised first generation incomers and a second generation, locally born child buried in line with parental practice. Leaving as unresolved the question of where the adults might have originated, this possibility, however remote, raises the wider issue of the retention of 'intrusive' burial rites in successive generations of people with family origins outside Britain but inevitably exhibiting local isotopic signatures by virtue of birth within Britain. This trend was recognised by Clarke (1979, 360) in terms of departure from the idealised combination of grave good types and locations and seen as a process of assimilation that lasted some three generations. The isotope data do not allow identification of such a process, and it remains uncertain, at best, that the artefactual evidence can be used in such a way. That such developments could and did occur within this cemetery population, however, is entirely plausible. What the isotopic evidence suggests is that incomers were probably drawn from a much wider area than could have been anticipated on any other evidence.

It was difficult to identify examples of Clarke's possible 'Anglo-Saxon' group among the burials from the OA excavations owing to the somewhat heterogeneous character of the original examples. Perhaps the only candidate was the burial in Grave 1760, since the provision of a range of grave goods and their location to the right of the skull and upper body were unusual compared to the majority of the burials. This burial had some parallels with that of the putatively Anglo-Saxon individual in grave 283 from Clarke's excavations, which also had a group of finds placed beside the skull and upper body, in this instance comprising a belt, a buckle-loop and a knife handle, as well as two coins beneath the skull, a knife on the right arm and a whetstone near the right hip. As mentioned above, however, this individual was isotopically local.

The OA excavations have therefore provided no evidence to support Clarke's identification of distinct groups of 'foreign' burials on the basis of their funerary rites. Although all the diagnostic attributes that Clarke described were present, they were rarely found together as would have been expected if they did indeed form a distinct suite of accoutrements. They were also found in combination with characteristics that Clarke considered to be indicative of a local origin, and this would tend to suggest that these practices also are native rather than intrusive, insofar as such characterisation is appropriate at all. Rather than representing intrusive elements within the population, these characteristics fall within the diverse range of Romano-British burial practices. Furthermore, no correlation was found between burials with supposedly foreign funerary rites and isotopic evidence for a non-local origin. In fact, six of the seven individuals from whom isotope samples were taken on the basis that their grave good assemblages had characteristics that Clarke had described as diagnostic of a Pannonian origin proved to be locals, and the isotope signature of the other, although outside the range for Britain, was also not consistent with origin in that region. These results are similar to those obtained for a sample of the putatively Pannonian group of burials from Clarke's excavations, and while they effectively refute the identification of these burials as forming a coherent, intrusive group, the presence among the burials sampled from both excavations of individuals with non-British origins provides some indication of the diverse nature of the population of 4th-century Winchester.

The search for these 'intrusive' groups, and its ultimate failure, is indicative in some ways of the shift in paradigms that has taken place in the study of Roman cemeteries since the 1970s; where once 'normative' burials were sought, and those burials that did not conform with them interpreted as being the graves of outsiders, late Roman burial rites are now more readily seen as encompassing a diverse, if nonetheless circumscribed, range of practices, and grave assemblages appear as the result of a series of decisions taken by conscious actors. Although Clarke was correct in identifying some of these burials as different from the majority of those in the cemetery, a more nuanced understanding of the associations within and between these assemblages in the light of work relating to issues of identity and ethnicity (itself only one aspect of identity), carried out in recent years, has led them to be re-interpreted mainly in terms of the accompaniments deemed appropriate for different individuals based on age, sex and status rather than necessarily as symbols of ethnic affinity. On the basis of the isotopes, most of the burials assigned a Pannonian origin on Clarke's criteria appear to be resolutely local in origin. This association is striking and suggests that any connotations of ethnicity or other aspects of identity that might have been carried by the objects (and the locations within the grave that gave these assemblages their particular character) were deliberately assumed by people of local origin and/or the group(s) burying them. As indicated above, however, the familial and cultural background of such people could still have been remote from Winchester, even if this was where they were born.

The poor correlation between possible place of origin based upon the archaeological criteria defined by Clarke and the possible areas of origin indicated by the isotope data is significant, but more positive aspects of the programme of isotope analysis need to be stressed. As set out above (Tables 5.60 and 5.61 and Figure 5.71) the combined isotope results suggest that 21 individuals from the OA sample of 40 may be from Winchester and

closely surrounding areas, with a further eight probably from other parts of the UK, while 11 individuals are defined as incomers. The broad conclusions of the isotope analyses and the associated archaeological evidence are set out in Table 7.6. All the probable incomers were adults; all of the sampled children appeared, perhaps unsurprisingly, to be of local origin. Ten of the non-British adults were from 'warmer' areas and one from a 'colder' area in relation to British isotope ranges. Many of the individuals defined isotopically as incomers cluster around the edges of the UK range, and identification of particular areas of origin is difficult. It may be appropriate to inject a note of caution here; the application of isotope data in this way is still a relatively new area of research which will undoubtedly undergo refinement in the future. It would perhaps be unwise to assume categorically that all the marginal individuals were necessarily non-British, even though this is what the current assessment suggests.

The group of 'warmer' people did include three, however, all females, whose isotopic signature is significantly warmer than is typical for Britain, suggesting origins in an area with a hot and/or arid environment, consistent with many areas of the Mediterranean, and perhaps even North Africa. These are characterised as 'hot' in the abbreviated terminology employed in Table 7.6. Remarkably, one of these, the young adult 119 in Grave 99, has cranial characteristics which suggest a possible origin in Egypt (on the basis of analysis using the CRANID programme, Richard Wright pers comm.; see also Chapter 5 above).

The archaeological evidence for the people who are suggested to be non-local on the basis of the isotopes is of considerable interest. The one 'colder' individual, male 1119 in Grave 1175, with an isotopic signature suggestive of origin in Central Europe, had an artefact set (belt, knife and coin, see above) partly consistent with the character of the burials assigned to that region by Clarke. The isotope values of this individual are quite different from those of the 'cool' individuals examined in the earlier study (particularly those from graves 81 and 426) and it is unlikely that they are from the same immediate area, but factors such as the altitude at which these people were living could account for some of the variability (G Müldner pers. comm.).

Most of the individuals who appear 'exotic' in terms of their isotopic signatures have generally unremarkable grave assemblages. Two of the 'hot' females, who could possibly have originated from the southern side of the Mediterranean, including the young woman in Grave 99, were each buried with a pot typical of the first half of the 4th century. The vessels were standard New Forest types which occurred relatively widely within the cemetery. The second of these women had a pair of unworn shoes, while the third individual had no grave goods and not even a coffin. In terms of their carbon and nitrogen isotopes these individuals again appear

unremarkable. The woman without a coffin (in Grave 850) had a more enriched $\delta^{13}C$ value than most of the people in that category (see Cummings and Hedges above) and so was not obviously among the less well-nourished section of the cemetery population which is correlated broadly with an absence of coffins. It may be noted, incidentally, that the absence of a coffin, considered by Clarke to be a characteristic of some 'local' burials, was the reason for selection of this particular individual for isotope analysis.

The seven 'warmer' individuals (that is to say, those with a western European but not British origin) comprised five males and two females. One of the males (in Grave 1515) was buried crouched and decapitated, the only one of the six examples of 'deviant' burial practice (ie not supine, and/or decapitated) within the isotope study sample apparently of non-British origin. The material with the others was fairly typical, three males having respectively associated shoes, shoes and a coin, and three coins and a knife. The coin dates place the burials in Graves 1805 and 790 after AD 367-378 and after AD 383-388 respectively, indicating the continued presence of a non-British element in the population into the later 4th century, although it is technically possible, given their ages, that the individuals in question could have arrived at Winchester as children before the middle of the century. In terms of artefact provision the most striking of the 'warmer' burials is that of the adult woman in Grave 82, the deepest of the four stepped graves found in the OA excavation. This grave contained the two ceramic unguent flasks of probable North African origin, the only imported pottery vessels in the entire Lankhills cemetery assemblage, along with the comparable vessel from Clarke's grave 45, that of a prime adult female. The rarity of these vessels, as shown by Pirling's study (Pirling 2003) may mark out associated individuals as special, but this significance remains uncertain. It is possible that there was a link between the origin of the vessels and the individual, but this is not demonstrable (and in any case reopens the trap of a simple reading-off of origins from objects). What the isotope evidence suggests, however, is that the woman in Grave 82 may have come from an area where the use of the exotic contents of these vessels was more familiar than it was in Britain. Whether these items reached Britain in the course of regular trade or as occasional arrivals is uncertain, but their exclusive association with large towns, where incomers having some familiarity with these products are likely to have concentrated, is unsurprising.

The distribution of the individuals sampled for O and Sr isotopes, including those from Clarke's excavations, is shown in Figure 7.14, where the graves are marked in terms of their broad isotopic character as set out in Table 7.6 and by Evans *et al*. (2006a; see also Eckardt *et al*. 2009). There are suggestions of patterning in the distribution of individuals in particular groups. The seven individuals with

Table 7.6: Summary of skeletons selected for Sr and O isotope analysis (Table 5.64 adapted)

Grave	Skeleton	Age (yrs)	Sex	Origin based on Clarke's criteria	Position	Coffin	Grave Goods/ [Other Characteristics]	Approximate date	Broad isotopic character
1175	1119	45+	Male	Local	S	Y	Coin, knife, buckle	coin date 388-395	Cold - Central Europe
99	119	26-35	Female	Pannonian?	S	Y	Pot	pot date 270-350	Hot
272	271	26-35	Female	Local	S	Y	Pot, shoes unworn	pot date 270-350	Hot
850	806	60+	Female	Local	S	N	-		Hot
82	84	Adult	Female	Others	S	Y	2 pots [step grave]	pot date 300-350?	Warm
610	566	26-35	Male	Others	S	Y	-		Warm
790	683	45+	Male	Local	S	N	Coin, shoes	coin date 383-388	Warm
855	812	45+	Male?	Others	S	Y	Shoes ?unworn		Warm
1170	1114	26-35	Female	Local	S	Y	-		Warm
1515	1517	60+	Male	Others	CD	N	-		Warm
1805	1697	36-45	Male	Local	S	Y	3 coins, knife	coin dates 367-378	Warm
263	281	45+	Male	Local	S	Y	Coin [DISH]	coin date 324-325	British
550	489	45+	Male?	Local	S	Y	-		British
805	776	Adult	Male?	Others	S	Y	-		British
1270	1197	60+	Female	Local	S	Y	Comb, shoes unworn		British
1349	1227	36-45	Female	Others	S	Y	Pot, shoes unworn	pot date 270-350	British
1895	1894	18-25	Male	Local	S	Y	-		British
10	12	45+	Male	Local	S	Y	Shoes unworn		Local
210	212	60+	Female?	Local	S	N	Shoes		Local
530	435	45+	Female	Local	S	N	Bone plaque		Local
665	661	36-45	Female	Others	S	N	Shoes		Local
905	861	60+	Male	Others	P	N	Shoes		Local
930	862	36-45	Male	Pannonian?	S	Y	Knife, ?buckle, shoes ?unworn		Local
920	874	6-12	Child	Local	S	Y	Beads, bracelets, ?ring, shoes, all unworn		Local
985	926	13-17	Female?	Local	S	Y	Beads, bracelets, rings, pin, all unworn		Local
965	932	18-25	Male	Local	S	Y	2 pots, shoes unworn	pot dates 300-350 & 270-400	Local
1070	1026	Child	Child	Pannonian?	P	N	Bracelets, ring		Local
1150	1084	26-35	Female	Others	SD	Y	Coin	coin date 350-364	Local
1135	1091	18-25	Female	Others	S	Y	-		Local
1140	1094	Adult	Female	Local	S	Y	Shoes		Local
1355	1133	Child	Child	Pannonian?	S	Y	Comb, buckle, shoes ?unworn		Local
1190	1134	36-45	Female	Local	S	N	-		Local
1280	1207	Adult	Female?	Local	S	Y	Comb		Local
1360	1244	13-17	Female?	Local	S	Y	Beads, bracelets, shoes, all unworn		Local
1310	1271	45+	Male	Pannonian?	S	Y	Knife [DISH]		Local
1345	1277	36-45	Male	Others	P	Y	-		Local
1329	1289	36-45	Male	Others	S	Y	Shoes		Local
1760	1761	Child	Child	Pannonian?	S	N	Coin, knife, ring, buckle, glass vessel, pot	coin date 388-392	Local
1866	1870	6-12	Child	Pannonian?	S	N	Pot, finger rings, bracelets	pot date 300-400	Local
110	118	10m-2	Infant	Pannonian?	SD	Y	Beads & bracelets unworn		Enhanced O - prob breast-feeding effect

Abbreviations for position: S = supine; P = prone; C = crouched; D = decapitated
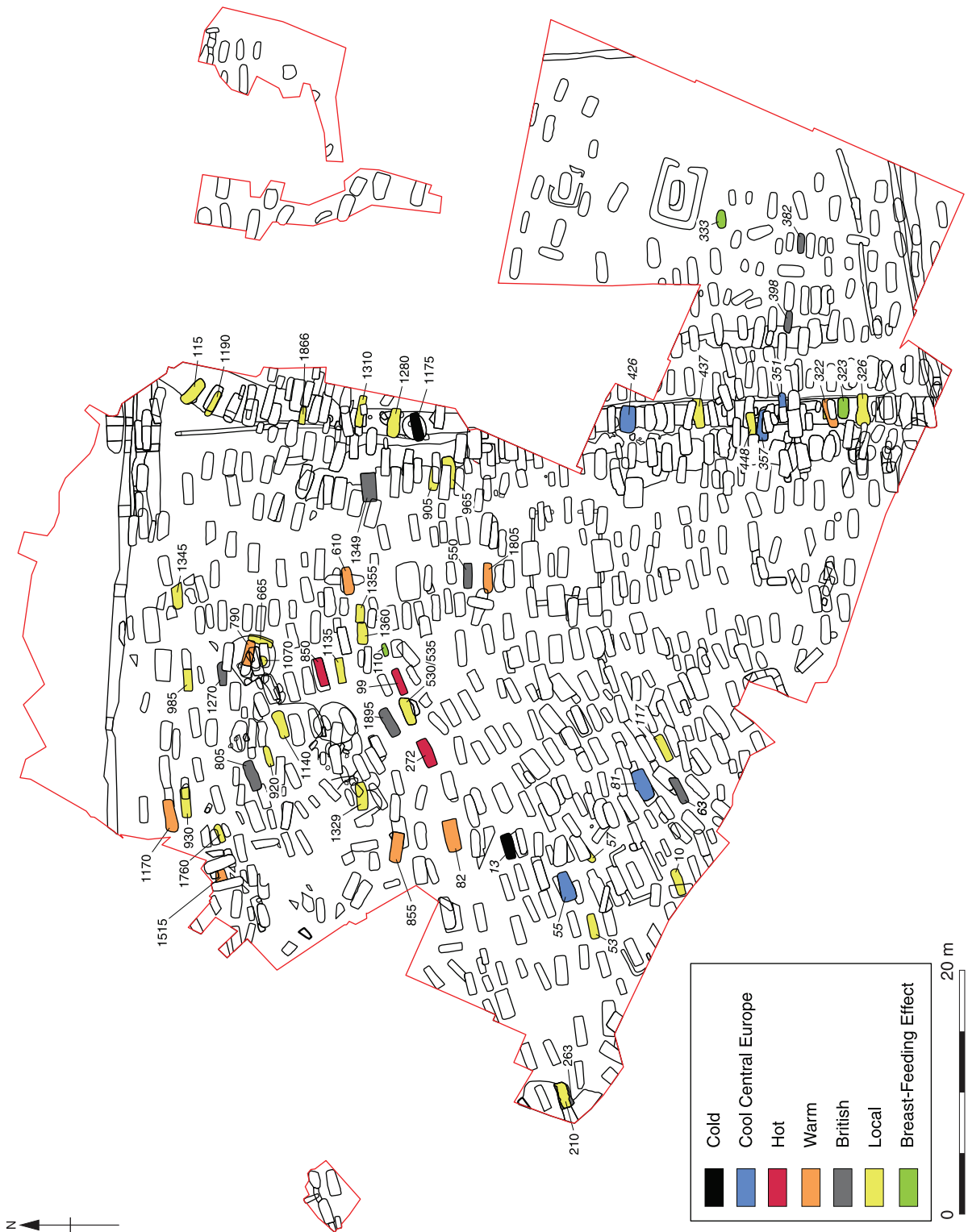
Fig. 7.14 Distribution of graves with Sr and O analyses by broad isotopic character

Legend:
- Cold
- Cool Central Europe
- Hot
- Warm
- British
- Local
- Breast-Feeding Effect

1:500

0   20 m

'cooler' isotopic signatures suggestive of (probably more than one) central European origin are widely scattered through the central and southern part of the site, but are absent from the northern area. Four of them, OA Grave 1175 and Clarke's graves 351, 357 and 426, lie along the line of the original eastern boundary of the cemetery, with graves 351 and 357 closely adjacent. The three 'hot' ladies were all buried quite close together; Graves 272 and 99 were in line and 4 m apart, while 850 lay 5 m north of 99. These associations appear too close to be completely coincidental, but there is no further evidence to suggest the nature of any possible connection between these three women.

The distribution of the people characterised as 'warmer than Britain' in terms of their origins is confined entirely to the area of the OA excavation, although quite widely spread within that area. An absence of such individuals from the north-east corner of the site might be significant, however. Most noticeable is the lack of examples of individuals with a comparable isotopic signature from the area of Clarke's excavation. While this could be related in part to the restricted nature of the sample of burials selected for isotope analysis from this part of the site, the total absence of members of this group here is striking. It is possible that a combination of spatial and chronological factors is at play, as many of the graves in the 'warmer' group appear to belong to the later phases of the use of the cemetery, being typically the latest graves in local sequences and/or associated with late material (such as Graves 1805 and 790, with coins of 367-378 and 383-388 respectively. Grave 1515 was not the latest grave in its local sequence, but was only cut by the very late north-south Graves 1373 and 1440 discussed above. The only significant exception to the view that the burials of this group of individuals were of later 4th century date is likely to have been Grave 82, for which a date in the first half of the 4th century is most likely.

The interpretation of these variations in distribution is uncertain, but a broad chronological trend is apparent. The graves of isotopically 'cold' and 'cool' individuals all date after the middle of the 4th century AD, although it is unlikely that they were all contemporary, with assigned date ranges from AD 350-370 (Clarke graves 13, 55 and 81) to AD 370-390 (grave 351), the latter date comparable to that of OA Grave 1175, associated with a coin of AD 388-395. As already indicated, the great majority of the 'warmer' isotope group are also likely to have been buried in the second half of the 4th century, but it is notable that at least two of the three 'hot' ladies are most probably earlier, being associated with pots dated not later than AD 350, while the third is not closely dated at all. The fact that the only burial in the 'warmer' group likely to date before AD 350 is of the woman in Grave 82, buried in the same line as the 'hot' Graves 99 and 272 and only 4 m west of the latter, may be coincidental but is suggestive of some association with them.

The more general point that there is little or no spatial overlap between burials of the broad 'hot/warm' and 'cold/cool' isotope groups is certainly noteworthy, particularly if many of the burials in these two groups (six out of ten in the former and all seven of the latter) were buried within the space of no more than 50 years. Although the numbers are small, they may suggest the existence of two or more contemporary groups comprising or including individuals of distinctly different backgrounds (and the southern group including members of the official/military community) which were well aware of each other's existence and in disposing of their dead used different areas of the cemetery. There is of course no clear indication of spatial definition in terms of excavated features, but the area immediately south of the west-east line of Graves 82, 272 and 99 and a westerly projection of that line contains a lower density of graves than some other parts of the cemetery and may suggest the existence of some sort of boundary here, although whether this was physically marked out or simply perceived is unknown. It is equally uncertain if such a putative boundary extended much further east than the position of Grave 99. An alternative view might be to see a boundary lying north of Graves 99 and 272, and perhaps also Grave 82, with a suggestion of a narrow underutilised space between these graves and the marked clusters of burials characteristic of the north-west corner of the cemetery area. Regardless of its precise position, any such 'boundary' need not have had the same meaning for the members of all the communities burying their dead at Lankhills. This is clearly demonstrated by the 'official/military' community, for while those of its members who are currently identified on the basis of isotope evidence as likely to have originated in central Europe were only buried in the southern part of the cemetery, other, British-born members of the same community were to be found in the northern part of the cemetery as well. This appears to be a modest demonstration of the ways in which different aspects of identity intersect within the same communities and individuals.

Status and social identity

Many aspects of the funerary rites at Lankhills, particularly the grave goods placed with many of the burials, appear to have been associated with the status or social identity of the deceased. Indeed, the increase in the range of objects placed in graves during the course of the 4th century may reflect an increase in the number and variety of identities that were being expressed through these rites, as well as in the sophistication with which they were articulated.

Among the more obvious examples of grave goods associated with status are the belt sets and crossbow brooches with which the burials of a small

number of adult males were adorned. These elaborate and ostentatious items were fairly clearly symbols of rank, whether military or civil (Reece 2007, 155-157). In addition to being striking objects in their own right, it is likely that they were associated with the wearing of clothes that singled the wearers out from the bulk of the population, and the burial of these individuals with this equipment may in some ways have been analogous to a modern burial with full military honours. Among the more prosaic grave goods that may have been associated with the status or identity of the individual were the spindle whorls that were buried with a number of adult or adolescent females, which may have been regarded as appropriate equipment for adult females, or for married women, their association with textile production perhaps symbolising responsibility for domestic production. The possible loomweight in Grave 1015 may have carried similar symbolism. Combs were similarly associated with female burials, particularly those of older individuals, and may have been the accoutrements of women of matronly status (or virtue?). The burial of jewellery with some of the females appears to have been structured according to rules relating to their age. Children and adolescents could be buried with large groups of bracelets, whereas older women tended to have only one or two, and adult women buried with necklaces and bead strings were usually wearing these items, in contrast to younger females, with whom the objects were placed separately within the grave. The vessels of pottery and glass with which some burials were furnished do not have an overt association with the status or age/sex identity of the individual, but the selection of specific vessels, and their deposition in specific burials, suggests that deliberate choices were being made as regards the appropriateness of the objects to the individual burial. The vessels placed in these burials were of a very restricted range, limited to certain forms that were mostly associated with drinking. Although they may have been deposited for use by the deceased in the afterlife, they may also have had a more symbolic significance, perhaps intended to reference the social contexts in which these types of vessel were normally used. As such, they may have expressed an aspect of the individual's social persona by reminding the mourners of the social practices in which the deceased had played a part during life.

Grave goods were not the only means by which status could be expressed. The construction of enclosures around a small proportion of the graves may have had such a purpose, as may the digging of stepped graves or the provision of a particularly elaborate coffin. The latter may perhaps explain the exceptionally large number of nails used in a few of the coffins, which may have been used to decorative effect or to secure decorative mountings or linings that have not survived. The significance of the stepped burials in terms of status remains slightly

uncertain, but while only Grave 82 of the four examples from the OA excavation was marked by the occurrence of unusual grave goods (or indeed any grave goods at all) nine of the 17 examples in Clarke's excavations (1979, 134) contained grave goods, including pottery in all but two cases. While none of the assemblages from these graves was exceptional, they do suggest a slightly above average degree of provision which, when combined with the evidence for extra expenditure involved in the production of the grave structure itself – the extra deep grave pit (only in two out of the 21 examples was the pit less than 1 m deep) and the wooden chamber roof above the coffin – serves to distinguish the individuals buried in this way, even if the characteristic(s) in life that may have correlated with this distinction are unknown. It is also uncertain why some individuals were cremated rather than buried, although the recovery of a crossbow brooch from a simple, un-urned cremation burial may be evidence that these burials could be considered to be of equivalent status to an inhumation.

A striking aspect of the presentation of status or identity is that in none of the burials was the practice of burying grave goods with the dead used as an opportunity to display the wealth of the deceased or their mourners. The majority of the grave goods, such as the pottery vessels, combs and spindle whorls, were of little financial value. Where coins were placed in the grave they were few in number and of low denomination, and the jewellery buried with some of the females comprised trinkets of bronze, bone and shale rather than expensive items made from precious metals. Virtually the only objects likely to have been of any real intrinsic value that had been placed as grave goods were the crossbow brooches and belt sets, the most striking example of which was the group in Grave 1846, with a gilded copper brooch, gilded silver buckle and strap end, and riding boots with bronze spurs. Even in these cases, though, the primary significance of the objects was as a display of status, perhaps even as a badge of office, and any inference of wealth, although real, was secondary. This contrasts starkly with the evidence from contemporary hoards of coins, plate and jewellery that indicate the degree of wealth that existed within Roman Britain. The absence of such items from the assemblage of grave goods from the cemetery is characteristic of later Roman cemeteries in Britain as a whole, and is unlikely to be coincidental; it may suggest that the disparities of wealth that undoubtedly existed within the community were suppressed in his context. One very direct exception, however, might have been with regard to textiles – both the clothes in which people were buried, and perhaps other fabrics placed within the grave, or used as covers or hangings. Examples are seen in the identification of silk at Butt Road (Crummy *et al*. 1993, 128) and of gold thread in burials at Poundbury (Crowfoot 1993, 112), Verulam

Hills Field, Spitalfields in London and from Winchester itself at St Martin's Close (Ottaway and Rees forthcoming). Of course, it is possible that in some instances other parts of the funeral were used as an opportunity to display wealth, perhaps through the splendour in which the deceased was displayed prior to the ceremony or through the size and magnificence of the procession to the cemetery, but the burial itself was generally not the place for such displays.

It would, of course, be a mistake to try to reconstruct some form of social hierarchy from this evidence. With the exception of the burials with belt sets and crossbow brooches, the position in such a hierarchy is not the aspect of the individual's status that appears to be manifested in the burial rite. Rather, certain objects appear to have been buried with the deceased because they were regarded as appropriate accoutrements for such an individual. The evidence of age and gender associations for particular objects discussed here and in Chapter 4 (above) supports the emphasis of Gowland's work (eg 2002; 2007) that these associations were significant in relation to aspects of identity that in some cases may have been closely related to particular life stages. The objects may have been believed to be necessary in order to enable the deceased to continue to enjoy the same status in the afterlife as they had during life, or alternatively they may have been buried with the deceased as a symbol of the end of that role, at least in the land of the living, with the status now passing to another individual. It is also possible that the association of these items with the status of the individual was not articulated in any overt way, but that they were considered to be no more than traditional accompaniments to the burials of certain individuals. Equally, the decision as to whether or not each individual was buried with grave goods may have depended largely on the customary practice within a family, social or ethnic group, or personal preference on the part of the deceased or the mourners, and individuals buried without grave goods need not necessarily have been of lesser status than those who were provided with objects.

BELIEF AND RELIGION

Interpreting religious beliefs from funerary evidence is notoriously problematic. Funerary practices are very much culturally specific, and the correlation of the material evidence with specific meanings or beliefs need not be straightforward (Ucko 1969). Funerals are also more than merely religious ceremonies, or a means of disposing of the dead, but are structured by more mundane concerns such as displaying status or re-establishing the roles of the mourners to accommodate the loss of the deceased. Indeed, it is axiomatic within the study of funerary archaeology that burial rites have more to do with the requirements of the living than the dead (Parker-Pearson 1999).

In the context of the Roman world, and specifically Roman Britain, there are additional difficulties in trying to relate the evidence from burials with that for religious beliefs more generally. Our understanding of Romano-British religion is largely derived from literary and epigraphic sources that are concerned primarily with specific, named deities but tell us little about the day-to-day beliefs and observances of the population (Esmonde Cleary 2004, 423). Funerary practices, on the other hand, were informed by the religious and superstitious beliefs of the people conducting the funerals, but very rarely included iconography that can be easily associated with an individual deity. The two different types of evidence thus relate to rather different aspects of the belief system. Indeed, it would appear that the beliefs that were paramount in a funerary context were only loosely connected to the world of the gods and Classical mythology. The relationship between burial practice and beliefs about death is also not a straightforward one. Practice does not necessarily imply belief, and may rather be associated with fashion, tradition or group identity. It can never be proved that the individual buried within a particular grave, or the people conducting the funeral, genuinely ascribed to the beliefs that appear to have been expressed in the ceremony. In many instances the participants at the funeral may have had only a very sketchy understanding of the symbolism of the practices that they perpetuated. In spite of these difficulties, burial ritual is, as Morris (1992) has argued, our best evidence for the system of beliefs and values that were current within the population using the cemetery. The important thing is not whether the individual deceased and mourners at each funeral truly believed in the ideas that were expressed by these rites, but that by enacting them they were conforming to the accepted norms of the community.

Grave goods associated with specific deities

It is rare for burials from Roman Britain to contain evidence that can be incontrovertibly associated with a specific deity, and none was found at Lankhills. The Roman world was polytheistic, and the literary evidence indicates that a wide variety of beliefs existed, but they were rarely prescriptive when it came to burial. Consequently, there is no reason to assume a link between the form of an individual burial and the religious or philosophical convictions of the deceased or mourners. The broad similarity of the majority of the burials at Lankhills is likely to represent a form dictated by convention and tradition, and considered appropriate to all religious beliefs.

The only evidence at Lankhills that could tentatively be interpreted as associated with specific deities relates to the selection of animal and bird species that were placed with a small number of burials, which may have been chosen because they were the totemic animals of particular gods. It is

possible that the domestic fowl placed in Grave 870 of the OA excavations and the seven such birds recovered from six burials recorded during Clarke's excavations had been selected for deposition because of the role of the cockerel in classical iconography as the sacred bird of Mercury, who conducted the dead to the underworld (Henig 1984b, 199), but the late Iron Age tradition of inclusion of fowl in burials means that this association cannot be taken for granted. Individual bird bones were also recovered from cremation burials 655 and 1806, and although neither of these could be identified to species it is possible that they were also domestic fowl. However, it should be noted that only one of these birds, from Clarke's grave 150, was demonstrably male, with the majority being female and two from the same excavations lacking the tarsometatarsus, upon which the determination of sex is dependent. It is perhaps unlikely that hens had the same significance as cockerels in this context.

The horse skulls that had been placed in Graves 530 and 1547 and cremation Burial 655 may also have had a totemic significance associated with the cult of the horse-goddess Epona. Rather than having been placed at the base of the grave with the burial, the horse skulls in the two inhumation graves had been placed in the backfill over the deceased, and the skull from the cremation burial was in a similar location on the surface of the cremation deposit. This consistency in their locations is surely evidence that the skulls played the same part in the funeral rituals. Horse remains were not commonly placed as grave goods, but there does appear to be a persistent association with some cemeteries, as discussed above.

Although Gaulish in origin, the worship of Epona was widespread throughout the western part of the empire, and she was accepted into the Roman pantheon sufficiently to be granted her own festival day in the Roman calendar of holy days (Aldhouse Green 2004, 213). In Britain her worship is mostly associated with the military, attested by a number of dedications on Hadrian's Wall and the Antonine Wall, but there are also a few references to her in southern Britain, and a wooden figure was found at Brook Street, Winchester (Ross 1975). The figure holds a key that is thought to symbolise her role in conveying the dead to the next world, and it is this attribute of her cult that would make her a suitable recipient for the offerings in the graves at Lankhills. The horse skulls in Grave 1543 and cremation burial 655 appear to have been already defleshed when they were placed in the graves, and although this may simply indicate that they had been prepared in advance of the funeral, it is tempting to interpret this as evidence that they had been previously utilised or displayed elsewhere, perhaps as part of the cult of the goddess.

The association of horses with burials, and particularly with the rite of cremation, is much more common in the early Anglo-Saxon period (Fern 2007) than in Roman Britain. There is no clear evidence to indicate a close relationship between late Roman and early Anglo-Saxon practice in this regard, but it is notable that the occurrence of cremated horses in Britain is 'unequalled in contemporary Europe' (ibid., 102), but its distribution is heavily biased towards East Anglia. While the occurrence of early Anglo-Saxon horse inhumations is more widespread these are less common and more clearly associated with high status burials, and separate heads are relatively rare. Despite superficial similarities, therefore, it appears unlikely that there was a direct link between late Roman and early Anglo-Saxon practice relating to the inclusion of horse remains in burials, but such a link cannot be ruled out completely.

The fate of the soul

The literary and epigraphic evidence indicates that a wide variety of eschatological beliefs was current in the Roman world (Hope 2007, 211-47). Very little of this evidence relates specifically to Britain, but there is no particular reason to believe that beliefs here lay significantly outside the range encountered elsewhere in the empire. The most common belief appears to have been associated with the survival of the individual after death, in some form of afterlife. Individual authors differed as to the precise nature of this afterlife, although it was usually described as being located somewhere beyond the world of the living, the most common version being the underworld kingdom of Hades derived from Greek mythology (Toynbee 1971, 33-9). These beliefs also seem to have been associated with a belief that the well-being of the dead could be affected by the actions of the living: hence the need to provide an appropriate place for their remains in a cemetery, accord them the proper funerary rites, and commemorate them through subsequent feasts.

It is in this context that many of the objects placed with burials at Lankhills may be understood, as equipment that the deceased would require in the afterlife, although we cannot know whether they were believed to literally pass into the afterlife with the deceased or were thought of in more symbolic terms. Traditional accounts indicated that the deceased were required to make a journey to reach the afterlife, and some of these objects seem to reference this journey. The footwear that was provided for many of the dead, for example, even to the extent of placing a second pair in Grave 590, may have been intended for the deceased to wear while travelling, or may have simply symbolised the journey from life to afterlife. One of the most popular elements of descriptions of the underworld was the River Styx and its ferryman, Charon, and it is likely that some of the coins placed as grave goods were intended to pay his fee. This is certainly likely to be true of those burials in which one or two coins had been placed in the traditional locations, in the mouth or hand of the deceased, but

Macdonald's (1979, 408-9) suggestion that in some instances the money was intended as an offering to other deities may apply to those provided with larger groups of coins, or in the case of graves in which they had been placed elsewhere. Vessels were the most common type of grave good, and it is possible that they too were associated with this journey, as receptacles for refreshments to be consumed en route. Some of the vessels, however, could not have had contents, such as the deliberately holed vessels in Burials 545 and 680 and several damaged vessels from both the OA excavations and Clarke's excavations (1979, 149). In these instances the provision of the vessel may have had a purely symbolic purpose. It is possible that the deliberate damage was thought necessary in order to 'kill' the vessel so that it could pass to the afterlife with the deceased. If that was the case, however, the practice might have been expected to be more widespread.

The implication of these objects is not simply that some, perhaps many, of the people using the cemetery believed that the soul survived after death, but more precisely that this existence was thought to be in some way corporeal. It is also possible that the placing with the dead of objects that expressed their identity or status is evidence that they were believed to retain this status in the afterlife (see 'Status and social identity' above), although it is also possible that these objects were buried for other reasons: perhaps because they were thought to be contaminated by their close association with the deceased, or as a display of the status of the deceased, and, by association, that of his or her heirs.

It may also be relevant to consider which members of the population were provided with a place in the cemetery. Neonates and infants are conspicuously under-represented, and this may be associated with the belief that they had not yet developed a soul. The corollary of this is that the individuals who were buried within the cemetery were placed here because they did possess a soul, and that correct burial in an appropriate location was necessary for its well-being.

Fear of the dead

As well as being intended to benefit the deceased or facilitate their passage to the afterlife, some aspects of funerary practice were also concerned with a fear that the dead may be able to escape the grave and have a malign effect upon the living (Toynbee 1971, 33–9). Taylor (2008) has considered in detail the evidence provided by burials from Roman Britain for such a fear of revenants, and the measures taken to contain them. The cemetery at Lankhills contained a number of individuals who had been buried in a prone position or who had been decapitated after death, and these are among the practices that she has interpreted as having formed parts of rituals intended to prevent the dead from rising. Burial in a prone position may have been intended

to make it more difficult for the deceased to escape the grave, particularly since several of these individuals may also have been bound when placed in the grave. Removal of the head, which was believed in both Classical and Celtic religion to be the seat of the soul (Henig 1984b, 203), may have been intended to prevent the reanimation of the corpse. Similar burials recorded at other sites have contained evidence for further practices that might be seen as measures intended to secure them in the grave.

There was no clear evidence to explain why these specific individuals had been singled out for such treatment, but the sort of fears from which it resulted may have been provoked by people who were socially deviant, deformed or diseased, or whose death was thought to be unusual or unexplained (Tsaliki 2008). The prone burials, in particular, do seem to have been treated differently from the majority of burials in a number of ways (see above). The graves containing these burials were located toward the edges of the cemetery or in the area near the centre of the OA excavations that had been defined by the digging of a group of shallow pits prior to the commencement of burial, and were more likely to lie on unusual alignments, while the grave pits themselves tended to be shallower. There was also evidence that some of these individuals may have been of low, or even servile status, since several of the skeletons exhibited pathologies that are likely to have been caused by hard manual labour, and their diets may have been more restricted than those of other members of the population. Low social status may have left these individuals with little defence against the sort of accusations or discrimination that might result in a belief that special precautions were required to ensure that they could not return to haunt the living. These burials were not necessarily lacking in respect, as is demonstrated by the occasional provision of grave goods and coffins, and this may indicate that the provision of some of the elements of a normal burial rite was also believed to help to ensure that they remained in the grave. One of the prone burials at the eastern cemetery of Roman London had been weighted down with two large stones (Barber and Bowsher 2000, 87), as had two such burials at Welwyn, Hertfordshire (Taylor 2008, 110), and the iron nails that had been placed in the mouths of two prone burials at Sea Mills (Bennett 1985, 26-7) may have been believed to have magical properties that would restrain the individual after death.

Alternative interpretations for these practices are, of course, also possible. In the case of decapitation, in particular, it could be argued that the removal of the head, as the seat of the soul, was believed to kill the soul or prevent it from reanimating the corpse, or conversely that the intention was to release the soul and facilitate its passage to the afterlife in the case of individuals for whom this was thought to be problematic.

The provision of a bounded cemetery as an appropriate place in which to bury the dead may itself be considered to be associated with a perceived need to confine the dead. To some extent it may be explained as a practical division of areas of varying landuse in densely occupied suburban areas where land may have been at something of a premium, and where land in differing ownership needed to be clearly defined. However, the boundaries enclosing the cemetery may also have had a symbolic significance, as did those surrounding a town. Epigraphic and historical sources indicate that in the Roman world contact with the dead was believed to result in a form of pollution, which appears to have combined a practical concern with hygiene and the potential for contagion with fear of a more spiritual contamination, which could only be removed by undertaking appropriate rites of purification (Lindsay 2000). Separating space designated for the dead from that occupied by the living through the maintenance of a clearly defined boundary, both physical and metaphysical, may therefore have been a very real concern. The area within such a boundary may have been regarded as having a different quality from the mundane world around it, perhaps analogous to the consecrated space of a modern Christian burial ground (Esmonde Cleary 2000, 137). It is likely that placing the dead within such bounded areas, perhaps with appropriate rituals to enforce the efficacy of the boundaries, was intended to contain them and ensure that they could not escape the cemetery and exert a malign influence upon the living.

Christian burial

The issue of Christian burial (see above) has loomed large in discussion of late Roman cemeteries in Britain, particularly in the light of prevailing interpretations of the sites at Poundbury, Dorchester and Butt Road, Colchester. Criteria for definition of a Christian burial rite and, by extension, cemeteries which can be labelled 'Christian', have been refined by Woodward (1993, 236-7), developing the work of Watts (1991) and have been considered with due caution in the context of Cannington by Rahtz *et al*. (2000, 419-420). Watts (1998) and Sparey-Green (2003) have further developed the discussion of some of these aspects. Quensel-von-Kalben (2000, 227-8) analysed Watts' and Woodward's criteria and concluded that they allowed the separation of 'Christian' and 'non-Christian' cemeteries, but this analysis did not question the underlying assumptions – for example that west-east burial is a Christian characteristic. While differences between certain cemeteries were therefore underlined, the significance of these differences in religious terms remains less certain. That Christian cemeteries can be identified on archaeological criteria is accepted by many, including the author of the most recent general review of Christianity in Roman Britain (Petts 2003, 145-9). There is, however, an equally

firmly established view that the search for an archaeological definition of Christian burial practice in this period is misconceived and that Continental evidence places the crystallisation of a distinctively Christian rite as late as the 7th century (eg Brown 2003, 24-5; Esmonde Cleary 2004, 424; 2006). It follows from this that identification of whole cemeteries as Christian is problematic (Harries 1992, 61; Millett 1995).

At Lankhills Macdonald tentatively identified Christian elements among the burials excavated in 1967-72, but admitted that the evidence was 'generally inconclusive' (Macdonald 1979, 430). Definition of criteria for the identification of Christian burials in Britain was less refined than it has become subsequently, but Macdonald focussed principally on aspects of care in burial (ibid., 429) and the evidence for possible family burial groups which, he argued, contrasted with the general pattern of the evidence from the cemetery for grouping of burials by sex, which he saw as a pagan characteristic (ibid., 430). The evidence from the present excavation, and from Gowland's re-examination of the skeletal material from Clarke's excavation, suggests that the apparent clustering of burials by sex is less marked than Macdonald thought, although the differences are fairly subtle (cf. Figure 7.4 with Clarke 1979, 189-190 and fig. 22). In any case, it is hard to see why burial in family groups could not have been characteristic of non-Christian groups, and conversely it could be argued that for a religion that emphasised the family of the church the importance of earthly families was less, rather than more likely to influence the grouping of burials than in a non-Christian context. Equally, the suggestion that the exercise of great care in burial was a specifically Christian rather than a non-Christian characteristic seems hard to justify.

With the possible exception of very specific (and uncommon) practices and structural types, and in the absence of inscriptions, the evidence that would allow us to recognise Christian burials thus appears to be slight since, as Macdonald (1979, 425-428) rightly recognised and has been widely pointed out subsequently, neither orientation nor the absence of grave goods were exclusive characteristics of such burial in the late Roman empire (eg Samson 1999), any more than they were, for example, in Merovingian Gaul (Effros 2003, 141). A key exception might, however, relate to the evidence for the use of shrouds (see above). If we could be confident that in a late Roman context this practice was distinctively Christian (it was also used by Jews and later by Muslim communities) it could be a useful pointer to the identification of Christian burials, although it is clear that the difference between prescribed and actual practice was wide (eg Martorelli 2000); shrouds might only have been used by a small part of the Christian community in the 4th century. In the present instance, the use of shrouds can perhaps be inferred from the osteological evidence, but this has to be treated with caution, as

the example of the woman in Grave 740 (see above) indicates, and cannot be quantified with confidence. If correctly understood, however, this evidence suggests that there were a few shrouded burials within the cemetery; these might have been of Christians, but certainty in this matter is impossible.

In view of the injunctions of writers such as Tertullian (discussed by Sparey-Green 2003) it may be that Christian cemeteries were most clearly distinguished by virtue of their physical segregation from those of non-Christians (see also Harries 1992, 61), although Rebillard (2009) has argued that this view has been overstated.. In the absence of a distinctive rite in relation to the individual burials, however, such cemeteries might not be identifiable archaeologically as belonging to a particular community even if they were distinguished by other characteristics in the eyes of contemporaries. In conclusion, therefore, it is clear that around Winchester and quite possibly within the Lankhills cemetery there could have been burials of Christians. There may have been cemeteries in which Christians formed a majority or even the entirety of the cemetery population, but this does not mean that there was at this time a common rite of burial which would have been characterised by contemporaries as distinctly, let alone uniquely, Christian in character, much less one that can be identified as such on the basis of archaeological evidence.