6 MEAT CONSUMPTION AND DISPOSAL OF ANIMAL BONE AT DANEBURY HILLFORT.

'Meat eating, the division of the carcass and the dispersal of the bones must always have a symbolic context behind which there is a conceptual order' (Hodder 1982:161).

In this chapter the analyses and results that comprise this study are discussed, in order to try to identify the concepts and behaviours behind the acts of consumption and deposition witnessed at Danebury. Assessment of the butchery and consumption activities, followed by the overall spatial patterns, and finally types of individual deposit, invite a detailed re-interpretation of the nature of occupation at Danebury. This in turn leads to consideration of the ways in which the hillfort may have interacted with other nearby communities, and the status of hillforts in the Iron Age.

6.1 INTRA-SITE CONSUMPTION AND COOKING ACTIVITY

There is a consistent pig and cattle butchery pattern at Danebury, which changes only marginally in respect of time phases and feature types. Sheep butchery was not investigated in this project but preliminary analysis suggests similar consistency (Grant 1987). It involved careful disarticulation of the majority of the carcass into individual bones, and filleting the meat from the bone, with little chopping or bone splitting. Analysis suggests that the task was specialised, and the relatively constant incidence of cuts implies that it was undertaken by only one person or group at any one time. The implication is that similar efficiency and time constraints were in place for butchers throughout the Iron Age at Danebury, as inaccurate or more rapid butchery would have lead to a higher incidence of marks on the bone (Luff 1994).

Tool use does differ between species, with a higher percentage of chop marks on ox bone (8-20% of butchered pig bones showed chops compared to 17-30% of butchered cattle bone). The majority of butchery marks was created during disarticulation with a knife, the easiest means of producing reasonably sized pieces of meat. It is also the most efficient, since disarticulation does not wear the cutting edge of any tool as much as chopping.

The incidence of filleting rose slightly in the later phases, suggesting that more meat was being removed from the bone, perhaps also indicating that smaller portions were being taken

from the bone and consumed. If we discount possible sample size bias from the smaller assemblages in the early phases (section 3.2.3.6), the greater number of carcass divisions noted in the late phase verifies this, since the production of more parts from each carcass implies that the portions themselves were smaller.

Differences between feature types might suggest some special treatment of bone in the pits at Danebury, in the early phases at least. Here, for pigs and cattle, crania were not filleted and it is more likely that they were deposited while still fleshed. Again this can only be a suggestion as the smaller sample may have biased the results.

6.1.1 Cooking

Butchery marks on the bone indicate disarticulation of joints and filleting of meat. This may have occurred before consumption, although it is possible that bone may have been marked during the carving of cooked meat. The low incidence of burnt bone (1.8% of identified fragments) suggests that any meat cooked on the bone was probably not grilled but boiled. Speth notes that the incidence of burning on bone roasted in a pit or oven is 'virtually nil', whereas that roasted over an open fire is 50%, if previously dismembered (Speth 2000:89). This means that roasting large parts of meat on the bone at Danebury cannot be eliminated, but it makes this method of cooking less likely than methods involving boiling. The size of bone parts is often large, with a relatively high proportion of whole or almost whole bone (pig humeri and femora 12-25% complete, and pig radii at 22-48%). This suggests that if meat was left on the bone for cooking, it would often be in large pieces. Filleting marks from pig bones at Danebury comprise 12-22% of the total butchered bone, suggesting that this process was carried out regularly, but not necessarily on all bone. Cattle bones were far more frequently filleted, almost certainly due to the larger quantities of meat they carried.

Pottery types at Danebury consist of jars, bowls, dishes and pots (Cunliffe 1984a: 231). The majority are jars (56%), followed by saucepan-pots (34%) then dishes and bowls (10%). From this it might be inferred that the main pottery forms (jars) were for storage, with those for cooking (saucepan-pots) secondary in importance and serving vessels in the minority. Brown (1995: 55) notes that both jars and saucepan pots contained residues 'consistent with activities such as cooking and boiling'. As previously stated (section 1.3.5), rim diameters of cooking pots range from 100mm to 320mm (Brown 1995: 57), the latter being a size that could accommodate most complete bone, even most bone elements of (Iron Age) cattle. The large size of many of the cooking pots could suggest that large quantities of food were being

cooked for a significant number of people. It is unlikely that large quantities were prepared for very few people, as cooked meat could only be kept for a few days before becoming toxic, especially in the warmer months. The relative lack of small vessels for personal consumption might also imply that food sharing was the predominant routine. Analysis of differences in vessel type over time could identify differences in the scale of consumption activity (section 7.3.1).

6.1.2 Preservation

Many social groups preserve meat parts when the animal to be killed provides a quantity of meat larger than can be immediately consumed. In the Iron Age, available techniques for preserving meat included smoking/drying and salting. Although many of the literary sources for the Iron Age are considered unreliable, it is interesting that Strabo stated that fresh and salted pork were especially common among the Britons (Ritchie & Ritchie 1985: 17), suggesting that pig bones at least may be expected to show evidence of preservation. Preservation of meat on pig bones has been proposed for a Bronze Age dated log house at Hallstatt. The building contained rectangular pits and produced mainly humuri, femora and tibia, leading to its interpretation as a location for salting with brine pits and waste bone. The ribs, cranium and vertebrae were absent, thought to be from the methods of butchery that involve gutting and boning from the back, with the animal lying on its belly (Anon 2000). However, the bone element proportions were calculated by weight, which advantages heavier bone elements such as the humerus, femur and tibia. It would be interesting to see if other analyses give the same results.

There is no clustering of specific parts that might be indicative of similar preservation at Danebury, but the scattering of bones throughout layers and pits implies that some time had passed between butchery and deposition. Although some time is bound to have passed while the meat (and maybe bone) was cooked and consumed, such scattering might be explained by preservation, whereby parts were kept for periods of time before consumption, so would not be deposited at the same time as the remainder of the carcass. There is no modification to the bone that might indicate preservation, but modification would not necessarily have occurred (section 3.1.3.4). The evidence for production of small quantities suggests that some meat at least was not being consumed in huge chunks. This is especially so in the later periods. Preservation of parts would comply with a frugal consumption pattern that concurs with this analysis.

If we accept this interpretation, meat must have been preserved on the bone. Stokes states that it is easier to preserve meat once taken off the bone (Stokes 1996: 57), although for many meat joints, such as hams, the bone provides a useful means by which to suspend the product, avoiding spoiling due to a lack of aeration (Lawrie 1998). If meat were preserved on the bone, it would not be possible to utilise marrow, and indeed there is little evidence for marrow removal at Danebury. Filleting marks would have been made during the cutting of preserved meat from the bone in this case.

Possible evidence for preservation comes from briquetage, commonly accepted as used for transport and trade of salt, which is frequently found at Danebury. It is not found at some smaller settlements, such as Old Down Farm or Lains Farm, but is present at Winnall Down and other sites (Morris 1994: 15). There does not appear to be a difference *per se* between hillfort and settlement use of briquetage, although salting or trade may have been restricted to some sites. At both hillforts and open settlements, where briquetage is found, there appears to be an increase in later periods, perhaps suggesting more use or trade in salt. Increased salting of meat in the later periods is consistent with the evidence for the consumption of smaller parts in the later Iron Age, proposed in the following section.

6.1.3 Consumption

Distinguishing consumption waste from butchery waste is often difficult because 'all parts of the carcase [*sic*] (except the horn and horn core) may be cooked and eaten' (Serjeantson 1989: 3-4). This statement was drawn from studies of food consumption in towns, where activities may be more specialised and/or centralised than rural settlements, but the apparent specialisation of butchery as a technique at Danebury could indicate that the same applies to the Iron Age. The criteria Serjeantson advanced for distinguishing the two types of waste are: information suggesting a residential building; a majority of bones from food animals; some evidence of butchery; predominance of skeletal parts with most meat. Distinctions are confused when deposits made in one place result from more than one activity. Her third criterion does not necessarily apply, since it is the *type*, not the *presence* of butchery marks that are of importance, and since butchery marks may not necessarily be found on butchered bone. Nonetheless, at Danebury, the second and third criteria apply to the pit fills, although the first three match the (occupation) layers. The implication might be that the bone in pits is further removed from consumption activity, or more mixed up, than that in layers (see discussion of spatial patterning below).

Conversely, if Wilson's claim that the bones of small animals and joints of the larger 'are a good indicator of eating areas' (Wilson 1994: 64) is accepted, the pit deposits at Danebury would represent the residues of consumption activity. The bone elements in each deposit include many from sheep, but only a selection of parts from cattle and pig. However, the sheep bones do not tend to come from one individual, suggesting that the deposit may not directly reflect eating activity (see part 6.2.3). It is likely that deposition activity has masked any distinctions between butchery and consumption waste.

6.1.3.1 Size of meat parts

Literary sources are at variance when discussing the quantity of meat supposedly consumed in Iron Age Britain. Caesar is the only writer to directly address Britain, stating that most Britons 'do not sow corn, but live on milk and flesh and clothe themselves in skins'[1] (Caesar, *De Bello Gallico* 5. 14). In respect of the latter, butchery marks from cattle and possibly pig bones at Danebury do suggest that skinning had occurred, perhaps providing some confirmation of Caesar's statement. Grant calculated that a milk and meat economy became more important in the later phases, using projected milk, meat and offal yields and feeding costs (1991a: 469). Caesar also asserted that Iron Age Britons 'account it wrong to eat of hare, fowl and goose; but these they keep for pastime or pleasure'[2] (Caesar, *De Bello Gallico* 5. 12). However, butchery marks on domestic fowl are present at Danebury (Annie Grant pers. comm.), suggesting that at least a part of his account is flawed.

Other ancient authors wrote of the eating habits of European Celts. Athenaeus, quoting Posidonius, says that sometimes 'whole joints of meat were served'[3] (Athenaeus, *Deipnosophists* 4. 154b) while Phylarchus, also quoted by Athenaeus, states: 'many loaves of bread are broken up and served… as well as pieces of meat from the cauldrons'[4] (Athenaeus, *Deipnosophists* 4. 150d). Diodorus Siculus states that Iron Age Gauls had 'caldrons [*sic*] and spits holding whole pieces of meat. Brave warriors they reward with the choicest portions of the meat'[5] (Diodorus Siculus, 5. 4). There does not appear to be any selective deposition of different bone parts to confirm the latter at Danebury, and the low incidence of burning argues against the common use of spit roasting. Diodorus Siculus may have been exaggerating the ferocity of Celtic warriors or recording exceptional meals, the

[1] 'plerique frumenta non serunt, sed lacte et carne vivunt pellibusque sunt vestiti'
[2] 'Leporem et gallinam et anserem gustare fas non putant; haec tamen alunt animi voluptatisque causa'
[3] 'παρατεθέντων κωλήνων'
[4] 'ταις τραπέζαις άρτους πολλους κατακεκλασμένους παρατίθεσθαι χύδην και κρέατα εκ των λεβητων'
[5] 'και λέβητας εχουσαι και οβελους πληρεις κρεων ολομερων. τους δ αγαθους ανδρας ταις καλλίσταις των κρεων μοίραις γεραίρουσι'

remains of which were rarely or never deposited at sites such as Danebury, and have not been recognised in this analysis. Consumption practice in Iron Age Britain and on the continent will have differed in some ways, and it is not possible to compare the two directly. Thus high meat content may have been atypical of everyday meals in southern Britain, despite the portrayal by Classical writers of northern European countries as lands of meat and bread.

Deitler (1996: 101) accurately states that the main problem in identifying feasting is the classification of 'single episode' deposits. At Danebury deposition in pits made such classification more possible, but the lack of indication of the length of time pit deposits took to form and the potentially significant distance in time and space between butchery and consumption remain limiting factors (see section 6.2.3).

Hill suggests that only 100 identifiable bones were deposited per year at Danebury (1995b: 2), but my calculations make the figure more like 800, when the bones are averaged per year of occupation (temporarily ignoring differences between the early and late phases, which are described more fully in section 6.5) and the number doubled to take into account the half of the site which remains unexcavated. Bone may have been deposited outside the hillfort, and even in the ditches, only a small proportion of which were excavated (Cunliffe & Poole 1991: 13). However, it is also possible that the total bone recovered represents a large proportion of the amount of meat eaten; many societies eat very little meat, although the importance they attach to it may be disproportionate (as discussed in section 1.3.4). For example, !Kung communities consume only 15% of their calories from meat, the inhabitants of medieval England spent half of the year (ostensibly) fasting from meat (Fiddes 1991: 22-29) and the Masai only kill cattle through sacrifice, and even then the meat can only be eaten by warriors (Lincoln 1981).

Small scale 'household' eating could be implied by the small size of the meat parts produced at Danebury, if direct deposition into pits after consumption is assumed (see below). This possibility is strengthened by the different patterning of sheep to ox/pig bones in pits given by other authors concerning Iron Age sites, where sheep appear to have been roasted on the bone or subject to more rapid deposition (Coy 1987), or cooked and eaten more frequently (Grant 2002). Coy's interpretation rested on the greater incidence of 'ivoried' sheep bone, the cause of which is debated and has otherwise been given as evidence for roasting and for rapid deposition. She rightly states that, whatever the precise reason for the bone becoming 'ivoried', something different had happened to the sheep bone to cause this effect (Coy

1987: 46). Thus it seems that cattle and pig may, perhaps inevitably given their larger size, have been more divided either for sharing at larger gatherings or for distribution to more people. This hypothesis is further discussed in section 6.2.4.

A mixed farming economy was practised (Cunliffe 1995), and grain could have provided a significant proportion of the diet. Meat may therefore have been infrequently consumed, and/or eaten in small parts, since the relatively small size of meat portions suggests that when meat was eaten, it was often not in large quantities.

6.1.3.2 Intensity of use

The high proportion of complete long bones at Danebury suggests that marrow extraction was not a common practice. However, the bones that were fragmentary constitute a significant number, and further analysis of fracture patterns and fragment sizes would clarify the extent of pre- and post-depositional breakage (Vehik 1977; White 1992; Outram 2001). Unfortunately there was not time to perform such analyses on any scale for this project, though it would form a useful focus for further work. The very low proportion of bones that were recognised as being chopped suggests that deliberate peri-mortem bone fracture was relatively rare.

The types of tool used could have exerted a strong influence on the types of butchery marks made. Chopping blunts iron knives and cleavers more quickly than modern steel ones, and if flint tools had been used in the early phases, these are more difficult to use in chopping activities, requiring a hammerstone (appendix 3). However, there is no evidence of a higher proportion of marks resulting from chopping in the late phase, which suggests that tool types did not alter. Both flint and iron tools performed the range of butchery tasks that were thought to have been performed at Danebury, suggesting that the influence of technology on the majority of the butchery techniques practised at Danebury was probably limited. No butchery at Danebury appears to have been performed with a saw - the main difference between modern and Iron Age butchery methods - and this most likely has a technological basis, since iron saws would blunt very quickly. Sawing marks were found on some worked bone though (Cunliffe & Poole 1991: 368), suggesting that bone working tools differed from butchery tools, possibly again indicating specialisation of craft activities.

Carcass divisions in the early phase produce larger joints of meat than in later phases. The incidence of butchered bone is constant through phases, but the variety of marks is greater in

the later phase, with more cuts to separate bone into smaller parts, and more evidence of chopping to split the bone. If we assume that sample size biases have not overly biased the results (an admittedly large assumption), it may be that in the earlier Iron Age meat was cooked in larger parts. This must remain an extremely tentative conclusion at this stage, which could be addressed with further work on cooking techniques and pottery sizes (section 7.3.1).

In summary, it is likely that meat was cooked by boiling in relatively small parts, and that preservation activity increased in the later Iron Age, although breakage of bone for marrow was still relatively uncommon. Consumption of large quantities of meat was probably not common, although it may have occurred more frequently in the earlier phases.

6.2 INTRA-SITE DEPOSITIONAL ACTIVITY

Pivotal to the understanding of any site using animal bone remains are issues of taphonomy. Here it has been argued (chapter 2) that there is little in the way of bias from the processes of gnawing, erosion and inter-site trading. In addition, Maltby concluded that although there is some evidence that preservation differs between features and by burial depth, this does not result in an overall bias in Iron Age assemblages in Wessex (Maltby 1996: 19). Hill cites Balksbury and Winnall Down as two sites where bone elements of more robust nature are found in the top layers of pits (Hill 1995a). This is not so at Danebury, where, for example, the top two layers of pit 23 contained, together with six robust bone elements, three cattle vertebrae and a whole sheep pelvis, bones that are not especially robust. Thus it would be expected that bones were deposited quickly after use, or were safeguarded from scavengers and weathering by storage or protection.

The analysis of bone elements in individual layers at Danebury showed that in each layer, bones originated from individuals of differing species and ages, and that the bones did not come originally from particular parts of the skeleton. Other pit layers may differ; Grant (2002) has shown that in pit 2269 five of ten layer deposits were coherent, often containing the remains of single animals. Further analysis is required to determine the extent of coherent deposits, but for the Danebury pits investigated in this thesis, and some of the layers in pit 2269, the scattered nature of bone elements suggests that parts of the carcass were moved around between butchery, consumption and deposition, Schiffer's 'secondary refuse' (Schiffer 1972). 'Primary refuse', defined as that discarded at its location of use, may apply to special deposits. Most special deposits appear to have been carefully placed on the

base of pits or covered by a capping of clean material (Grant 1984a; this study, part 5.2.1.1). If we regard special deposits as offerings (Cunliffe 1992), their area of use was the pit, and therefore they could be described as primary deposits. They will therefore represent different processes from the remainder of the bone, which is often found with special deposits, but is more likely to be secondary refuse.

6.2.1 Identifying ritual deposits

There are many difficulties associated with identifying the differences between 'special' and 'mundane' deposits. Feature type could be regarded as an indicator, with special deposits found in pits (Hill 1996b). Any material in postholes could be from natural accumulation as the post rotted, and material in gullies from silting or after disuse. Hill raised the possibility that all pit deposits were in a way special, by virtue of their survival (see section 1.3.4).

Building upon Wait's (1985) idea that the absence of enclosure ditches (common in earlier prehistoric periods and some Iron Age sites) led to the deposition of humans (and other special items) in pits, Fitzpatrick suggests that whilst special deposits were found in pits, feasting remains were deposited elsewhere (Fitzpatrick 1997). He backs this interpretation up by noting the unabraded nature of pottery sherds in pits, indicating that they were primary deposits that had not been disturbed. Sillar (1996) describes a similar activity in the Andes, where storage pits, once relieved of their produce, are used as receptacles for dead bodies, in this case to 'preserve' the spirit, although the same cannot necessarily be said of the Iron Age deposits. The storage/ preservation of sustenance and human remains is proposed for both places. However, the remains of butchered animal bones within the pits at Danebury suggest that these remains were certainly eaten, although they may of course represent activities other than 'everyday' consumption.

However, the nature of the deposits from pits and layers at Danebury suggests that there was not a considerable difference between the contents or methods of bone deposition in pits and occupation layers, especially in the later phases. Thus Bradley's (1985) suggestion that we 'rank' deposits on a ritual scale, depending on whether the components are found in domestic rubbish, is flawed. There is no means of identifying where exactly domestic rubbish is to be found, nor indeed what domestic rubbish is, or even whether any rubbish is purely domestic. There is also the question of re-use and recycling, which would, for animal bone, result in the obliteration of bone remains when fully exploited for marrow, grease and raw material for working. This obviously had not happened to a large number of bones at

Danebury, indicating that bone had not been fully exploited, and again no difference was recognised in bone fragmentation between pits and layers. This suggests that, whatever the cause of the apparent absence of full exploitation of the bone at Danebury (taste, time constraints or ritualised activities such as conspicuous consumption), the pits and layers were largely equal.

Unusual sites that have an undisputedly different function might be interpreted as of a ritual nature. For example, the 'temple' on Hayling Island contains 'unusual' species proportions, in this case many pig and sheep bones, and no cattle (Downey *et al.* 1979: 7). At most sites dating to the Iron Age, cattle are the second best represented species by fragment count (Maltby 1981; Grant 1984b). The absence of ox bones was interpreted by the excavators of the Hayling Island site as evidence for prohibition on ox sacrifice. There is no obvious evidence of the avoidance of cattle bones in particular areas or deposits at Danebury, even special deposits. However, Hayling Island is geographically separate from the Wessex Iron Age settlement sites, and differences could be regional (see section 1.3.1.2). It is also a different structure type to the majority of buildings at Danebury, which were roundhouses, and is more similar to the central 'shrine' at Danebury. However, no bones were recovered from the latter. It could be that different activities took place in different buildings, without them necessarily having a distinct ritual nature.

Particular deposits in features, in addition to features themselves and whole sites, have been regarded as ritual in origin. Some debate has taken place over what constitutes such a 'special' deposit, especially those found with so-called ordinary refuse (see section 1.3.4), and how they were created. Maltby (1985) has suggested that articulated skeletons are the remains of diseased animals that were deposited whole into pits, but other authors have convincingly argued that this is unlikely, since species representation of special deposits is different to that of the site(s) as a whole (for example, Hambledon 1998: 59).

However, the burial of a cow that had died whilst birthing at Gussage all Saints (Harcourt 1979), suggests that some at least of the animals that make up the special deposits may have died during unusual situations, which made them perceived as unsuitable for eating; Fiddes (1991: 84) has noted a widespread taboo on eating animals not deliberately slaughtered. Jones (1977: 58) provides an alternative view, suggesting that the pits at Winklebury acted as 'unintentional traps for animals'. However, a photograph of pit 616 indicates that the pit deposits at Winklebury also contained a range of other bone elements, like Danebury; this particular pit was extremely densely filled, and contained apparently complete animal bones

with a high proportion of mandibles. Jones' explanation is not consistent with the evidence for Danebury, where if pits had been left open so that animals could fall in, the bone would not have been in such good condition. Feasting activity was suggested for parts that were articulated but carry butchery marks from filleting (Harcourt 1979: 150), which is possible, since even bones without cut marks may have been carefully butchered. Armour-Chelu (1991) also suggests that articulated animal bones at Maiden Castle were the remains of celebratory event or special meals. This explanation is entirely feasible, but does not explain some of the more unusual juxtapositions of articulated bone with other skeletons and artefacts, described by Grant (1984c).

As discussed in section 1.3.4, Wait sees all special deposits as animals that had been exploited in an unusual manner (Wait 1985: 151), stating that depositing articulated (and, he assumes, fleshed) bones is uneconomic, and that it is hard to imagine these were not religious/ritual in nature. We have already discussed the possibility that the meat had been removed from the bone, and that the breakage of bone for marrow extraction appears to have been limited in extent for both articulated and disarticulated bones. He goes on to say that ritual is spatially segregated (Wait 1985: 242). However, at Danebury there is no spatial segregation of special deposits, which occur across the site in roughly equal proportions to those of the pits. Human bones, conversely, are not found in the areas of densest pit concentration in the early phase, instead being concentrated at the peripheries (see section 1.3.3). In other phases they have a roughly equal distribution. So it may be that human bone deposition was focussed in certain places in the early period, and human bones and special animal deposits were not normally deposited, or regarded, in similar ways.

Obvious 'special' deposits are those animal bones and artefacts found as grave goods. Individual graves in Iron Age cemeteries in East Yorkshire often contain the remains of animal parts (Stead 1991). It is uncertain whether these parts could represent habitual meat 'cuts', or a specific funerary rite either as a sacrifice or a funerary meal. The parts include whole pig forelimbs and so do not correlate with the butchery patterns from Danebury, which show disarticulation at all joints on the leg. Whole forelimbs have, however, been found as special deposits, which could represent a particular ritual activity rather than mirroring animal disarticulation for consumption. However, Hampshire and East Yorkshire were spatially and culturally separate in the Iron Age, so any direct comparison is difficult to sustain.

Poole (2000: 7) questions why individual bones are seen as less 'special' than articulated parts or head deposits. Her premise, like that of Hill (1995a), is that the bones in the pits are unusual in the fact of their survival, and that they should be compared to structured or articulated deposits. She also puts forward the possibility that single bones could represent other parts of the animal, 'a long bone for a leg, a skull for the whole animal' (Poole 2000: 8). Other authors have stressed the symbolic aspects of meat eating, which could have some influence on the manner in which bones were treated. The killing involved in procuring meat makes it a symbolically loaded occupation: 'in some societies, all slaughter is sacrifice, and can only take place within the context of the sacred' (Sherratt 1991: 62). Thus the remains of this activity are 'dangerous', and need to be safely disposed of, which may preclude dumping the remains on the fields. If one bone was regarded as representative of one animal, the scattering of the other parts of the carcass in individual pit layers requires less explanation; one bone (one animal) had been safely disposed of, so the remainder of the carcass becomes impotent.

It is also possible that a single bone or bone part may be representative of a butchery unit, for example a distal humerus may represent a shoulder of meat, and this might explain the scattered parts of the carcass found in pit layers, for example in pit 507, layer 3. Here, despite a relatively large number of bone fragments recovered, there are no conjoining parts. Thus while a whole animal may have been consumed, only part of the carcass was deposited as representative of the rest, and the missing parts may have been discarded in other symbolically insignificant locations.

This other consumption waste may have been mixed into the soil in fields as fertiliser, although there has been no fieldwalking done in the area around Danebury so it is impossible to tell from the pottery recovery if this was the case. Bone element representation does not support this interpretation, as there are no bone parts that are conspicuously absent from the hillfort assemblages (see Grant 1984: 462). However, the deposition of bone elements in fields may have been random. Bones not quickly deposited in pits may have been burned for fuel or destroyed by dogs, although the good condition of bone from occupation layers suggests much of the bone was deposited in a relatively protected environment.

By comparing types of deposit it may be possible to rank deposits according to certain criteria, for example the integrity of deposit or associations with other finds. This could then denote degrees of ritual (see Brück 1999), rather than pigeonholing deposits as ritual or secular, the separation of which is in any case irrelevant for most societies. When individual

layer assemblages in pits were investigated, there did not appear to be any particularly unusual deposits that could be denoted as of a different ritual status. The only positive distinction was that some layers (for example the middle layers in pit 23) contained a particularly large quantity of animal bone, and this was also where the special deposits of human bones and pottery were found. However, these large deposits also contained large quantities of other categories of find, and may simply denote a bigger deposition episode.

In summary, there is no evidence to suggest that at Danebury the layer deposits were any less 'special' than the majority of pit deposits, nor that there was strict structuring of pit deposits which could represent different degrees of ritual within pits. Pits or individual deposits do not seem to be restricted to certain species that could indicate ritual activity, while 'special deposits' within pit layers are not segregated to certain parts of the site. Bone elements believed to have been ritual in nature when used as grave goods are not directly comparable to deposits at Danebury, which originate from a demonstrably different culture. Symbolic interpretation of the scattered nature of bone deposits in pits includes metonymic explanations, whereby a single bone is representative of an animal or meat part. Such explanations, although tempting given the body of evidence that suggests that some deposits in the Iron Age were symbolically meaningful (section 1.3.4), are tenuous. If the deposits did hold meanings, they are not visible in this analysis, and do not appear to differ between feature type or, in most cases, between sites.

6.2.2 Zoning of areas

Many writers have stressed the tendency of human societies to segregate space (e.g. Lefebvre (1992: 89), Hodder (1982) and Parker-Pearson (1996)). Parker-Pearson has highlighted the possibility that activities were explicitly zoned within Iron Age buildings. Unfortunately the circular structures at Danebury rarely have surviving occupation deposits with which to test this theory. Those that did exist and could be investigated consisted of only a few deposits (section 5.2.3) and did not show substantially different bone assemblages.

Other forms of segregated space are 'functional' or 'use' areas. The identification of these is dependent on the activity being performed in the same location, resulting in characteristic patterns of deposition. Many authors have contemplated whether use and discard areas are likely to coincide, with the majority rejecting the hypothesis. Indeed, 'the potentially great inconsistency between butchering locality and locus of consumption' is noted by Gilbert &

Singer (1982: 26), while Grantham (1995) concludes that for an agricultural village community, even when consumption of certain foods occurs separately, disposal of is likely to merge the remains. Other writers consider site formation processes to be the main force influencing the spatial distribution of animal bone (Dooney 1997; Wilson 1996). The scattered nature of the bone deposits at Danebury does suggest that some time had elapsed between butchery and the disposal of bone, during which time the bone was distributed by human agency (chapter 5). Taphonomic processes appear to be less important (see below).

6.2.3 Evidence of area segregation at Danebury

Cunliffe's functional areas, illustrated in figure 2.1, are based mainly on the sub-surface features that could be recognised. Therefore the area of housing on the periphery is informed purely by the survival in these areas of gullies and postholes indicative of buildings. Differential preservation may well have a part to play in this patterning, as the houses in the periphery were cut into or covered by stratified layers beneath or behind the ramparts. It is likely that more circular structures existed in the centre of the site but that their remains have been truncated (Cunliffe 1984a: 43). Area differentiation is based, to an extent, on pit distribution and surviving structures, as well as roads and computer identified four-post structures. This means that Cunliffe's divisions may at least in part reflect the survival of features. The distribution of animal bone parts does not differ according to proposed functional area; in fact the distributions of cattle and pig bones do not appear to show any segregation of activities at all. Primary, secondary and tertiary butchery waste is found across the site in direct proportion to the density of pits, confirming Cunliffe's statement that there was no 'positive patterning' across the site (Cunliffe 1995: 42). There is also a lack of evidence for distribution patterns based on species or age, with the exception of a number of pits in the early phase that contained large quantities of disarticulated cattle bone. These were found outside the main area of pits, in similar areas to those where bird bones were found (but separate to those containing human part-skeletons (Walker 1984: 458). These might represent the remains of special events where large numbers of cattle were consumed, or at least deposited.

Wilson's (1996) analysis and interpretation of spatial distribution of species on Iron Age sites was outlined in section 1.3.3. The three main factors he stated as contributing to movement of bone across site are reiterated here:

a) Canine activity and dispersal, which transports bigger, meatier bones a greater distance from their origin, leaving smaller bones at the place of deposition;
b) Butchery practice, which will leave bone from small animals (assumed to be cooked on the bone) at the place of cooking, at the focus of habitation of the site, and that from (defleshed) larger animals at the periphery of activity;
c) Rubbish disposal strategies, which involve the movement of larger pieces of bone (and thus bone from larger animals) from the centre to the periphery of occupation, as areas are cleaned of hazardous or odious waste. Smaller pieces (under 9cm) are left behind.

As previously stated, the relevance of many of these considerations to this investigation is tenuous. The theory was developed from data from Mingies Ditch, Oxfordshire, where material from ditches and gullies was analysed, not occupation layers and pits like at Danebury. The occupation area is of a very different layout, and Wilson unconvincingly used later historic periods in his analysis.

The basic premise, that bones from the butchery of larger animals were deposited (or dragged by scavengers) outside the main area of use, does not explain the bone distribution at Danebury. The presence of more cattle and horse bones at the periphery of settlements does not fit with the large deposits of cattle bones in the southern half of the sample area at Danebury in the early phase. In the early Iron Age, this area provided more evidence for housing, and therefore presumably consumption and other activity (Cunliffe 1995: 25); it is not the periphery of the settlement area. The ditch deposits, which were not extensively excavated, may contain a greater proportion of cattle and horse bones, but only further excavation can clarify this point. Evidence at Danebury for canine destruction of bone, another agency in Wilson's model, is also very limited.

It is possible that a few pits in the southern sector of the site in the early period contained the remains of activities involving the consumption of large quantities of meat. Although this area contained relatively few pits, it does contain substantial quantities of cattle bones in some pits, potentially indicating that this area was dedicated for butchery and/or feasting activities, as well as housing.

There is no evidence for differential status between areas of the hillfort as might have been revealed by the separation of 'waste' and 'meat' bones in certain places, or of particular bones, for example the cranium, in certain places - perhaps around the central ('ritual') structure. Instead the bone elements appear to have been deposited extremely evenly. When

individual pits were examined in more detail there did not appear to be any difference in particular deposits within the pits that might have suggested that families or households of different status were depositing separately into pits. Cunliffe's hierarchical society, should it have existed, is not evident from the deposits. Several options are available to explain this: the hillfort may only have been occupied by a single layer of a hierarchical society; the social divisions occurring in the population had little or no impact on eating habits; food was not an indicator of status. Ethnographic and historical data suggest that this is unlikely, but it would comply with Sharples' (1991) theory of a hillfort building elite that controlled people but made an outward show of egalitarianism; this is explored more fully below. It is also possible that status divisions were reflected in food consumption, but these were obliterated by common disposal in the same places.

Chaff, grain and weed were found in similar proportions throughout pit layers at Danebury, which suggested that a range of activities was carried out across the hillfort site (Jones 1984: 489). No distinctions in individual features were identified that might have indicated the disposal of remains from different activities. Although Grant's (2002) analysis identified some coherent deposits within a pit at Danebury, the analysis of pits for this project led to similar conclusions as those made by Jones. The only difference that could be identified between individual deposits was the density of bone parts. This could represent different scales of consumption prior to deposition, but the difficulty of ascertaining the length of time represented by a particular layer in a pit makes it very hard to draw meaningful conclusions from bone densities. The number of bone fragments per cubic metre of each layer would provide a simplified means by which to compare fills, a methodology used successfully by Rob Sayer (pers. comm.). This would assume an even weathering of the pit, and is also beyond the scope of this thesis.

When bone from a small sample of layers and pits was compared, a greater number of potentially conjoining bone fragments was found in occupation deposits than in pit layers (section 5.2.4). Deposits from house make-up layers may therefore be more directly formed, the activities of butchery, consumption and deposition occurring in closer proximity to each other. Butchery may even have been performed in the circular structures. However, this analysis was extremely limited in scale, and these results cannot be seen as conclusive.

The mixture in pit layers of a range of bones from different species and of individuals of different ages, suggests that in both pits and layers the bones had been widely distributed rather than become mingled prior to or during deposition, or that meals consisted of a variety

of meat from a number of different animals. The bones that were not in a given context must have been taken off site, destroyed, or deposited in a different pit or layer. The gathering of many people or groups, each contributing some food, is a tempting explanation for the scattered nature of animal bone, and would result in some very large deposits. However, the same evidence could also be used to argue a more familiar situation, where individual animals were divided up between different people or groups, or perhaps small parts bought or traded from suppliers, prior to cooking and consumption.

Alternatively, curation of parts would have isolated the bones for a length of time before deposition, suitably long for the other bones in the skeleton to have been deposited, or for them to have been middened or deposited in a separate place, explaining the scattered nature of bone parts. The good overall preservation of animal bone suggests they had not been left in the open or on floor surfaces for any length of time. However, Walker suggests that the small size of human cranial fragments implies some attrition prior to disposal (Walker 1984: 454), in which case, some disturbance of the bone, or secondary deposition is inferred, although not necessarily for animal bone. The low proportion of eroded or gnawed bone could be explained by protecting middens from scavengers and weather conditions. However, if this were the case one would expect the pit to be filled at once, with a homogenous deposit, rather than in a series of episodes. If several pits were open at any one time, the bones may have been spread between the pits. In this case, the whole site might consist of 'structured' acts of deposition. Put simply, there might be no 'ordinary' deposits.

6.2.4 Possible deposition scenarios

'Plausible results may be expected only from reconstructing the history of individual features and their fills as fully as possible' (Jerem 1998: 331).

Developing the possible interpretations presented above, three possible scenarios for bone deposition are presented here. They aim to explain the scattered nature of cattle, pig and sheep bone elements in pits: even when the bones deposited appear to have been the waste from consumption of a large quantity of meat, they have often been shown to have come from several individuals of different ages. Rapid deposition of many parts in a short space of time, immediate deposition of bone into pits after consumption, and curation are the three most compelling explanations.

a) Rapid, periodic deposition

At Danebury, half of the excavated pits had been filled 'rapidly or deliberately' (Cunliffe & Poole 2000a: 30). The proportion was considerably higher at some of the Danebury Environs sites: 61% at Nettlebank Copse and 87% at Suddern Farm (Cunliffe & Poole 2000b: 24; Cunliffe & Poole 2000a: 30).

Hill concluded that rapid periods of intense depositional activity was the most likely way that Iron Age pit deposits formed. However, he did not look in detail at individual bone elements, or ageing; these have shown that the majority of the deposits was incoherent. He also did not consider Danebury in detail, and notes that Winklebury and Danebury had a higher proportion of natural silting episodes in pit deposits than other Iron Age sites such as Winnall Down (Hill 1995a: 49). This suggests that hillfort sites had more sporadic filling episodes than other settlements, and possibly less dense occupation. Grant has shown that a sample pit from Danebury was probably filled in 18 months (Grant 2002); it is possible that pits at Danebury were filled more slowly than at other sites.

If pit deposits were made periodically, but contained remains from the consumption of large quantities of meat, one possibility is that the mode of consumption may have been feasting. The scattered nature of pit deposits suggests that whole animals were not being cooked and eaten at once, or if they were, not deposited into a single pit. Instead, feasting may have involved each participant accepting (or bringing) a meat part, perhaps related to their status. Alternatively, it may have been that individual meat parts had no particular status, and that the parts simply reflect what was available. The deposits that included only small amounts of bone therefore must represent erosion or deliberate make-up layers, where bone became mixed in accidentally. The contextual information for layers in pit 23 does not contradict this explanation (section 5.2.1.1), but the bone elements in the smaller assemblages (layers 1, 2 and 8) are not eroded or gnawed. Therefore it is unlikely that small bone deposits were accidentally caught up in fill deposits.

The 'missing' bone elements from particular layers may have been deposited in other pits. At Danebury, many pits may have been open at once, seemingly with more pits filled per year of occupation in the early phases than the late. At Winnall Down and Winklebury, Hill (1995a: 3) calculated that only one pit per year was open, although since none of these sites were fully excavated the exact numbers are not known. At Suddern Farm, only 1.3 pits was filled per year, an estimate based on the proportion of the site excavated (a conservative

estimate of 10%) and multiplied by the number of pits in this area (78), then dividing by the number of years the site was in use (580, if the middle abandonment phases are excluded). This suggests that at Suddern Farm far fewer pits would have been open than in the early Danebury phases, but similar numbers to those of the late phase at Danebury. In the early period at Danebury, therefore, bones from one animal may mainly have been deposited in several pits, but at other sites with a smaller proportion of open pits, deposition cannot have followed this pattern, and absent bones must have been deposited elsewhere.

This scenario assumes that the bones represent the total quantity of meat eaten at the hillfort, which of course may not be the case. As Poole (2000) says, each bone might represent an animal, from the hillfort or from outside settlements. In this eventuality, where are the other remains? They might be at other sites or have been differently disposed of. The less dense bones and elements that were used in bone working are less frequent overall at Danebury (Grant 1991a: 453), and this may also partly account for the apparent scattered nature of bone elements in individual deposits. While this may be the case for some deposits (pit 23, layer 5 for instance, illustrated in figure 5.3), many other deposits show a mixture of fragile and robust elements (for example pit 23, layer 4 shown in figure 5.2), suggesting that taphonomy is not the only factor to take into consideration.

If all bones in pits were 'special', as proposed by Hill (1995a) and Poole (2000), this would mean that pits and layers, which showed few differences in bone element composition, would both have had this special status, and therefore that all consumption at Danebury was special in nature. Some differences are apparent between Danebury and Suddern Farm, but a similar pattern of scattered bone elements is evident in most of the investigated pit layers at Suddern Farm. If Danebury was special, then so was Suddern Farm. It is perhaps more likely that, instead of being 'special' in the now accepted sense, the bone that survived did originate from a different type of activity to everyday consumption. It is perfectly plausible that all sites in Wessex in the Iron Age had a similar consumption pattern, and that all meat eating took place in the context of feasting or, at least, communal eating.

b) Small-scale eating and depositional actions

If meat consumption was small scale, over a period of time deposits would be made directly into pits as bones were stripped of meat. The extremely good condition of the bone suggests that pits must have been covered and quickly filled to explain the absence of gnawing and weathering effects. Rain and freezing temperatures may still have affected the condition of

the uppermost bones, although if layers were regularly ‘capped’ with make-up layers and/or special deposits, these effects would be limited. This manner of deposition could reflect periods of relative abundance and scarcity that might be expected during the changing seasons, explaining why some layers contained a large quantity of bones and why in others they were rare.

In this scenario, many pits must have been open at any one time, and deposition not restricted to one pit. However, in the later periods at Danebury and at the smaller sites where fewer pits were found, there may not have been more than one pit open at any one time. The missing bones therefore might be in layers or destroyed, although again this raises the question of why some bones entered pit deposits and others did not. The unusual nature of some of the pit deposits at Danebury (Grant 1984c) suggests that it is likely that other pit deposits may have also had some meaning. However, evidence from the layers, which have not been found to contain special deposits, suggests that there was little difference between most pit layers and occupation layers.

A large centralised market or redistribution centre, where meat could be obtained on the bone would explain the apparently random range of bone elements present. A scenario can be envisaged whereby consumers would have purchased or traded for different meat joints depending on the occasion, and deposits would include a range of remains from different events. Unfortunately, this type of activity can be hard to distinguish from feasting activity, where participants take away with them the meat share they have been awarded (Gilbert & Singer 1982: 26-28).

c) Curation

If all bone was first deposited in a protected environment, this means that the bone present (excepting the more fragile parts and elements used for bone working) is the total that was consumed, and would suggest that small quantities were eaten. This scenario fits the bone element representation evidence for the site as a whole, which suggests there was no trade of particular meat parts off site, but that the pattern of bone representation was explained by taphonomic factors. As mentioned before, the stratigraphic layers in pits suggest sporadic fill patterns, not a periodic massive dumping of waste. It is possible that middened bone and pottery fragments were used to form make up layers between special deposits, possibly at particular times of the year, rather than using midden material as a means by which to fill a pit as quickly as possible. It is also possible that midden material had been specially reserved

for deposition, if perhaps it held some symbolic value (as suggested by Sherratt 1991 and Hill 1995a), and therefore represented only a small part of the meat actually consumed. However, there does not appear to be any patterning of species or bone elements that might indicate any difference to 'ordinary' bone from consumption.

Stopp, in her (1999) investigation of pit fills at late Iron Age Basel-Gasfabrik (Switzerland), suggested that there was no difference between dark earth (occupation) deposits and other fill types, except that bone was more weathered in the occupation deposits. She suggests curation of these bones from the low numbers of matchable fragments, and protected deposition areas from the low incidence of gnawing, although she does not indicate where bone may have been protected.

It is also possible that different groups filled pits in different areas, so only one pit may have been available for filling for each of these sub-communities. The relevant community might have formed each deliberate layer by importing curated bone (perhaps one from each animal killed since the last deposit). A different bone would have had to have been chosen each time in order to create the scattering seen in deposits, which seems unlikely. The different provenances of grain suggests that crop processing waste from more than one site was represented at Danebury (Jones 1995), and this fits well with Hill and Sharples' suggestions that hillforts were communal areas, where different communities gathered, and to which they brought provisions.

Conclusions

For each of these three possible scenarios, the special deposits of articulated remains or skulls might have been deposited on different occasions to the rest of the fills. The bones found *with* special deposits are dissimilar to those *from* special deposits in two basic respects. They are seldom found with their conjoining elements and they sometimes have chop and filleting marks. There are seldom assemblages that contain all the bone elements that might be found in a special deposit, such as an articulated limb, or a single individual, and it is perhaps more likely that they had been stripped of meat, although this cannot be proven. It seems that special deposits have very little in common with the remainder of the animal bone, and were probably a part of a very different activity to the majority of the bone deposits.

The bones found with special deposits are not noticeably different to those in other pit layers (bearing in mind that any organic special deposits might since have vanished), although in pit 23, layer 4, which was in proximity to a human bone, contained more 'meaty' bone. Both Hill (1995b) and Hambledon (1998) mention a possible association with human bone; both concluded that deposits containing human remains were different to those without. Human bone might be accompanied by remains from ceremonial consumption.

The human skeletal evidence represents only a small percentage of the population that is proposed to have lived there (Walker 1984: 472), and much of it shows pathologies and evidence of violence. Hooper (1984) suggests sword cuts were common, possibly indicating that these bodies were of those who had died an unusual or violent death, further adding to the impression that pit deposits were not mundane in origin. Sherratt argues that the remains from some ritual activities require careful disposal (Sherratt 1991: 50), possibly by fire, although burial would also be a possible means. In some societies specific associations between human individuals and animal species are made (Ingold 1988). However, there is a possibility that the association with human bones is not as symbolically loaded as we might expect; Ingold (1988) and Tapper (1988) both describe other societies where the distinction between animals and humans is blurred. Such assumptions have some validity in the context of monumental enclosures of the Neolithic, such as Windmill Hill (Pollard 1995).

The simplest and most familiar scenario is that of small-scale consumption, a model closest to our own consumption patterns. It is certainly plausible, and accounts neatly for the differences in bone density between deposits. However, it seems unlikely that each time a bone was discarded the pit covering was removed, the bone was thrown in and the pit re-covered, without bones suffering any obvious attrition. Experimental work on the effects of exposure on bone could clarify the possibility that this occurred. Nicholson (1998) has addressed the issue, but the bones she studied had been buried, not left on the ground surface. This model would, however, account for the apparently coherent deposits identified in one pit by Grant (2002), as remains of discrete episodes of meat eating and/or deposition. More unlikely is large-scale curation of bones, which would have been stored safely before disposal, in relatively small quantities, into pits. The process of redeposition would have fragmented the assemblage, accounting for the scattered nature of bone elements in deposits, but the same issue applies as to the previous explanation – why is there so little evidence of attrition? And where would the bones have been stored?

A more likely scenario than curation of parts, in my opinion, is that the deposits were created by many different groups, possibly including some from outside the hillfort, whose food remains became mingled and deposited in pits. This would explain the scattered nature of bone elements, the very dense nature of some deposits and the presence of plant remains from many different areas outside Danebury. Consumption could have been communal, providing an opportunity for communities to come together for other (ritual?) activities, such as the placement of special deposits or human bone. However, it is difficult to justify the presence of bones with little meat value, such as phalanges and metapodials, which are found throughout the deposits, as belonging to food portions brought for events. The large numbers of bone in some deposits are as easily explained by periodic large-scale meat consumption in a society that normally ate small portions (scenario b). Therefore, small-scale consumption and depositional practice is presented here as the most likely model for meat eating and bone disposal at Danebury.

6.3 INTER-SITE CONSUMPTION ACTIVITY

For many of the sites used here as comparisons, detailed butchery records have not been published, and so some comments must be taken at face value for the sites not investigated at first hand by the present author. Thus where writers have noted that certain types of butchery are rare, it is not possible to know how their definition of rare matches my own. Other discrepancies may arise from a different researcher's interpretation of marks, or perception of similarities or regular sizes. For this reason the discussions of the butchery at Old Down Farm (Davies 1994), Lain's Farm (Coy 1991) and Maiden Castle (Armour-Chelu 1991) must be treated with caution.

The general similarities in butchery techniques in the Iron Age have been well documented, with the noted predominance of disarticulation and the use of knives (Maltby 1996; Wilson 1978: 120). Animal husbandry methods for Iron Age chalk land sites are also often similar (section 1.3.2). This discussion attempts to isolate the differences between sites that are only revealed during detailed analysis of butchery and deposition methods. The scale of meat consumption can be assessed using various means. The size of the animal, size that it was cut into and extent of filleting of meat from the carcass are used to provide an idea of the relative scale of meat consumption at a selection of sites in Wessex. The intensity of use of animals can also be investigated by assessing how much of the carcass was utilised, including the parts where relatively little sustenance can be found, such as the head and feet, and the breakage of bones for marrow extraction. It may be that sites where there is evidence

of more intensive use of the carcass, such as splitting of bones, were of lower status, and could not afford to ignore this food resource. The reasons why marrow was discarded instead of used could include dislike of marrow, a lack of knowledge or ability to extract it efficiently, or a taboo on its consumption.

Maltby (1995) provides information on a large range of Iron Age sites in southern England. He states that Owslebury unusually provides evidence for culling of cattle at immature age, mainly for meat, and culling of sheep at their optimum meat age (Maltby 1995: 22). This suggests that the deposits at Owslebury, like those at Danebury, contain bone from animals that were mainly kept for meat, and that these two sites had a greater emphasis on meat production than smaller settlements. Grant's analysis of sheep mandibular wear stage (MWS) patterns at Danebury showed a peak at MWS 10, animals around one year old (Grant 1984b: 107). She suggested that this represented the culling of weak or surplus males, in order to strengthen the flock (analysis of the sex of the animal bones did not provide enough examples to support this hypothesis). However, in some societies young animals are desirable food (Fiddes 1991), so it is possible that the remains of very young animals, that died before they reached their optimum meat weight, suggest a high status.

The size that carcasses were cut into also provides a crude measurement of the size of parts eaten, especially when coupled with analysis of the proportion of filleting marks, which could indicate how big the meat portions were. In this thesis, it has been proposed that cattle at Balksbury had been more intensively butchered than those at Danebury, perhaps because they provided food for more people, but more likely because of different butchers at these sites. Late phase Balksbury in fact has more in common with middle phases at Danebury, where disarticulation was by far the most common butchery mark. Nettlebank Copse had an intensive butchery pattern, with relatively small bone parts, which might indicate that less meat was eaten per inhabitant at these two sites. Old Down Farm in Hampshire, is described as having similar faunal remains as Balksbury (Davies 1994), although it is not possible to say without further analysis how similar the butchery patterns were.

Some butchery descriptions simply state that meat was divided into 'regular size', sometimes without a detailed description of how this interpretation was made. This is the case for Lain's Farm, a possible banjo enclosure in Hampshire. This site dates to the 5^{th}-1^{st} centuries BC, comparable with Danebury ceramic phases 3-7, but too little was excavated to draw conclusions about differences by phase (Bellamy 1992: 73). One deposit at Lain's Farm included a length of articulated spine, which could be a special deposit or a butchery unit (or

indeed both) (Coy 1992). A length of spine with the meat still on would provide a similar amount of meat to some of the joints proposed for Danebury, such as the radius or tibia of a pig. Filleting at this site was described as rare, as is deliberate breakage of bone, so it can be suggested that disarticulation, which did occur, produced joints of meat that were roughly the same size as the bone element they were attached to. It may be that some of these butchery units were larger than Danebury, where filleting marks were relatively common, forming between a third and a fifth of the observed butchery marks. However, differences in recovery and recording approach may also account for apparent contrasts.

At Maiden Castle, Dorset, cattle parts were of regular size (Armour-Chelu 1991: 150). They are argued to have been chopped up to extract marrow and to fit into pottery vessels. Pig limb bones were under-represented, and it is suggested that there was 'more thorough processing of pig compared with other species' (Armour-Chelu 1991: 146). Neither of these patterns fit with that at Danebury, and the meat parts at Maiden Castle may have been smaller. However, occasionally large portions of meat may have been available; there were filleting marks on sheep and dog special deposits, and it was proposed that partial skeletons were the remains of celebratory special meals (Armour-Chelu 1991: 151). This compares well with Ashville but not Danebury.

Analysis in this thesis has suggested that there may have been specific deposits at Suddern Farm that resulted directly from feasting, or at least large-scale meat production, and other sites have also produced similar results. At Winnall Down, Hampshire, one early Iron Age pit contained most of the meat bearing bone elements of three oxen and two horses, with a large concentration of other bones. Bones with little meat value, including phalanges and tarsals, were not recovered from this pit. Maltby (1985: 101) suggested this pit contained the remnants of a large consumption or preservation episode. Large accumulations of meat bearing bones were also recovered at Ashville in Oxfordshire, where meat appeared to have been stripped from entire articulated limbs (Wilson 1978: 125-137), as filleting marks and gnawing were found on articulated horse and cattle limbs. This implies activities here that were distinct from those at Danebury, where articulated animal bones showed no evidence of filleting. However it may be that some butchery marks on the Danebury bones were missed (section 2.3.4). An entire horse or ox limb would provide a large quantity of meat, enough for several dozen people, and feasting activity could thus be implied, although the bones might represent butchery waste. It is likely that meat was removed prior to cooking, since cooked bone joints often disarticulate spontaneously (Boulton pers. comm.). Unfortunately the pig butchery is not as fully described by Wilson (1978: 122), so comparisons are limited.

Meat on cattle heads at Ashville was filleted in a similar manner to those in layer deposits at Danebury, suggesting that at least in some features, the use of the carcass was fairly intensive. The majority of the bone at Ashville was recovered from ditch deposits (62%), suggesting that differences in butchery between the two sites may in fact stem from the feature type; Wilson did not describe butchery from pits and ditches separately.

At a few sites, for example Winnall Down and ditch deposits at Owslebury (Maltby 1985), bones show evidence of having been split to enable marrow extraction, although there is no indication of how frequently this may have occurred. Generally, bones did not show evidence of routine marrow extraction (Maltby 1995; Coy 1992), and even where raw meat had been filleted from the bone at Maiden Castle and Winnall Down, marrow was not extracted. This suggests that at these sites, it was not an inability to extract marrow (such as would be caused by preserving meat on the bone), but a choice not to.

As a result it could be suggested that sites such as Owslebury, Ashville and Nettlebank Copse, and Winnall Down and Maiden Castle (in some deposits of disarticulated bone), were using carcasses more intensively. However, the butchery at these sites is often not described by phase, so it is difficult to say whether the intensive use of the carcass occurred in a particular time period; at Danebury deposits seem to indicate less intensive use in the early phase. Suddern Farm and Balksbury have higher proportions of butchered cattle bone, perhaps suggesting that these cattle were butchered by a different, possibly a less experienced person than the butcher(s) at Danebury, or that there was more intensive use of the carcass. However, pig bones do not show the same pattern, and some deposits at Suddern Farm suggest that feasting could have been taking place. The large amounts of cattle bones in single deposits at Suddern Farm and Winnall Down suggest that either butchery was undertaken in one place (although the largest deposit at Winnall Down does not contain phalanges or tarsals, while other, smaller, deposits do), or, more likely, that some episodes of consumption were very large. In these deposits large parts of several animals are represented, suggesting that deposition of the bones occurred relatively quickly and perhaps in the same area as slaughter.

The smaller size of many of the assemblages from other sites discussed here often did not allow for division into phases or feature types. Thus comparison with Danebury is often limited; only general conclusions are possible. However it can be stated with some confidence that the overall patterns are similar, with some deposits containing bones representative of large volumes of meat, and some containing the remains of relatively small

parts and of fully exploited bone resources (Ashville, Maiden Castle and Winnall Down). Certain sites show evidence of larger carcass divisions, such as Suddern Farm and perhaps Lain's Farm, although this may be offset, at least at Suddern Farm, by a greater incidence of filleting of meat from the bone. Intensity of use appears to be greater at some of the smaller sites (Nettlebank Copse for instance), although it is difficult to ascertain the extent by incidence of butchery, which depends to a degree on the skill of the butcher.

6.4 INTER-SITE DEPOSITIONAL ACTIVITY

The purpose of this section is to explore the nature of deposition at other sites in the Danebury region in the Iron Age, in order to compare the scale of deposits, the extent of distribution of carcass parts and possible evidence for differential use of space that could indicate area specialisation. Various aspects of spatial patterning are discussed, including evidence for zoning of activities, coherence of deposit and scattering of bone elements. Different site types with similar patterns of distribution are also examined.

Relatively few sites have been explored with regards to spatial patterning of both animal bone and other artefacts. At Winklebury hillfort in Hampshire, animal bone and pottery types were investigated spatially. No evidence of waste/ meat, nor coarse/ fineware segregation was found, and there was no association of waste or meat bone with particular pottery types as might be expected if certain meat parts and material goods held different status (Fisher 1985: 175). However, meat and waste bone definitions are not provided. Animal bone was found to be as common near four-post structures as circular buildings, and there did not appear to be a restriction of crafts (or at least artefacts associated with various crafts) to certain areas. No spatial segregation (of deposition) is therefore proposed for this site.

At Winnall Down in the middle Iron Age some spatial patterning was identified. Animal bone was found in less dense quantities the further away it was from hut groups (Maltby 1985). This suggests that deposition at this site was in some way related to the people using or living in the structures. Bones from larger animals were found on the periphery of the site, in ditch deposits. Unfortunately very few ditch deposits at Danebury have been excavated, and the nearest comparable deposits, those in quarry hollows, fell outside the area of the sample analysed for this thesis. A similar pattern of deposition to that at Winnall Down had already been suggested for Ashville in Oxfordshire, for which a functional explanation was

proposed, whereby cattle bones had been stripped of meat and deposited in bulk at the periphery of the settlement (Wilson 1978).

This type of patterning does not appear to be characteristic of deposits at Danebury, where species proportions were similar in pits and layers (Grant 1991a: 449). However, some differences are apparent in the early phase, when slight differences in butchery of cattle and pig crania in pits and layers were recognised, and fewer bird, dog and horse but more cattle bones were recovered from layers. This suggests that the size of the animal was not as important (in terms of deposition location) as the species, since cattle and horse are both large animals and their spatial distribution differs slightly. The location of the Danebury pits – in the centre or periphery - also seemed to have little impact on the bones deposited in them. Cattle and pig bones were found in direct proportion to the density of pits, with the exception of a few pits in the southern half of the site in the early phase that contained large quantities of cattle bone. However these pits were near a concentration of housing, not at the periphery, so it is suggested that in general, and admittedly without comparative data from the ditches at Danebury, larger animal bones were not deposited at the periphery.

Differences in deposition at Winnall Down were noted between deposits in the north and south areas. The highest density of material is found in the southern half, as is the case for cattle bones in the early period at Danebury. The southern area at Winnall Down was also the location of deposition for many small finds and human remains, but this is not the case at Danebury. Some deposition or activity might thus have been influenced by orientation, but the evidence is not strong. At Winnall Down, human skeletons were found outside the former enclosure, while the bodies of infants, partial skeletons and individual human bones were found inside, suggesting a degree of depositional segregation between internal and external areas (Hill 1995a: 88). There is no obvious dividing line at Danebury, except perhaps for the roads, but there is no evidence for any segregation of deposits occurring here in respect of animal bone remains.

Different types of deposits were located in different features at late Iron Age Wendens Ambo (Halstead *et al.* 1978). What was interpreted as ‘table’ refuse (bones of smaller animals) was infrequently found in pits, but was common in gullies and postholes, with many parts of the sheep skeleton represented in single features. This suggests that butchery and consumption of sheep occurred in the same location, and that sheep were consumed in one event. However, there is no indication as to how many bones per individual were recovered, nor of the ages of individuals, so again this site cannot be directly compared to Danebury. The

larger numbers of sheep bones recovered from the site overall probably contributed to the composition of individual deposits containing many parts of sheep skeletal elements.

Different deposit types at Wendens Ambo contained remains predominantly from bones of different meat value; 'kitchen' waste was found in the enclosure and 'table' waste in the hearths (Halstead *et al.* 1978) (see section 1.3.3), a pattern not found at Danebury. This might be because occupation deposits in the circular structures at Danebury were relatively rare, either due to the clearing of waste in the Iron Age, or to a later truncation of deposits. It is also possible that deposits at Danebury simply became more mixed after consumption, obscuring any differentiation, as suggested by the plant remains. While a mixture of chaff, grain and weeds were found in each deposit in the early phase at Danebury (Jones 1984: 489), at Winnall Down (as outlined above) and Suddern Farm (Campbell 2000: 52) the different pit layers contained the remains of different crop processing activities. Thus the plant remains at Danebury may have been subjected to a greater degree of mingling of material prior to or at deposition. The mixing may also have occurred in the pits if deposits resulting from a range of activities were discarded in fairly rapid succession.

At Ashville, Wilson notes the association of ox atlas and skull fragments (Wilson 1985: 119). Such association is not found at Danebury, and the difference is not due to different butchery practices at the two sites (decapitation took place on the anterior condyles of the atlas at both). This again suggests that deposits at Danebury were subject to more mixing than at other sites. Again this interpretation depends on feature type; the atlas and skull fragments may have come from layer deposits, which at Danebury seem to provide more evidence of conjoining bone elements. In addition, Wilson identified some associated lumbar ox vertebrae, also found at Danebury and interpreted as possible portions of meat (section 4.2.3).

Close investigation of individual deposits is important when attempting to ascertain the relationship between use/ activity and deposit. Some single deposits at Danebury contain many bones from sheep, although often from a range of individuals rather than almost complete animals. This might indicate small-scale consumption. The greater numbers of bone in some deposits suggest that these were periods of more intensive consumption or deposition activity. A few layers (see, for example, figure 5.3) contained many bones, from a relatively small minimum number of individuals. In such cases there are more bones per individual, perhaps indicating episodes of disposal more directly linked to butchery or consumption activities in the vicinity. Such deposits were found at Suddern Farm, where

significant numbers of cattle limb bones from relatively few individuals were found. Here episodes that could be construed as feasting are more common than at Danebury, and are larger in scale.

One pit at Lain's Farm in the early Iron Age was filled with the remains of more than seven sheep, but only a few bones from other species, suggesting that here, as at Danebury, larger parts of sheep than cattle and pig may have been consumed and/or deposited in one event (Coy 1992). Underrepresented bones in this pit show that these sheep were by no means complete, with relatively few scapulae, humeri, radii, femora and tibiae. These bones may have been destroyed by breakage to extract marrow, although Coy notes that this practice was infrequent, or they may have been deposited elsewhere. The missing bones are all those that carry a large quantity of meat, and they might have been intended for a different event to that resulting in the remains in the pit. They may even have been preserved with the meat, and deposited later. It is unlikely that the pit contained only butchery waste, as other meat bearing bone elements (e.g. the pelvis and vertebrae) were well represented, although meat may have been filleted from these parts (without marking the bone). Such obvious patterning, involving the under-representation of meat bearing bones, was not recognised at Danebury. Coy notes that the bottom fills of this pit contained only one ox mandible. Though very restricted in scale, this evidence mirrors that at Danebury where the basal layers of pits often contained few bones, mainly of low meat value.

Hill (1995a: 71) suggests that some pits at Winnall Down contain the remains from the killing and/or consumption of many animals: in one there are bones from more than 12 individuals of four species; cattle, horse, pig and dog. However, it is unclear how much of each of these animals was present; if his figures were obtained from a minimum number of individuals count, the bone elements may comprise a range from various parts of the skeleton, much like in the Danebury pits, rather than the remains of most of 12 individuals. This deposit does not necessarily represent one episode of activity apart from that of deposition, so no conclusions can be drawn from direct comparisons of the Danebury deposits investigated here.

Generally similar deposition practices (deposition in pits, the inclusion of articulated or 'special' deposits, a mixture of bone, pottery and other artefacts) are found in Iron Age hillforts, open settlements and enclosures throughout Wessex. However, some similarities are also present in the pit deposits at Danebury and other site types, for example the midden site at East Chisenbury, Wiltshire (McOmish 1996) has an extremely large, well preserved

faunal assemblage from the late Bronze Age-early Iron Age. The assemblage consists mainly of sheep bones, in common with most other Iron Age sites in southern England, but like Danebury, has a disproportionately large number of neonate and foetal lambs. There are even some articulated joints, but more commonly 'individual segments, some displaying cutmarks from butchery' (Brown *et al.* 1994: 48). Unusual, seemingly 'special' deposits include a fragment of human skull placed in the midden with pot sherds from one vessel and a fragment of sarsen placed around it (McOmish 1996: 73). The midden is not homogenous but includes prepared and compacted chalk floors and platforms without artefacts, much like the make-up layers in pit fills from Danebury.

In other respects, this assemblage is very different to the Danebury assemblages. Bagust (1996: 44) states that this huge accumulation, which is thought to have formed in under 100 years, was subject to heavy gnawing. Heavy chops into bone were recorded, suggesting marrow extraction and indicating a more intensive use of the bone, and greater exposure to the elements, than was usual at Danebury. Bagust suggests that the remains were of animals from neighbouring hillforts/ farms, and that the site possibly acted as a meeting point for feasting. The size of animals by species was varied, leading her to conclude that many different flocks, and therefore communities were represented. However the individual lenses of deposition were extremely large, and bone element analysis for each layer was not carried out. The difference in preservation and butchery at this site when compared to hillfort pit deposits, suggests that what is represented at Danebury is a different activity entirely.

It is important to note that the material at East Chisenbury is not necessarily simply waste; Parker-Pearson, quoting Collis, states that in modern Germany, farmers measured their wealth by the size of the midden in their courtyard (1996: 127). A midden the size of East Chisenbury makes a bold statement about the scale of consumption made by a community. The midden was regarded by McOmish (1996) as the remains of feasting, and he proposes that bone waste was not routinely scattered on fields, but deliberately accumulated. I would agree that, at least in the early Iron Age, Danebury deposits may not simply represent the convenient disposal of remains of everyday meals (if meat was an everyday ingredient), but could also have been a deliberate symbol of meat eating activity. However, deposition in pits renders such activity invisible, so any symbolic message must have depended on personal knowledge, as was presumably the case for any significance held by special deposits. In the late Iron Age, when it is likely that meat eating became less communal, any symbolism attached to meat consumption probably declined.

To summarise, Danebury shares many superficial aspects of its deposition pattern with a variety of sites. However, more in-depth analysis has shown that the deposits at Danebury may have been more mixed than those from smaller sites such as Suddern Farm, Wendens Ambo, Winnall Down and Ashville. Another hillfort, Winklebury, has shown an absence of zoning similar to that at Danebury; it is possible that activity patterning here and at Danebury may have been obscured by deposition practices, especially in the late phases (see section 6.5).

6.5 CHANGE OVER TIME

Cunliffe (1995: 25) proposed a change between the northern and southern halves of the site midway through the Iron Age. The area he named as the 'occupation' zone moved from the south to the north, and the area considered as 'storage', from the north to the south. Some differences in deposition of cattle bones in the early period may reflect these changes and divisions, but no evidence has been isolated from this project that suggests a segregation of areas in the late Iron Age.

As mentioned in section 6.4, some differences between species proportions and butchery patterns were evident between the early and late phases. Grant (1991a: 449) noted generally similar species proportions in layers and pits, but bird, dog and horse bones were less frequently recovered from layer deposits, and in the early phase, there was proportionately more cattle bone in layers. This is unlikely to be explained by Wilson's (1996) view that butchery of larger animals occurred on the periphery of sites, the location of most of the layers at Danebury, since large deposits of cattle bone were also found in some pits in the area of housing. Some other differences between feature type are apparent in the early phase; butchery of pig and cattle crania between pits and layers seems to differ in the early phase but not the late (section 3.2.6). Marks resulting from the filleting of meat from the head were found only in layer deposits, perhaps suggesting more intensive use of the carcass in the latter. It is therefore suggested that the material deposited in layers in the early phase was the result of less careful and/or more intensive butchery, and of smaller scale consumption than that found in pits.

Although the butchery marks are very similar overall, suggesting that the techniques of butchery did not alter significantly, this analysis has suggested that smaller carcass/meat parts were produced in the late Iron Age. The implication is that carcass processing became more intensive, with some bones possibly being split for marrow extraction. This concurs

with other analyses that document the deposition of increasing volumes of all finds, interpreted as evidence for intensification (Cunliffe 1995: 71). Grant (1991a: 450) also calculated that there were more animal bones per pit, and a higher minimum number of animals deposited per 10 years of occupation in the late than early phase (Grant 1991a: 482).

Salter and Ehrenrich (1984: 151) state that in late Iron Age central southern Britain, there was an increase in iron tool use, or at least, deposition. Butchery tool types might have altered, with metal tools perhaps replacing flint tools that may have been used in the early Iron Age for certain tasks (Young & Humphrey 1999, discussed in appendix 3). One explanation could be that in the late Iron Age, butchery had become a more high status task, but it is more likely that iron had become more commonly available. An increased number of finds of briquetage in the late Iron Age (Morris 1994) could indicate that preservation of meat by salting had become more prevalent. No direct evidence for salting meat (described in section 3.1.3) has been identified at Danebury, but meat may be salted without any impact on the bone. Meat eating, or eating large quantities of meat, may have become less frequent. This could have been due to increasing pressure on resources, suggested by Cunliffe (1991), using in part the increased proportion of sheep periodontal disease in the Iron Age recorded by Grant (1984a).

As has been already been noted (section 6.4), differences in plant remains show that in the early phase there may have been less segregation of grain processing activities; grain, chaff and weeds were similarly dispersed with a concentration in the middle-south area. In the late phase, spatial organisation of crop processing activities is suggested by the absence of charred weeds in areas of densest crop processing (Jones & Nye 1991; Jones 1995: 46).

The re-fortification of Danebury in cp6 (310-270 BC) provides a convenient dividing point for the differences that have been identified: butchery and deposition from cp1-3 have been shown to differ (albeit slightly) from those in cp7-8 - the middle phases do not provide a coherent enough pattern to identify specific differences. By the time of re-fortification, the suggested practice of eating large meat parts communally had probably reduced in scale (section 6.1.3). Differences between material deposited in pits and layers had ended, and the practice of depositing more unusual items (birds, special deposits) in the southern part of the site had ceased too. Segregation of areas for processing of crops may have been introduced, and (using the evidence from briquetage) preservation of meat may have become more widespread.

Other sites show similar patterns. At Winnall Down, bone evidence suggested that remains of larger parts of meat were deposited in the early rather than late Iron Age (Fasham 1985). Sharples (1991) provided evidence of a considerable change in occupation type from earlier periods for late Iron Age Maiden Castle, with rampart rebuilding, more organised and dense occupation and a change in material culture at the end of the second century BC. An increase in the range and form of vessels, their degree of decoration and quality of production was noted and used as evidence for regionalised styles and territories. In the late Iron Age, metalworking was apparently confined to an area near the east entrance, and a cemetery was created. This was seen as evidence for the increasing segregation of roles and activities (Shaples 1991: 263).

This sort of segregation is not apparent from the animal bone distributions at Danebury, although butchery and meat eating may have been less segregated than some other activities. The declining proportions of cattle and pigs over time at Maiden Castle (Armour-Chelu 1991: 151) might have resulted from less meat eating, as is suggested here to have happened at Danebury. Sharples interpreted the differences at Maiden Castle as originating from the increased importance of individuals: grave goods and coinage were more common; associated field systems indicated, according to Sharples, evidence for personal appropriation of previously communally owned land; and the segregation of certain areas resulted from individual control of specialist industries (see section 1.3.1). Danebury provides little of this sort of evidence, although the smaller size of meat portions is probably related to smaller groups eating together, possibly indicating fewer communal activities.

Hill also states that in the middle Iron Age all activities took place in the same locations in settlements, while by the late Iron Age, divisions occurred leading to the performance of some activities (burials, shrines, hoards and special deposits) in different locations (Hill 1995a: 125). He agrees with Sharples that the individual became more important, with the introduction of ‘sets’ of ceramic eating equipment and drinking vessels (Hill 1995a: 121). Other authors also state that public and private activities became more separate in the late Iron Age, for example, Giles and Parker-Pearson used artefact scatters from roundhouses to suggest that public consumption occurred at a distance from private housing (Giles & Parker-Pearson 1999).

It was not possible to investigate the butchery from the very latest phase at Danebury, cp 8, separately, due to the small sample of butchery marks that could be securely dated to that period. This is unfortunate, as Cunliffe (1995: 53) noted a significant change in animal

husbandry and an increase in artefact deposition in this period, and it is possible that butchery practice or meat consumption also altered. Roman influences on pottery were noted from this period (Brown 1995: 55), and it is possible that butchery and other activities also altered at this time.

In conclusion, many of the strands of this analysis provided seemingly scant evidence for specific differences over time at Danebury. However, when they are amalgamated, it is apparent that consumption and deposition practice at Danebury had changed during the Iron Age. The differences between feature type became less apparent, suggesting a greater homogenisation of activities or deposition. However, deposits from crop processing activity appear to have become more spatially structured in the late Iron Age. The southern part of the site may have held a different status to the northern in the early phase, with some very large deposits of disarticulated cattle bone, and a greater proportion of less common species in the former. Circumstantial evidence from briquetage, together with the possible decrease in the scale of meat consumption in the late phase could suggest that meat preservation became more common. The increasingly small size of meat parts and segregation of deposits is also attested at other sites in the Iron Age (for example Maiden Castle and Winnall Down).

6.6 A SPECIAL STATUS FOR DANEBURY?

'The only difference between communities, that could indicate a hierarchy during this period, is that some communities are surrounded by large defences and some are not' (Sharples 1991: 260).

The nature of differences within Danebury itself in comparison to other settlements has been explored in this chapter. As stated previously, the most informative methods of investigation are not based upon the study of single sites, but focus instead on the patterns that emerge when several sites can be compared. This allows analysis of how other sites are different to Danebury; defining the nature of difference is crucial.

Compared to Balksbury and Nettlebank Copse, Danebury does appear to be 'special', with larger meat portions and an absence of butchery on cattle and pig crania, possibly related to 'special' deposition. However, the deposits at Lain's Farm, Winnall Down and Suddern Farm are very similar to those at Danebury, with the possible exceptions of larger episodes of consumption in the late phase at Suddern Farm. Cunliffe's (2000) deduction that Suddern

Farm was high status is perhaps confirmed by this outcome. Danebury appears to be less structured spatially than Maiden Castle in the late Iron Age, possibly implying that there was less specialisation at Danebury. However, chapters 4 and 5 have shown that deposition at Danebury was spatially and probably temporally separated from the activities of butchery and consumption. It may be that inter site differences fall mainly in the realm of depositional practice.

There has been very little that has emerged from the research undertaken for this thesis that shows Danebury to be out of the ordinary. The large bone deposits in the early period suggest that Danebury may have been a centre of some sort, but the evidence does not suggest different status from other sites, except in the scale of rampart building. It may be that communal activities were simply more common in the early Iron Age. By the late Iron Age, the consumption of meat at the hillfort appears to have been scaled down, with smaller parts being deposited with less variation between areas and feature types. This contrasts with some other sites, such as Suddern Farm, where deposits remain of a similar size through to the late Iron Age, and sites such as Maiden Castle where specialisation occurs. Apart from crop processing, perhaps Danebury failed to diversify and specialise adequately, leading to its eventual abandonment, while other sites continued to function into the Roman period.