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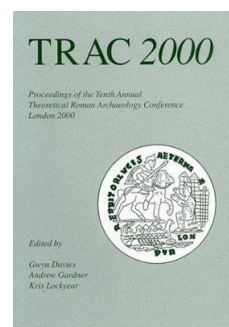
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Infants, Cemeteries and Communities in the Roman Provinces

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11.1 Introduction

It is commonly estimated that in Roman, as in other pre-industrial societies, 50% or so of individuals born were unlikely to reach maturity (Chamberlain 1997, p. 249). Under the influence of this grim statistic some historians have postulated a 'demographic determinism' for the apparent indifference towards their young children on the part of parents in past societies (Golden 1990, p. 82). The lack of attachment, the marginal position of young children in communities and the lesser degree of pollution resulting from child death have been argued to be manifested in the different burial rites performed on their behalf in many historical, archaeological and ethnographic instances. Among the most conspicuous and recurrent of these is burial in settlement space rather than in formal cemeteries (Duday *et al.* 1995; Ucko 1969, pp. 270–1). In the Roman period such differences in burial rite are explicitly documented by a small number of authors (see below). The apparent agreement between textual and archaeological evidence seems to require little further comment. However this paper re-investigates whether the archaeological evidence does fit so closely to expectations derived from texts and explores the implications for burial location as evidence for the peripheral status of infants in Roman communities.

Ancient historians have shown an increasing interest in concepts and experience of childhood, exploring for example the stages of development envisaged by medical and philosophical writers, the rites of passage that introduced the child to domestic and public life and the structural position of the child within family and society (*e.g.*, Golden 1990; Néraudau 1984, 1987; Rawson & Weaver 1997). Responses to the death of children have been exploited as part of this consideration. As well as counsels of indifference in philosophical consolations on the deaths of children, Néraudau (1984, 1987) has also shown more tender responses in other sources, as in the passage from Juvenal cited below. The *mors acerba* and *mors immatura* of the young imply a particular bitterness experienced by the deceased and those connected to them and the 'unripeness' of an untimely death. As in the early modern period (*e.g.*, Pollock 1983), the indifference thesis has been challenged in favour of an approach more sensitive to the genres from which information is taken and which admits a greater range of attitudes. Ariès' observation stands that concepts of childhood in the past were very different, but subsequent work has shown that there is no single pre-modern character for childhood (Ariès 1962).

The ancient literary and legal sources, however, give access largely to an élite and Mediterranean based world. Most children's lives are unlikely to have been structured by the progression of ceremonies and education described by the texts. Epigraphic

and artistic sources (*e.g.*, Huskinson 2000; McWilliam 2000) widen our scope, but most people had neither the resources to raise monuments nor the 'epigraphic habit'. The archaeological evidence offers potential access to a much larger proportion of the empire's population, allowing us to examine variation in behaviour across space and time, within and beyond the Roman period (Moore & Scott 1997). Of particular interest are differences in constructions of childhood between Roman societies and those incorporated into the empire (*e.g.*, Martin-Kilcher 2000) and change in these over time (Néraudau 1987; Wiedemann 1989). As with other aspects of provincial culture, textual evidence from the core has too often provided the only explanation.

Children are not archaeologically visible in burial alone (*e.g.*, van Driel-Murray 1995) but burial evidence has so far been little exploited. A number of different aspects for burial rituals can be explored, for example monuments, burial containers and grave goods, but the particular focus of this paper is the exclusion of infant burials from cemeteries as evidence for their marginality as social beings. In the first section, current views on the location of infant burials are presented and the relationship between burial treatment and age categories discussed. Taphonomic and analytical biases, which have been neglected in previous discussions, are then examined. The final section draws on selected groups of evidence from Gaul and Britain to assess current characterisations.

11.2 Rituals for infants

The principal textual references for the funerary rites for infants in the Roman world are as follows, although others also discuss more generally the appropriate ways to mourn young children (Néraudau 1987, 196–7).

Pliny (1st century AD): *Natural Histories* VII 15.72

Hominem priusquam genito dente cremari mos gentium non est.

It is the universal custom of mankind not to cremate a person who dies before cutting his teeth.

Juvenal (early 2nd century AD): *Satires* XV 138–40

Naturae imperio gemimus . . . cum funus adultae virginis occurrit vel terra clauditur infans et minor igne rogi.

It's at nature's behest that we weep when the funeral cortège of a ripening virgin goes by, or the earth is heaped over an infant too young for burning.

Fulgentius (late fifth century AD?): *Expositio sermonum antiquorum* VII

Quid sint suggrundaria. Priori tempore suggrundaria antiqui dicebant sepulchra infantium, qui necdum XL dies implessent, quia nec busta dici poterant, quia ossa quae comberentur non erant, nec tanta immanitas cadaveris, quae locum tumesceret; unde et Rutilius Geminus in Astianactis tragoedia ait: 'Melius suggrundarium miser quereris quam sepulchrum'

What suggrundaria are. In former times the ancients called suggrundaria the burial places of infants who had not yet lived 40 days, because they could not be called graves since there were no bones to be cremated nor a big enough corpse for a mound to be raised. As Rutilius Geminus says in his tragedy Astyanax: 'You would do better to look for an infant's burial place than a grave'.

Pliny and Juvenal refer to the inhumation rather than cremation of infants at a period during which the majority rite was cremation, while in the explanation of obscure terms in his *Expositio*, Fulgentius reports this and the difference in location, supplying the term *suggrundaria* for the burials of infants around buildings. This is the only attestation of the term; its meaning is usually derived from *suggrunda/suggrundium*, a more frequently recorded term meaning 'eaves' and the space beneath. Fulgentius supports his interpretation with a quotation, but his use of sources is not entirely reliable. Whitbread (1971, p. 158) notes in the introduction to his translation that the *Expositio* 'is chiefly remarkable for the strong suspicion under which Fulgentius falls of having faked his evidence'. In the passage quoted Rutilius Geminus is a source known only to Fulgentius and no play titled *Astyanax* is recorded elsewhere. These sources are sometimes conflated in modern discussions (*e.g.*, Coulon 1994, p. 140) and *contra* Watts (1989, p. 373), Pliny does not refer to burial of infants in or near houses nor does he use the term *suggrundaria*. Nevertheless the composite view which may be derived from the textual sources has seemed a fair characterisation of much archaeological evidence from across the Roman world. Infant burials in early Roman cemeteries were usually inhumed when the majority were cremated. Infants have also often been excavated on settlement sites, although not always immediately beneath the eaves or around houses and were often older than 40 days (*e.g.*, Berger 1993; Duday *et al.* 1995; Scott 1990, 1991; Struck 1993).

The advice from Plutarch (*Mor.* 612A = *Cons. ad Ux.* 11) to his wife, on learning of the death of their two year old child, that mourning for infants should be minimal, based on their minimal connection to the world, may explain what appears to be an accepted framework for these different rites. Plutarch's reaction is however only one variant among responses to deaths of children in Roman literature (see above). Recent closer attention to infant burials on settlement sites has also revealed patterning not anticipated in these brief textual references. For example, the detailed excavation of infant interments in a potters' workshop at Sallèles d'Aude (Aude, France) (Duday *et al.* 1995) has revealed careful ritual rather than casual deposition. In more general surveys Struck (1993) and Scott (1990, 1991) have shown that the location of infant burials from rural sites in Britain reflects a recurring careful choice; in particular infant burial seems regularly to have inaugurated construction or terminated the use of buildings and installations. Scott's deconstruction of previous explanations shows that some modern value judgements on, or empathetic response to, this difference in burial location may be of questionable use in interpretation.

The investigation of age-related differences in burial rites, whether in location or otherwise raises more general questions as to the interpretation of burial evidence. From a 'processual' perspective, age-related treatments are among the 'horizontal' dimensions of identity expressed in mortuary rituals (Binford 1972). Like gender they have attracted less interest than determining social status hierarchies through burial differentiation, save where child burials equal to or more elaborate than those of adults might indicate ascribed rather than achieved status, and thus increasing social complexity. The post-processual critique has demonstrated that burial is not however a passive reflection of identity. Depending on contextual attitudes to death, identities are actively transformed in the context of burial ritual to present an ideological version of social structure (Shanks & Tilley 1982). Children are unlikely to be active agents in mortuary rituals (Lucy 1994); the burial ceremonies for a child are more likely to reflect the concerns of adults and may be manipulated by them to advance a position (*e.g.*, Morris 1987). Such arguments for the ideological rôle of ritual can be reductionist and omit the emotive dimension of responses to death (Meskell

1994). However a more empathetic approach risks imposing contemporary attitudes: the choice of child burials to illustrate this dimension may be based on modern views of special poignancy in child death. It is also difficult to use emotional response to explain variation in rites. The age categories which can be identified through differentiation in burial practices, in this case burial location, therefore do not correspond directly to general constructions of age categories in the society in question. They ought rather to be compared to categories operating in other spheres of public and private life, which the literary evidence from the ancient world shows both to overlap and to contradict (see references above).

This re-examination of the proportion of infant burials in cemeteries has also been prompted by recent observations on the interpretation of infant burials in Romano-British cemeteries. In particular Watts (1989, 1991, 1993, pp. 195–6) has proposed that the presence of neonate and infant burials, especially when treated with ‘respect’, is an important criterion in the identification of Christian cemeteries in the late Roman period. She has argued that pagan Roman religion did not classify infants as fully human and therefore did not accord them formal burial, but in a Christian context infants, already baptised or as catechumens, were classified as such, and provided with formal burial. Their presence is given a numerical weighting in a scheme which allows cemeteries to be scored in terms of their Christian attributes. This criterion has been influential on subsequent analysis of late Roman cemeteries (*e.g.*, Cooper 1996; Millett 1995b, p. 131; Woodward in Farwell & Molleson 1993, p. 236).

Watt’s observations may have further implications. Her hypothesis resonates with some recent work on Christianity’s transformation of the marginal position of the infant in a Roman world view, at the centre of which was the rational adult male citizen, into equal integration based on membership of the Church (Wiedemann 1989). However a systematic examination of Watts’ hypothesis is so far lacking. Other criteria used to differentiate Christian and pagan burial can be challenged (*e.g.*, Millett 1995a) but only her observations on infant burials are discussed here. Watts examined largely fourth century evidence and did not consider the number of infants in earlier cemeteries. Evidence from other provinces was not used, which one would expect from her model to show the same changes. Nor did she define what she meant by ‘respect’ with regard to infant burials. Her analysis also raises methodological concerns critical to any discussion of the proportion of infant burials in cemetery populations. In most Roman cemeteries of any size some, if only very few, infant burials are recovered: rather than presence or absence a more explicit notion is required of the proportion of infants to be expected in the burial population. Watts did not define very precisely the age group under discussion, nor, like other commentators on Roman period infant burials (*e.g.*, Molleson 1991; Philpott 1991), did she take account of the taphonomy of her sample. The significance of taphonomy has been recently demonstrated in a re-analysis of the proportions of child burials in Anglo-Saxon cemeteries (Buckberry 2000).

11.3 Mortality rates

In the absence of reliable demographic statistics from the Roman world (Hopkins 1966), a guide to the proportion of infant burials to be expected in a cemetery, were all members of the population to have been buried there, must be derived from better documented historical populations and modern populations from the developing world. For comparative population statistics the Coale-Demeny model life tables are

Coale-Demeny Model West	Expectation of life at birth	Mortality rate as % (0-1 yrs)
Level 1 Female	20	36.5
Level 1 Male	18	41
Level 5 Female	30	25
Level 5 Male	27.7	29
Level 10 Female	42.5	16.1
Level 10 Male	39.7	18.9

Table 11.1: Comparative mortality rate from Coale-Demeny life tables.

now favoured over the UN life tables because of their basis in more reliable census data (Coale & Demeny 1983) and figures from Model West are preferred as a guide to an approximate structure of pre-industrial populations (Parkin 1992, pp. 79-83). Table 11.1 shows infant mortality rates of between roughly 20% and 35% from Model West, given life expectancies at birth between approximately 20 and 40, expectation of life at birth of 20 being the lowest at which a population can reproduce itself. Such expectations correspond well with those from some selected historical populations (Guy *et al.* 1997, p. 224).

The usual caveats apply to the use of such figures. They are obtained from 'transitional' or 'post-transitional' populations (the transition being that to industrialised societies with modern medical care): Greece and Rome fall into the category of 'pre-transitional populations', for which we generally lack reliable demographic statistics (Engels 1984). The exploitation of statistics from 'transitional' populations as comparanda is a standard procedure for the study of ancient demography, although demographic structures may not be entirely comparable. The life tables also represent abstractions which assume a stable population without immigration or emigration and not in growth or decline; these assumptions will not have universal validity for the Roman world. It is also likely that infant mortality rates will have varied across the Roman world. To take the most obvious example, the environment of Rome may well have produced infant mortality levels as high as those in the cities of early modern Europe (Scobie 1986). It is difficult to know to what extent conditions in smaller cities and towns will have exacerbated mortality levels. Infanticide is also a possibly significant factor: the extent to which it was practised in the Greco-Roman world is difficult to estimate, although its impact may have been exaggerated (Engels 1984). Recent analysis of the age profiles of infants from Romano-British settlements and cemeteries (Mays 1993b) suggests a relatively high level of infanticide but the methods by which infant skeletons were aged have been challenged (Gowland, this volume). Nevertheless for the purposes of this paper, figures from model populations provide a general guide to the significance of statistics from archaeological populations.

11.4 Taphonomy and analysis

With such figures in mind we may move on to consider the formation processes which intervene between the population buried in the cemetery under study and the available archaeological information, in particular those which may influence the study of young children from cemetery data.

Burial type

On the model presented above we would not expect infants to have been cremated, but is it possible that their visibility is affected by their sometimes having been cremated? Cremation has a more destructive effect on child than on adult skeletons, as they include a higher proportion of collagen which is combusted (McKinley 1989). It lessens the precision with which individuals may be aged, often reducing analysis to comparing 'immature' and 'adult'. Young children might therefore account for some of the unaged small deposits of cremated bone from cemetery sites, although in many cremation cemeteries these comprise only a small proportion of burials, many of which comprise damaged deposits, as at King Harry Lane, St Albans (Stead & Rigby 1989).

Grave depth

The burial of small children in shallow graves makes them more susceptible to post-depositional disturbance, for example the subsequent use of the cemetery (with the small and less regular cuts of infant burial possibly less visible to grave diggers), and to scavengers, root action, ploughing and erosion. If so, infant bones might be expected among the assemblage of disarticulated bone. In cemeteries from Britain such material was recovered among the disarticulated bone in several cases, for example at Trentholme Drive, (Warwick, in Wenham 1968, p. 147), East London (archive), Cirencester, Butt Road (Crummy *et al.* 1993, p. 61), and Newarke Street, Leicester (Cooper 1996). The differential effect on these cemeteries of recovery techniques, in particular on whether or not features are sieved, is not clear. However in no case was this material biased towards infants, and nor was evidence of more than a few infant individuals recovered.

Shallow burial of infants mean that relative depth or stratigraphic position cannot be applied to date them. The scarcity of grave goods with infant burials and the lack of burial container can also frustrate dating within a burial sequence. It may not therefore always be clear whether infant burials are evenly spread throughout the 'lifetime' of a cemetery, for example at Gabbari, Alexandria (Dzierzykraj-Rogalski 1983).

Diagenesis

Cremated bone is less susceptible to radical change through time within the burial environment; however the age group with which this paper is concerned is more likely to have been inhumed. Skeletons of children generally survive less well than those of adults, because their bones are smaller, less dense, more porous and have a lower mineral and higher collagen content (*e.g.*, Gordon & Buikstra 1981; Walker *et al.* 1988). In less than optimal preservation conditions, for example free draining sands and gravels, child skeletons are likely to be in a poorer state than those of adults, although subjective descriptions hinder reconstruction of preservation conditions (Buckberry 2000). Sites where archaeological and documentary information is available have shown an under-representation of the infant burials known to have been buried there (Guy *et al.* 1997; Walker *et al.* 1988). However the preservation of immature individuals of different ages also varies. Changing bone mineral content and distribution is likely to cause poorer preservation of individuals younger than a threshold 'some time before the age of three' (Guy *et al.* 1997, p. 226). Observations of the better preservation of the bone of fetuses and neonates than of slightly older infants from the late Roman cemetery at Poundbury (Farwell & Molleson 1993, p. 175) may also be explained by

the decline in mineral content in bone after birth noted by Guy *et al.* (1997). Current understanding of the taphonomy of human bone of individuals of different ages in different burial environments, and of differences within the immature age category, is therefore incomplete. The expectation that the skeletons of immature individuals will be less well preserved in certain burial environments is a valid rule of thumb (Buckberry 2000), but dangerous to rely on in isolation to explain detailed differences between sites.

Excavation

The burial of infants can often be demonstrated to have concentrated in particular parts of cemeteries (see below). While partial rather than total excavation of cemeteries may miss such areas, it seems 'beyond coincidence' (Molleson 1991, p. 114) that these will have been missed where several cemeteries have been excavated.

Infant burials may be less likely to be recovered because of smaller, less regular grave cuts and because their bones may be more easily missed. Excavating child burials may previously also have been of lesser priority, as they were considered to contain less palaeopathological information (Buckberry 2000). A recent study of Anglo-Saxon cemeteries showed that the recovery of child burials has increased significantly since the 1970s (Buckberry 2000). However this trend could not be identified among Romano-British cemeteries, for example. The cemeteries with the largest proportion of infant burials were excavated during the 1960s and 1970s (see below). Of these the most important, Lankhills and Poundbury, were excavated under research rather than rescue conditions. This has applied only infrequently in subsequent excavations of Romano-British cemeteries.

Analysis and analytical categories

Where survival permits, the ages of young children can be established to within weeks or months (Mays 1998), but inconsistent and poorly defined terminology in bone reports further obstruct comparison. Among the categories used for non-adult individuals there is most variety in terms (*e.g.*, 'infant', 'child', 'juvenile', 'adolescent', 'sub-adult' and 'immature'), as well as in age brackets. A similar inconsistency characterises cemetery reports in other languages (Duday *et al.* 1995). Terms are not always defined and a more precise estimation of age for individual burials to accompany the descriptive term is sometimes lacking, particularly in the case of young children. Comparison within and between cemeteries is often therefore reduced to lowest common denominator categories, usually of immature and adult, which will conceal the differences of interest here.

Sample

Groups of cemeteries with usable human bone reports are not evenly available over time and space. For example, the (published) cemeteries of Britain and Hungary are biased to the late Roman period, while the early Roman period is better represented among those of the Low Countries and Germany.

For the meaningful comparison of cemeteries, a minimum number of several tens of burials is required. Applying such a threshold to Roman Britain yields a sample of mainly urban and small town cemeteries for analysis, with mortality profiles that may differ from those of rural areas in which the majority of the population lived,

although in other provinces, such as Gaul, large rural cemeteries are more plentiful (*e.g.*, Ferdière 1993; Murail & Girard 2000; van Doorsaeler 1967). The catchment areas of urban cemeteries may also affect the composition of the cemetery population but the influence of this factor is impossible to allow for.

Straightforward comparison of proportions of infant burials between large numbers of cemeteries is therefore problematic. Rather than disregard all but a few cemeteries, the following analysis assesses general trends from the largest possible sample and moves to more detailed observation where evidence permits.

11.5 Case Studies

Gaul

In a striking group of early Roman cemeteries from central and southern Gaul, the proportion of infant burials falls within, or in one case exceeds, the expected percentages. Excavations in the 1950s at Alesia, suggested that such areas represented cemeteries devoted to infants, but more recent work has shown that such groups of infant burials were either part of larger burial grounds or more occasionally located near buildings on rural settlement sites (Coulon 1994; Dудay *et al.* 1995). The latter would be common in a rural Romano-British context but have excited more attention as being relative rare in Gaul.

At the 2nd–3rd century AD cemetery of Champ l'Image, St Marcel-sur-Indre (Indre, ancient *Argentomagus*), inhumed individuals under one year old comprise 28% of the 143 burials, the rest being mostly adolescent and adult cremations. Most of the inhumed infants were buried along what seems to have been the boundary wall west of the cemetery, although too limited an area was excavated west of this wall to be certain of this (Fig. 11.1). Evidence for containers is rare, although occasionally the cuts for infant burials were bordered by stones or roofed by tiles or amphora fragments (Allain *et al.* 1992).

Individuals inhumed in pottery jars, almost of all whom were under one year old, comprise 31% of the 500 burials from the cemetery of Chantambre (Essonne), in use from the 1st to the 5th century AD, this proportion remaining similar throughout the phases of use. These burials were grouped in the south-western corner of the cemetery (Murail & Girard 2000).

In the 1st–2nd century cemetery of Les Bolards, Nuits St Georges (Côte d'Or), the 120 inhumations of neonates comprise 52% of burials, the remainder comprising cremation burials, from which the human bone has generally not been examined, and 19 adult inhumations. Many of the neonatal burials cluster in the north-east corner of the excavated area. Almost all were buried between two *imbrices*; given heavy damage to the site and difficult excavation circumstances, other infant burials not so protected may have been destroyed or not recovered. Nevertheless the surviving proportion of infant burials exceeds substantially what might be expected. The excavator attributed this to a tradition of bringing sick infants to a healing sanctuary within the town in an, in these instances unsuccessful, attempt to cure them (Planson 1982, p. 176). However this seems implausible. The age at death of the infants (only provisionally determined), mostly dead before term, still-born or only a few days old, makes it unlikely that they were brought any distance to the sanctuary. It seems more probable that the excavation included an area of the cemetery in which infant burials were clustered, as at Chantambre and St Marcel.



Figure 11.1: The main excavation area of the Champ de l'Image cemetery at *Argentomagus* (Indre, France). The dashed lines indicated ditch lines close to the boundary wall of the cemetery (redrawn from Allain *et al.* 1992, Fig. 18).

This high representation of infants is not however a universal feature of early Roman cemeteries in Gaul. At other recently excavated cemeteries the proportion of infant burials is lower, for example at Fréjus St Lambert less than 10% and at Fréjus Le Pauvadou and St Paul-Trois-Châteaux only 1–2% (Bel *et al.* 1991; Gébara & Béraud 1993). However, as these sites are not yet fully published the influence of taphonomy cannot be fully assessed. The minute proportion of infant burials from the rue Perdue cemetery in Tournai seems broadly typical of the small number of published cemeteries from late Roman Gaul (Brulet & Coulon 1977).

Britain

The following comments on Roman Britain are based on an examination of cemeteries with 40 or more burials from which the human bone has been examined. Late 3rd–4th century cemeteries outnumber earlier periods by a ratio of 2:1, and the sample is heavily biased towards urban sites in southern Britain. Taphonomic processes have

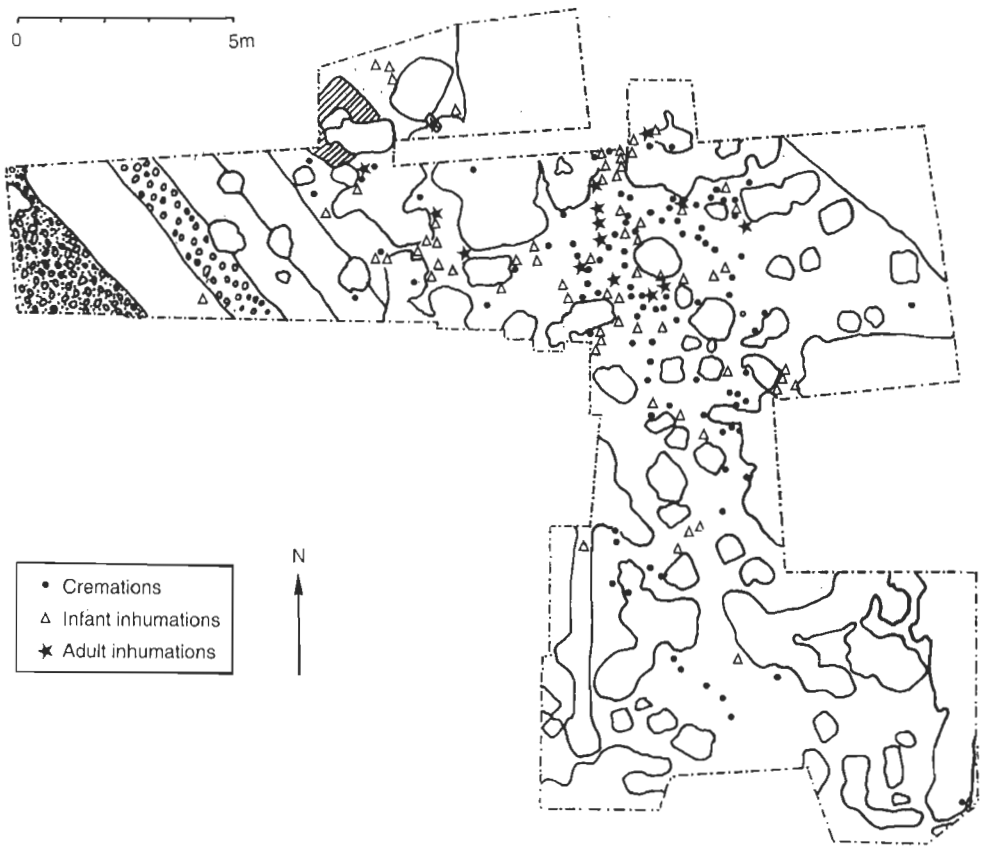


Figure 11.2: The Hyde Street cemetery, Winchester. The outlined areas indicate areas of post-Roman disturbance. A section of the road to Cirencester was excavated in the north-west corner of the site, next to which was a small burial monument (shaded) (redrawn from Kjølbye-Biddle 1992, Fig. 14.3).

not operated evenly across the sample and the precision of information across the sites is often not directly comparable. Fuller presentation of this evidence is in preparation but some provisional conclusions are presented here.

In almost all Late Iron Age and early Roman period (predominantly cremation) cemeteries the proportion of infant burials (usually though not exclusively inhumations) does not exceed one or two per cent, for example at Westhampnett (West Sussex) (Fitzpatrick 1997) King Harry Lane (Stead & Rigby 1989) and St Stephens, St Albans (archive), Wallington Road, Baldock (Burleigh 1993; archive), Braughing (Partridge 1981) (all in Hertfordshire), and from the Abbeyfield at Caerleon (Gwent) (Evans & Maynard 1997). In cemeteries the use of which began in the early Roman period, at Derby Racecourse (Wheeler 1985) and the east London cemetery (Barber *et al.* 1990; Whytehead 1986; archive), inhumed infants account for a similar small percentage. At many of these sites however the poor survival of inhumed bone and, less often, the intensive use of cemetery space may account for missing infant burials.

The largely cremation cemetery connected to a rural settlement just outside Godmanchester (Cambridgeshire) includes a higher percentage of inhumed infants (Mays 1993a, four of the 50 burials;), but the most obvious exception to this trend is Hyde

Cemetery	No. <1 year old	Total no. of burials	Percentage < 1 year old	Reference
<i>Butt Road (Period 2), Colchester</i>	6	545	1.1	Crummy <i>et al.</i> 1993
Lynch Farm	1	50	2	Jones 1975
Ilchester	1	49	2	Leach 1982
<i>Chester Road, Winchester</i>	4	114	3.5	Archive
Cassington	3	71	4.2	Harman <i>et al.</i> 1981
Bathgate, Cirencester (South)	19	362	5.3	McWhirr <i>et al.</i> 1982
<i>Icklingham</i>	3	44	6.8	West 1976
<i>Ashton</i>	14	170	8.2	Archive
<i>Victoria Road, Winchester</i>	11	129	8.5	Archive
<i>Poundbury (Main), Dorchester</i>	84	973	8.6	Farwell & Molleson 1993
Lankhills, Winchester	34	301	11.3	Clarke 1979
<i>Ancaster</i>	30	243	12.4	Cox 1989
Poundbury (E. peripheral), Dorchester	12	61	19.7	Farwell & Molleson 1993
Poundbury (Site C), Dorchester	30	68	44.1	Farwell & Molleson 1993
Oram's Arbour, Winchester	43	66	65.2	Archive

Table 11.2: The percentage of under one year olds in ascending order from 3rd and 4th century cemeteries in Roman Britain. Italics indicate cemeteries classified as probable Christian by Watts (1989) or those from which evidence was not available to her but which would be classified as Christian using her criteria (Victoria Road and Chester Road, Winchester).

Street, Winchester, where inhumed infant burials account for over 40% of the aged burials (archive; see Fig. 11.2). The extensive damage to the site makes this high proportion even more surprising. Although some infant burials cluster, in general both they and the cremations are mixed without obvious zoning. The site is close to the north gate at Winchester, lying in the triangle between roads to Cirencester and Silchester. It is possible that this area was preferred for infant burial because of its proximity to the town, from which like other towns in Roman Britain only a few infant burials have been excavated (*e.g.*, Zant 1993). However infant burials were also buried in large numbers further out from the town in the late Roman period (see below).

A larger sample of cemeteries where osteological analysis allows quantified comparison of the proportion of infants in the burial populations, is available for the 3rd–4th centuries in Britain (see Table 11.2, where bibliographic references are given). Preservation conditions range from relatively poor to good, generally being more favourable than the in the early Roman cemeteries discussed above (Table 11.2). In general the proportion of infant burials is slightly higher than in the early Roman period, but few cemetery populations include the expected proportion of 20–35%. Only in six cemeteries do they account for more than 10% of burials. Of these, only one is a Christian cemetery as defined by Watts. Some differences may be attributable to differential preservation, for example the poor preservation of human skeletal material

at Butt Road, or erosion, which may have affected the main cemetery to a greater degree than the eastern group of burials at Poundbury. However, in general such factors do not consistently bias against the representation of infants in the 'Christian' cemeteries. The similarity in the proportion of infant burials at Lankhills and the main cemetery at Poundbury is worth emphasising because they are archetypal 'pagan' and 'Christian' cemeteries in Watts' analysis. Both were excavated under similar circumstances and the preservation of human bone at Poundbury was certainly better than at Lankhills.

The infant burials from Oram's Arbour were recovered during excavations through the western stretch of the Iron Age enclosure ditch west of Winchester's Roman period walled circuit. As the focus of these excavations was the enclosure ditch, it is not possible to tell whether these burials were related to a larger cemetery containing burials of other age groups, although there were a small number of adult burials recovered close to or on the lip of the ditch where sectioned. Infants were recovered from boundary ditches at some other cemeteries in Winchester, although never in equivalent numbers. At Lankhills, for example, four infant burials, aged from six to 18 months, were the first interments made in feature 12, the initial eastern boundary of the site, possibly some time prior to the main use of that area of the cemetery for burials. At Victoria Road some infant burials were buried in the fill of the ditch separating the cemetery from the road to Cirencester.

Infants can therefore be seen to have been buried on the boundaries of several cemeteries from Britain and Gaul. This peripheral position may have spared the expense of a formal burial plot within 'managed' cemeteries (Philpott 1991; Thomas 1981), an interpretation which might support the 'indifference' view. However, the re-consideration of the locations of infant burials on settlement sites (see above) prompts other possible interpretations. The burial of infants at the edges of cemeteries may have served to inaugurate the use of cemeteries or to demarcate burial areas from surrounding spaces of different character.

The Romano-British evidence may therefore be summarised as follows. The burials of infants under one year old are better represented on third and mostly fourth century inhumation cemeteries than in earlier cemeteries, with one substantial exception. Within the late Roman cemeteries there are great differences in the proportion of infant burials. However this proportion is not determined by whether or not according to Watts' criteria the cemetery was that of a Christian population.

11.6 Conclusion

The reservations which preceded the case studies must not be forgotten. The mortality profiles which we expect in cemeteries from the ancient world are partly dependent on untestable assumptions. The proportion of individuals of different ages in different cemeteries is affected by taphonomic and analytical biases which are not fully understood and which are unlikely to have affected any two cemeteries in identical ways. This paper has also restricted itself to one aspect of burial treatment, location. Full consideration of the burial rites for infants must also incorporate other forms of burial ritual. Some general observations have been made: for example under one year olds are under-represented in epigraphic commemoration (Hopkins 1966). Other qualitative differences can also be identified which should be examined in relation to larger samples of data. The transition from inhumation to cremation inferred from Pliny as occurring at *c.* six months can be documented in several early Roman provincial

cemeteries (Mackensen 1978). Certain types of burial container and grave good seem to be associated with infant burials, some cemetery specific, some more general, such as pipe-clay figurines (*e.g.*, Allain *et al.* 1992; Planson 1982; Taylor 1993). Discussion has also concentrated on a single age limit, one year old, but other age categories may be equally (if not more) significant, for example six months, the threshold between cremation and inhumation.

Nevertheless it is possible to make some more confident statements based on study of location alone. The expectation that infants will be buried outside formal cemeteries is true of only some infant burials. Several cemeteries do include a proportion of infant burials which either falls within or even exceeds the range that might be expected from model populations. In these cases it seems likely that the whole of the population is receiving burial within the communal cemetery. In the cemeteries where few infant burials are attested, the arguments that infants were deliberately excluded may be difficult to prove in individual cases, given the formation processes behind samples, although the frequent finds of infants on settlement sites show that infants were frequently buried elsewhere. Infants may have been categorised as marginal in Roman society but such a categorisation is not universally manifested by their burial outside formal cemeteries. However, even were we to set problems of formation processes to one side, it is difficult to identify consistent trends in proportions of infant burials. More cemeteries from early Roman Gaul have the expected proportions of infant burials than in Britain, for example, but within both areas the variation in the proportions is very great. Local variations in ritual forms are probably more significant. An increase over time in the proportion of infant burials may be suggested by evidence from Britain but cannot yet be stated with any certainty. More emphatically, *contra* Watts, in late Roman cemeteries in Britain a higher proportion of infant burials do not occur within those cemeteries claimed on other grounds as Christian. This criterion does not distinguish Christian from pagan burial rites, nor can it therefore provide evidence for the 're-categorisation' of very young children within a Christianised world view.

The data presented here may be significant in a broader perspective. Previous surveys have noted that in comparison with the early medieval period, the proportion of infant burials in Roman period cemetery populations is high (*e.g.*, Crawford 1993; Lucy 1994; Molleson 1991). These surveys relied on smaller data sets but the observation has been confirmed in this examination of evidence from Britain and Gaul. The evidence discussed may be significant for long-term change in constructions of childhood. However, Buckberry (2000) has shown that preservation conditions may bias against the preservation of child burials in early Anglo-Saxon cemeteries. It therefore remains to be seen if the apparent difference withstands closer scrutiny.

To conclude, the evidence for infant burial from recent considerations of settlement contexts and this examination of cemetery populations, demonstrates that simple characterisations based on literary evidence are inadequate: burial rites for infants show considerable complexity and diversity. The infant may well have been on the margins of a Roman view, but this is not unambiguously demonstrated in their burial rites.

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