HYEF 93/94:
CONTEXT FORMATION, DEPOSITION & RESIDUALITY

Introduction

Within the dynamics of any settlement there is a constant and, cumulatively, very significant amount of deposition that is the consequence of the acquisition, use (in some cases subsequent reuse too) and discard of material culture. However, the deposition of much of this material, and particularly its movement and re-deposition post-discard, is incidental to the movement, creation and reworking of far more massive deposits of soil and other materials such as gravel. The large-scale excavation undertaken at Elms Farm has facilitated the appreciation that soil movement and gravel surfacing activities constitute very large and important undertakings during the life of the LIA and Roman settlement. In the investigation of their source and nature of these deposits the material culture that they contain is essentially incidental to their function and is used here as an indicator of their origin and agency of formation.

These 'landscaping' activities, while of primary interest, are not the only important aspects of deposition at Elms Farm. As has been amply demonstrated elsewhere in this report, pits were a particularly numerous and dominant feature of settlement morphology; particularly across the northern and southern occupation zones. The pits themselves, although numerous, are not especially significant but the activity that they represent is. Rubbish disposal was clearly a necessity, the volume created by the settlement population requiring management on a daily basis. In contrast to mass soil and gravel movement, material culture is central to rubbish disposal and it provides an insight into what, when, how and where 'occupation debris' was discarded. Analysis of rubbish composition has revealed patterning that reflects strategies adopted in the management and, in some cases, in the re-use of rubbish. These may be demonstrated to have changed significantly over time.

A third aspect, essentially a by-product of such activities as soil movement and rubbish disposal (amongst others), is that of residuality. Residuality is an inevitable product of intensive occupation activity and should be regarded as an integral part of the study of formation and deposition. Analysis, particularly of rubbish deposits, reveals that a number of material and artefact types had a prolonged or secondary usage that did not necessarily have much to do with their original function.

This section, then, seeks to explore the varying nature of deposit formation across the settlement area. Mundane activities such as rubbish disposal and landscaping are focused upon here in order to gain insights into daily practice. More specific and specialised 'structured deposition' that is the product of religious or superstitious practice is addressed elsewhere (Sections 6 and 7), although it is acknowledged that the dividing line between them may be blurred.

Landscaping, soil-movement & dumping

Throughout the life of any major settlement there occurs many depositional episodes that accompany or facilitate its foundation, subsequent change and general occupation (or lack of). The Elms Farm excavation has identified a range of such episodes and depositional types that may be deemed to be either deliberate (e.g. both the removal and importation of soil, the introduction and use of sand, gravel brickearth and clay) or incidental (e.g. occupation soils, road wash, demolition debris). These have clearly been undertaken, or have occurred, on varying scales but all have the potential to give insights into some of the very many processes and activities that constituted the dynamics of the settlement. Reword.

Three major instances of soil movement and landscape change have been identified within the settlement area at Elms Farm that are instructive with regard to the general nature and process of formation and deposition:

- LIA settlement remodelling (mid 1st century)
- Area I dumping (mid 2nd century)
- Area R channel reclamation (early 2nd- mid 3rd centuries)

LIA settlement remodelling:

The nature and extent of this pre-conquest remodelling activity has already been described in Section 3 and its status and socio-political implications discussed in Sections 4 and 5. Of relevance here is the consideration of the landscaping episode itself in terms of the removal and importation of material. As previously established, this involved the removal of topsoil over an area of at least 15,000 m^2, the quarrying of sand and gravel, and the construction of metalled roads and extensive occupation surfaces over the settlement core (i.e. the central zone). The removal of topsoil was clearly a huge undertaking for which we have no tangible evidence bar the conspicuous absence of ancient soils sealed beneath the earliest roads and surfaces. It is presumed that this material was deposited elsewhere beyond the excavation and settlement limits; perhaps being used to reclaim an area of marsh to the south. However, it is not inconceivable that the topsoil was valued enough to be spread out across the adjacent fields or even across some of the lower-lying areas within the settlement. Relatively deep sequences of silts were present in central and southern parts of Areas D and F that, due to their very restricted investigation, may not have been recognised as such.

The absence from the excavated area of quarrying associated with the extraction and processing of the sand and gravel required for the road and occupation surface construction indicates that outlying mineral resources were exploited for this. As with the disposal of the topsoil, no source of this material has been identified. Unlike the episodes of soil importation that are considered below, this redeposited gravel was virtually devoid of artefacts, the few collected from its excavated portions being unreliable as *in situ* material. The sand and gravel was clearly a virgin resource that lay beyond the occupation areas of the settlement and was deliberately quarried and laid as an uncontaminated construction deposit. Thus, it is extremely difficult to pursue the nature of this earliest of major depositional episodes any further.

However, gravel and sand deposits were used for the same, if smaller-scale, purposes into the 3rd century. Roads were maintained at least until the end of the mid Roman period. While the limited nature of road excavation could not determine whether this amounted to large-scale resurfacing or merely localised repair, some episodes coincided with widespread resurfacing of adjacent occupation areas (e.g. Areas H and J) and so may be assumed to have been major works themselves. The gravel of these resurfacing episodes was also generally clean, the artefacts collected from them likely to have been intrusive due to the compaction of material into road surfaces. Later resurfacings of Road 2 were noted to contain a number of items of ironwork at the time of their recording. However, little of the sequence was systematically excavated in order to verify whether or not these were deliberate inclusions during construction (perhaps to aid consolidation of the road surfaces?) or were surface-compaction intrusions.

Although not specifically linked with any single major constructional event, it is relevant to briefly consider the lesser use of mineral resources in settlement construction. As well as sand and gravel, widespread use of brickearth and clay was made. Most commonly, brickearth was found as a flooring material - either a preparation or the surface itself - within building interiors (e.g. Buildings 32, 39 and 54). Clay was clearly used as a building foundation deposit (e.g. Temple Building 52 and Building 39, again) but also as a lining for structures such as wells (e.g. 6280). Its most

extensive use must surely have been as a walling material judging by the general spread of burnt daub across the site, of which almost 352kg was collected (ref. to daub report). Given the relatively large number of buildings likely to have been present within the settlement, the quarrying of this clay resource must have been relatively concerted. It is perhaps also worthwhile to consider that the disintegration of *unburnt* daub walling must have added to the general accumulation of soils within areas of occupation.

Area I dumping episode:
The deposition of 0.3m of silt across Area I represents the abandonment of one of the metalled surfaces laid as part of the pre-conquest settlement remodelling, as discussed above, and of the structures that occupied it (Section 3). In contrast to the previous episode, soils were now imported into this area of the settlement, in what amounts to a deliberate and swift change of function. That this depositional activity was both rapid and pre-meditated means that the silts are of key importance to our understanding of soil movement at Heybridge. The overall deposit was recognised at the time of its excavation (albeit largely by machine) to comprise a multitude of dumps (5494 *et al*) that were rich in cultural material. Wheel ruts (13137 *et al*) were identified ?within these silts which may simply record the passage of traffic across the abandoned area, but equally could indicate that the dump material was brought to this location by cart or wheelbarrow(?).

Although the collection of artefacts from the dump deposits was partial, and most likely rather selective, it is perhaps still valid to combine all into a single representative assemblage in order to facilitate the characterisation of the nature and likely origin of the dump material. The table below (Table 0) amply demonstrates the quantity and diversity of artefacts contained within the silt deposits. These are clearly rubbish deposits that were spread out over the earlier gravel surface. The crucial issue is that of the source of this material.

Artefact type	**Dump deposits**		**Midden 5722**	
	Count	**Weight**	**Count**	**Weight**
Pottery	3749	75,781	303	2640g
Animal bone	-	11,002	-	40g
Tile	-	9,216	-	51g
Briquetage	125	796	10	86g
Slag	-	777		
Daub/baked clay	10	322	2	18g
Misc. Fe (inc. nails)	20	-	1	
Quern frags	12	-		
Brooches	6	-	1	-
Fe tools	6	-		
Misc. Cu alloy	5	-		
Vessel glass	5	-		
Intaglio	1	-		
Coins	1	-		

Table 0. Artefact composition of Area I dump and midden deposits

It is very pertinent that the position of a large midden mound was recorded on the pre-excavation plan for this part of the site. Originally thought to be a circular gully ('gully' 5722), excavation quickly established that the ring-effect had been produced by the truncation of a 10m-diameter midden, the base of which had been preserved within the surrounding dump deposits. It thus seems possible that at least part of the dump material was derived from this midden which was simply

spread about the area. Comparison of the artefactual assemblage collected from the very limited excavation of the 'gully fill' with that of the dump deposits (Table 0) to its west suggests that the two deposits were indeed similar. Both contained notably large amounts of pottery; the midden assemblage dating to the late 1st century and the dumps generally spanning the late 1st to early/mid 2nd centuries. The greater date range of the latter may indicate further sources of material, some of a residual nature, but equally could reflect the deposition date of the upper portion of the midden. The characters of he collected assemblages were broadly similar in terms of both fabric and form and the incidence of Dressel 20 amphora sherds throughout may indicate a single vessel having been spread throughout the midden. Soil micromorphological analysis (ref. Macphail) identified a high herbivore dung content in a number of these apparent midden deposits.

Area R channel reclamation:
In contrast to the dumping episode in Area I, the importation of material into Area R was not a single and distinct activity, but a series of concerted efforts to reclaim parts of the wide and marshy water channel that ran through it. At least two distinct phases, separated by the mid 2nd century use of the north bank as a burial ground, have been identified. This reclamation scheme was clearly a more sophisticated affair than the simple spreading out of middens across a flat surface and included revetting, consolidation and reinstatement of land surfaces.

While the various elements and processes of this reclamation episode is described elsewhere (ref. to site narrative), the nature and origin of the material used is of particular interest. The earlier episode of deposition may have amounted to little more than consolidation of the north bank during the early Roman period. The grey-blue silty clays were probably derived from the cleaning out of the water-course while gravels were most likely quarried from the terrace step immediately to the north. This shows that procurement of materials for this work was very localised. Indeed, evidence of gravel quarrying during the 2nd and early 3rd centuries was identified in the Crescent Road excavation (Wickenden 1986, 13-15), immediately north of the present site.

The nature of the material used in the mid-Roman period reclamation and consolidation was very different. The dump material contained a significant component of building debris. The absence of Roman buildings incorporating structural brick and tile from any of the sites excavated north of the water-channel (i.e. Drury's Crescent Road, Cotswold's Langford and Holloway Roads or, indeed, Areas R and W at Elms Farm) suggests that this material must have been brought from the settlement itself.

Artefact type	Period III deposits		Period IV deposits	
	Count	Weight	Count	Weight
Brick and tile			899	73,305
Pottery	4	146g	317	4,115g
Stone rubble			4	510g
Mortar frags			-	375g
Iron ([ ] = nails)			23 [21]	-
Glass ([ ] = window)			17 [5]	-
Animal bone			-	30g
Misc. Cu alloy			1	-

Table 0. Artefact composition of Area R 'channel reclamation' deposits

Table 0. demonstrates the large quantities of building rubble in the mid Roman dump and levelling deposits on the north bank of the channel. As well as tile, stone and mortar, the significant

quantities of iron nails and window glass are probably from the same source. It is worth noting that window glass is very much a mid Roman phenomenon at Elms Farm and that Area R Period IV-V and cleaning contexts account for 45% of the whole site assemblage (i.e. 22 of 49 fragments). It is likely that all the window glass was introduced to this vicinity in the rubble used in the channel reclamation and bank consolidation.

Equally notable is the absence of appreciable quantities of domestic or manufacturing debris. In contrast to the Area I dump deposits, there are no quern fragments, jewellery or coins, no slag, daub or tools. The very small quantities of animal bone and modest amounts of pottery show that this material was specifically selected. Instead of hauling midden material from the settlement proper and across the watercourse, the silt and gravel is likely to have been procured from the immediate vicinity of the hinterland and thus lacks artefacts distinctive of domestic activity. Thus, it appears that much of the tile, brick mortar and stone rubble was obtained from a damaged or abandoned building that was presumably located within an unexcavated part of the settlement. Did the building burn down – some signif charcoal deposits noted, esp. 12056/57? Also daub dumps noted but not collected, e.g. 12079. Also a contemporary rubble dump in the channel = 12101 et al.
Need some specialist input here!

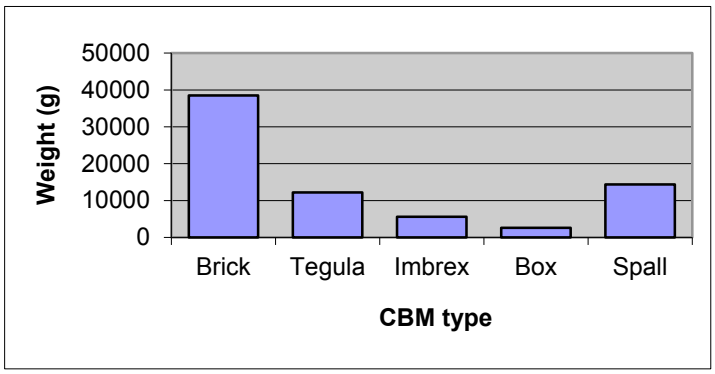

Fig.0 Tile composition in north bank dumps, Period IV

- Road accumulations and wash
- Reworked soils - e.g. brickearth
- 'Dark earths' - e.g. Area H

Rubbish disposal patterns

If the sheer number of excavated and observed pits located within the settlement is anything to go by, the activity of rubbish disposal itself amounted to a very major depositional, albeit protracted, event. In excess of 1,100 pits spanning the LPRIA to latest Roman/early Saxon periods were sampled of a guestimated total that may exceed 10,000 such features across the entire settlement area (review this). Pits, of course, were not the only means of disposal; the remnants of a few middens at Elms Farm attest to the above-ground stockpiling of refuse and, at times, material was no doubt also strewn about the land surface. However, these pits and their contents are our most tangible and reliable surviving evidence of rubbish disposal.

A number of issues regarding the nature of LIA and Roman disposal practices are evident. The first is whether the burial of rubbish in these pits is a primary deposition activity or whether it is an interim or final measure. Consideration of the likely relationship between pit and midden is clearly of importance here and has implications as to how rubbish was both perceived and used - i.e. was rubbish regarded as an obsolete end-product or a resource that was continually exploited? It seems apparent that rubbish was carefully managed and, at least at certain times in its 'life', was valued. However, such broad statements require detailed analysis of the pits and their fills in order to characterise the material culture assemblages that they contained and to define their changing nature over time. Undoubtedly, artefact assemblages do display considerable temporal change but it is not readily apparent whether this is specifically a product of changes in disposal practice or in other aspects of lifestyle. As well as analysis on a collective basis, consideration of the 'histories' or treatments of particular material or object types is also necessary and informative. This inevitably involves the issue of residuality …

Pit morphology and use

It seems evident that the vast majority of pits at Elms Farm did not have a primary use for storage. Few exceeded a depth of one metre and most bottomed at or just below the present water table, which suggests that the Roman watertable cannot have been very different than today. Indeed, the low-lying nature of the site, together with the acidity and permeability of the gravels into which the pits were cut, would have been unsuitable for the below-ground storage of foodstuffs such as cereals. Those pits that do appear to have had a storage function (e.g. 8540, Area P; 10375, Area F) were invariably clay- and timber-lined and have been interpreted as constituting wet storage, perhaps of live seafood; although waterproofing for dry storage cannot be ruled out completely.

Other than intermittent and small-scale gravel extraction, it is difficult to interpret these cut features as anything else other than rubbish pits. In some ways, this being their apparent primary rather than secondary function is helpful to the study of disposal practices, as it means that both the pits and their fills have fairly immediate and close relationships to the processes of rubbish creation.

Some clear patterning is evident in the pit distribution. The great majority of pits were located outside the central settlement zone in what were the main occupation areas. The southern zone (Areas K to Q) is the principal example of this with relatively intense pitting activity having been carried out within the strip plots alongside Road/track 3 from the LPRIA to Late Roman periods. There are, of course, exceptions to this, particularly the ritual pits of the temple area (Section 6), but on the whole the pits are located within the occupation areas of the settlement. Comparison of the pits of the north and south zones (both areas being essentially occupational in their nature) shows that their contents are very much a product of the activities being undertaken in the vicinity. Craft manufacture, including metalworking, is clearly a significant feature of the southern zone and this is reflected in the artefact assemblages of its pits. The northern zone occupation, on the other hand, had a more agrarian slant to its essentially domestic character.

This simple observation suggests that rubbish was not disposed of very far away from its place of creation. This, together with the fact that many of the south zone pits respected and were aligned upon boundaries, makes it possible to speculate that pits and their contents were generally directly related to the occupation of the enclosure in which they occurred. In the case of the strip plots of the southern zone, it has already been suggested that each functioned as a smallholding inhabited by a single family-unit (Section 5). This is probably also true of the less-regularly enclosed northern zone and has the implication that pits which display a domestic character represent set 'disposal units' that reflect the users needs.
Within an occupation enclosure, there was probably an area designated for the digging of pits – hence the presence of inter-cutting clusters of, often similarly dated, features. However, pit location did not necessarily remain fixed; although generally occupying peripheral locations in the plot this could be to the rear or along one side. It is noted that in the case of the LIA-early Roman transition period distinct clusters, often of particular type, occupy positions close to road frontages and the buildings along them. These most likely had a principal function associated with metalworking activity (e.g. Areas M and N, Periods II-III) to which the deposition of domestic waste was secondary or even incidental. - review.

The majority of pits were clearly intended for the burial of primarily domestic rubbish. Analysis of the principal bulk assemblages of pottery (ref.) and animal bone (ref.) has demonstrated that there is very little patterning evident in their deposition. Spatially, assemblages tend to be very homogenous and characteristic of general use and discard by the resident population of Heybridge. There are, of course, exceptions, the main ones being 'structured deposits' of a religious nature and, in the case of animal bone, specific instances of specialised butchery practice. However, these may be put aside as separate, issues that are dealt with elsewhere (Section 6 and ref. xxx, respectively).

In addition to the broad distributional trait of the location of pits primarily within areas of domestic occupation, they demonstrate temporal distribution. This is, in essence, a further expression of this relationship with domestic activity. In parallel with other evidence, such as morphological development and coinage, the pits clearly reflect the perceived pattern of settlement contraction/depopulation that has been discussed in Section 3.

Most importantly, the rubbish assemblages within these pits readily demonstrate temporal patterning, with the range and quantity of component material and artefact types displaying very significant change from the LIA to late Roman periods. Characterisation of pit assemblages, and hence of rubbish generated and disposed of, has been possible on a period-by-period basis (Table.0):

- Period II: moderate to large quantities of pottery and small quantities of animal bone, briquetage, loomweight, burnt daub and spindle whorls. Low, but consistent, incidence of metalworking waste across the pits of the southern settlement zone.
- Period III: Larger quantities of pottery and bone, now supplemented by small quantities of brick and tile, as well as briquetage, daub, iron and copper alloy objects, and very occasional quern and glass fragments. Occasional metalworking waste again present in the southern zone pits.
- Period IV: significantly increased quantities of tile and animal bone as well as plentiful pottery. Increase in iron objects and the appearance of lead objects, oyster shell and tessera.
- Period V: Large quantities of pottery, bone and tile. Increased oyster shell and appearance of a range of (non-brick & tile) building debris such as *opus signinum*, mortar, wall plaster and stone.

Characterisation of Period VI pit assemblages, that is of latest Roman and early Saxon date, is deemed to be less meaningful due to the highly residual nature of the assemblages and low Saxon material culture in comparison to that of the late Roman period. Thus, it is unlikely that rubbish

deposits of this date accurately reflect contemporary material culture and its discard. However, this data is included on Table 0, for what it is worth.

Consideration of major material/artefact types deposited in pits (Table 0.)

Pottery:
Pottery and animal bone constitute the basic artefactual components of pit fills throughout all periods. Pottery is clearly a constant, showing only a slight increase in its average weight per pit over time. Whether or not the settlement population decreased over time, as is possibly denoted by the low number of rubbish pits (only 39 by Period VI), people were disposing of *basically* similar rubbish in similar quantities throughout.

Animal bone and oyster shell:
Although also a basic rubbish component, average animal bone weight per pit can be demonstrated to significantly increase through time (ref. bone rep.). This increase in disposal, presumably mirroring consumption, was at first gradual and perhaps represents only minor change during the LIA and early Roman periods. The major change occurred between the early and mid Roman periods with increased levels of discarded bone remaining constant thereafter.

The virtual absence of oyster shell in LIA pits, despite Heybridge's location close to the Blackwater estuary, is a clear reflection of the nature of consumption at this time. Shellfish were not consumed in any number until the mid and late Roman periods. Even then, it is argued that their high incidence in Area I and J features suggests a religious or symbolic use, although this still may well have involved formal feasting. Thus, daily domestic consumption is thought to have been very limited throughout the Roman period.

Loomweights and briquetage:
Generally accepted as typically LIA artefacts, both loomweights and briquetage are significant elements of Period II and II rubbish deposits. The incidence of loomweight fragments conforms closely, the small quantity in early Roman pits being largely, if not wholly, residual and its surprising re-appearance in Period VI is entirely residual. Briquetage content actually increases from the LIA to Early Roman periods which may in part be due to the continuance of salt production beyond the conquest but equally to the secondary use of briquetage as a building material in the foundations of structures such as hearths. It should be noted here that briquetage is more highly fired than loomweight fabric and that this may be a contributing factor to their differential patterning (H. Major, pers comm.) This, along with the residuality factor, may explain its persistence, albeit a diminishing one, into the Late Roman period.

Daub:
Daub is again more frequent in LIA and early Roman pits, and could be seen to parallel the incidence of briquetage. However, it must be considered that the circumstance of its preservation has been somewhat different, being due to accidental, rather than deliberate, firing. Thus, it was only the fortuitously burning of this material that allowed its incorporation into rubbish deposits; other non-burnt daub simply disintegrating back into the soil. The comparatively low incidence of burnt daub in mid and late Roman pits may be due to the lack of houses being destroyed by fire in the vicinity, or the careful deposition of debris elsewhere (although daub was only a very minor component of the Area R 'reclamation'). Alternatively, it may be possible to postulate a change in building style with wattle-and-daub being replaced by 'weather-boarding' as a method of wall construction.

Metal objects and metalworking waste:
Although discussed together here, metal objects and waste resultant from the manufacture of metal objects should be regarded as distinct from one another – particularly where it is apparent that the latter is not necessarily related to the former.

In the earlier pits, the relationship between objects of iron and copper alloy is the important one. While both were deposited in relatively small numbers in the LIA and Early Roman periods it seems that copper alloy objects were initially slightly more numerous than iron, with an early Roman reversal. This may be a deceptive pattern as a tendency for small, easily lost and broken, bronze personal items may be expected to occur in greater number than larger, functional and durable items of iron such as tools. Whether or not the generally low incidence of metallic objects in pits is a reflection of low late Iron Age material culture, or at least of its supply to this settlement, at this time is difficult to determine. Equally important is the likelihood that much of the metal in circulation as objects was recycled. Indeed, it is possible that the metalworking activity evidenced at Elms Farm represents this.

The quantity of metalwork increases in mid Roman pits, particularly of iron. It is possible that iron and copper alloy were subject to differing degrees of recycling by this period. Copper alloy objects show only a small increase while that for iron is far greater. The latter increase may have been due to the increased availability (lower cost?) of iron, and of objects made beyond the settlement, which in turn may have reduced the need for recycling. Increased availability of both metals, together with a generally increasingly material culture, may account for continued rise in incidence of iron and copper alloy objects in late Roman pits – particularly at a time of supposed settlement contraction and depopulation. It is perhaps reasonable to speculate that, amid the settlement changes of the 3rd and 4th centuries, the recycling of metals further reduced or was more or less abandoned as a common practice. Although, as a note of caution, the concentrating effect of increasingly effective composting/middening activity may have produced the same effect.

The incidence of lead objects adds weight to this consideration of supply and recycling. The occurrence of lead is negligible in LIA and early Roman pits and is quite likely intrusive in most cases. Although it might be expected to more commonly feature in mid Roman pits, lead only makes a sudden and dramatic increase in the late Roman pits. It is conjectured that prior to this, lead was conscientiously recycled due to its restricted supply / high cost. As with iron and copper alloy objects, such recycling was abandoned as base metals became cheaper and supply greater.

Although the average incidence of metalworking waste per pit purports to show constancy through Periods II to V, with a single and marked increase in the latest Roman pits, it is argued that the latter rise is the product of the messiness of lead casting which is a readily identified aspect of Period VI. This is concentrated in and around Building 63 in Area J and probably falsely inflates the figures. Removing this material from our consideration, reveals that the incidence of metallic waste was remarkably constant throughout the whole of the settlement life. This is interpreted as a reflection of the level of subsistence metalworking activity undertaken to meet the basic needs of the resident population. Thus, increases in the incidence of metal objects may be seen to be the product of increased consumer need that was fulfilled by external supply rather than that of increased metalworking activity at Heybridge.

Structural debris:
Structural debris is defined here as the distinctively Roman-period building materials of brick, tile, *opus signinum*, mortar and wall plaster (daub already having been considered above). It must be

borne in mind that much (if not all) of the tile was used in the construction of hearths and ovens, rather than as a roofing material and that some of the debris in pits will have derived from their demolition. However, distinguished from ubiquitous daub, much of the structural material in later Roman pits not only infers the presence of at least one substantial Roman building at Heybridge but also identifies the period of demolition and disposal (at least of some of the material) following its/their abandonment. Thus, Periods V and VI seem to have been the heyday of this activity, although earlier consideration of the Area R water channel dumps suggest that this began in Period IV. Indeed, particularly in the case of the demolition of a single building, the appearance of debris in later pits may be the product of the final deposition following re-use in a range of minor structures. In some instances, structural debris had been used as sealing or capping deposits in both domestic (e.g. pit 13358, Area I) and votive (e.g. pit 6641, Area H) pits that might constitute an immediate post-demolition use.

Coins:
The basic level of recording of the unstratified component of the assemblage largely precludes meaningful analysis of spatial distribution, as does the very partial investigation of layers and dump deposits. However, consideration of coins derived only from cut features gives an insight into the frequency of coin loss and allows broad comparison between feature types (Table 00).

Feature type	1 coin	2 coins	3-4 coins	5-9 coins	10+ coins	Totals
Pits	54	10	2	2	3	71
Ditch segs.	25	2	3	1	1	32
Post-holes	22	2	0	0	0	24
Other struct.	6	1	0	0	0	7
Wells	3	2	0	0	2*	7
Totals	111	19	4	3	6	141

(* All from 'ritual pool' in top of well 22210 in Area J.)

Table 00. Incidence of coins in individual deposits within cut features

It is evident that the majority of occurrences are of single coins within discrete features. Predictably, coins are most likely to be found in pits; whether singly or otherwise. Structural features such as beam slots and gullies tend to contain the least coins, although the equally low incidence of deposition in wells is perhaps surprising. The occurrence of coins in quantity, most obviously numbering ten or more, seems to be the product of structured deposition. Although often only recognised through association with other, more conspicuous, 'placed' artefacts and assemblages, it is apparent that a number of the smaller quantities of coins were also deliberately deposited. The nature of 'special' coin deposits is further discussed in Section 6. As already noted, single or small numbers of coins, apparently deposited in mundane circumstances account for the majority of recorded occurrences and it is this 'normal' pattern of deposition that is of primary concern in this exploration of formation and deposition within the settlement.

The fact that incidence is generally low in structural features and in what may be termed 'use features' (e.g. wells), while relatively high in rubbish pits, is a good indication that this is a product of incidental or casual disposal. It would appear that the great majority of coins were simply being dropped and lost across the settlement during the course of daily life. There is no apparent patterning in the recorded position of instances one or two coins within individual pits (i.e. in bottom, middling, top or single fills) which suggests that their incorporation into a pit was incidental - either in deposits such as floor sweepings or during episodic infilling or wholesale backfilling with soil that was presumably derived from the surrounding land surface. Markedly lower coin incidence in ditches may reflect different disposal practices, be related to smaller capacity or, equally, be a product of lesser sampling during excavation.

The creation of rubbish

Having identified and discussed the major components the LIA and Roman pits, it is evident that while rubbish deposits of each period display certain characteristics there is little apparent spatial variation that relates to differing use and disposal between given areas. It appears that, within a specific period, rubbish disposal was mundane and uniform; wherever one type of material was deposited in a pit, it was almost always accompanied by the 'suite' of other characteristic types. The relative proportions of the different components was also broadly constant between pits. Thus, it seems apparent that the vast majority of pits received general domestic rubbish that was supplemented by waste from a range of craft activities undertaken in the same vicinities as occupation. It is interesting that the homogeneity of this rubbish suggests that the lifestyles of individuals and family groups resident at Heybridge did not differ markedly enough from one another to be visible in the cultural material they discarded (it is perhaps more likely that it was the items that they prized and curated, rather than threw away, which more accurately reflected their wealth and status in relation to one another). How, then, did these mundane and uniform deposits come to be created and deposited within such pits?

It has already been suggested that pits were located within occupation plots and that they were thus used by its residents (a single family, or extended-family, unit?) rather than the community at large. As there seems to be no particular differential disposal of rubbish between contemporary pits, it may also be assumed that this deposition was limited to a single pit at a time. If this was the case, we should ideally expect to see the fill sequences of pits displaying complex banding that reflects the frequent (daily?) disposal of domestic rubbish, with each band possessing its own character that reflects the types of meals prepared and consumed and perhaps house-cleaning chores undertaken over a very limited span of time (possibly a single day). Where the waste was deemed offensive capping layers of soil, sand or even inert debris such as tile may have been inserted. Intermittently, this very regular sequence might be interrupted by the disposal of other material on an occasional basis – the accidental breakage of a ceramic vessel, such as a storage jar, being a prime example.

Of course, in reality rubbish deposition was not so simple. It is suspected that pits may have been used incidentally as latrines, and their in-filling was by no means a simple progression of daily deposits, but could be intermittent and further complicated by settling, renewed deposition, recutting and even deliberate mass-backfilling. The lack of conformity to the idealised model suggests that the relationship between the generation of rubbish and the in-filling of pits was not a direct one. Rubbish, domestic or otherwise, was not disposed of directly into pits.

Instead, rubbish seems to have been accumulated above-ground over protracted periods of time. It is thus appropriate to envisage middens as significant features of the settlement landscape. It appears that these accumulations were intermittently levelled and, being mounds of predominantly organic material, have generally left very little trace from which to surmise their size, location, composition and duration. Only where relatively deep stratigraphic sequences of (rapidly accumulated?) silts were preserved at Elms Farm were the bases of middens recognised, as has already been described previously in relation to the Area I dumping episode. One further large midden, deposit 10496 *et al*, was identified in Area F (ref.). Both were approximately 10m in diameter and may represent the upper end of midden-size. A smaller midden 13146/13211 was recognised in Area I and comprised almost wholly of oyster shell, interleaved with a layer of sand (ref.). Even on the basis of this limited evidence, it is perhaps possible to presume that modest-sized middens were present in every enclosure and that there may also have been communal dumps to cater for the inhabitants/users of the central settlement zone where such facilities could not be accommodated.

Thus, primary deposition of rubbish was on such middens. The principal component of these would no doubt have been organic material – presumably largely derived from domestic food preparation and discard, but also perhaps including crop processing waste and animal bedding and dung (human too?). Given the ease in which domestic rubbish could have been disposed of beyond the settlement limits, it is clear that middens were not simply stockpiles of useless rubbish. It is perhaps better to see them in terms of compost heaps, the function of which were to reduce the great bulk of organic waste into mulch and eventually to soil. However, this was not the only refuse deposited on these heaps as material of a 'non-offensive' nature also appears to have been added in quantity. This included pottery, tile, jewellery and other metalwork and much of it probably constitutes the disposal of general rubbish and floor sweepings from the dwelling and surrounding plot.

During the process of decomposition the midden may be imagined to have been managed, used, added-to and reduced over a prolonged period of time. Find out how to manage a compost heap. Middens probably constituted a food source that was exploited by domestic animals such as pigs, chickens and, no doubt, dogs, thus maximum use was made of this resource while helping to reduce the heap at the same time. As the decomposition of the material progressed, the reduced organic component could be used as a soil supplement and the midden may have been intermittently quarried for this purpose. These rubbish mounds may well have developed and been maintained over a number of years, even decades judging by the base diameter of those such as 5722 and 10496. This prolonged accumulation is supported by the large quantity of pottery and other non-organic material both in these deposits and in the pit fills that ultimately receive such material. It is possible that the fact that only broad date ranges can often be assigned to rubbish pits at Elms Farm may be a reflection of this and refers to the life span of the originating midden rather than to the date of the pit infilling.

At some point, the decision seems to have been made as to the end of the useful life of each midden. It seems that this may have been precipitated by the removal of the majority of composted organics, much of which may have been reduced to soil. Pits, whether pre-extant or cut for the purpose, seem to have been used for the disposal of the remnant of the midden. This may account for the high, non-organic, rubbish content of such pits and for both its varied range and broken-ness. Ref to Ed's pot deposition stuff .

Midden material was also used to level-off the tops of subsidence hollows of previously filled pits and, on occasion it appears that entire middens were simply levelled across an area as has been posited for midden 5522 in Area I. Further evidence of this practice may be seen across the southern settlement zone where wholesale levelling may be indicated by the incidence of similar levelling deposits within the subsided pit tops across an enclosure. This spreading of midden material seems to have been limited to the settlement area as no distinctive 'manuring scatter' of cultural material was identified across the hinterland excavation of Area W. Thus, this practice was probably of a very localised nature and largely undertaken in order to enrich the soils of cultivated areas within the various smallholding plots, the potentially midden-derived dumps of Area I being an exception.

While the deposition of midden material within pits was often the final act of midden reduction, it is clear that this was not always a straightforward affair. The phenomenon of structured deposits, normally in the tops of pits and most likely associated with some rite of closure, is discussed in Section 6. However, the incidence of such ritual deposits indicates that rubbish disposal was a complex process to the very end and that rubbish itself was valued or even protected.

A final aspect of pit deposition is that of inclusion of additional waste material not derived from middens. A clear example of this is the deposition of dog remains which are almost wholly confined to the upper fills of pits and often comprise only part-articulated skeletons. While the practice of animal burial is again considered in Section 6, these partial carcass remains are interpreted less as structured deposits and more as examples of deceased animals being given a half-decent burial in a convenient pit. This may reflect the higher status of the dog in society, but also reflect a practical need to reduce temptation to wild scavengers. The low incidence of carnivore gnawing on bones has been suggested as evidence of rapid burial (ref. bone rep), perhaps undertaken for this very reason.

Conclusions

The study of both specific instances and also of the general trends of depositional practice demonstrate that material was constantly moving around the settlement and its immediate environs. Soil, building debris, and rubbish generated by domestic and manufacturing or processing activities were being created, used and discarded on a daily basis – as one would expect. The consideration of the three episodes of mass soil movement and dumping reveal this to have been at times undertaken on a massive scale and to have involved the acquisition of material from a range of sources.

The study of rubbish disposal, particularly as evidenced by the 1,100+ excavated pits within the settlement and the recognition of what probably amounts to thousands more across the unexcavated parts of the site, reveals that these small individual depositional episodes collectively amount to a phenomenon no less significant.

Deposition in other features and deposits

Although the consideration of the major soil-moving (aka dumping) episodes and rubbish disposal in pits (via middens) accounts for a major part of depositional practice, the incidence of cultural material was clearly not restricted to them. Consideration of the relative incidence of the basic finds types across the major feature/deposit types is informative. The three artefact types of pottery, animal bone and metalwork (iron and Cu alloy only) have been used as representative of the whole as these are present across all periods of settlement occupation (Table 0.). While this confirms that most cultural material was ultimately deposited in pits (in excess of 50% in all three cases), the remainder of rubbish was discarded in either ditches or as dump deposits, with post-holes containing only a small fraction of the total, as may be expected. Rubbish disposal within ditches and layers was broadly equal in collective terms, although some differences in individual rubbish types are apparent between the two. While similar levels of pottery disposal are evident, that of animal bone is greater in ditches. This is perhaps surprising when it is considered that ditches were not a particularly dominant aspect of settlement morphology (include gullies?). However, it should be borne in mind that the 'layer' category subsumes a multitude of more specific deposit types that includes the major dump and midden deposits identified above (should these be separated out on the graph?). Many of the minor layers were small and fragmentary and yielded only small quantities of artefacts. It is likely that weathering and trampling of material on the exposed surfaces of the settlement has resulted in the under-representation of animal bone in these deposits.

Conversely, iron and copper alloy objects were less numerous in ditches that in these layers. This may in part be a reflection of the more casual and accidental loss, particularly of the smaller items, rather than of deliberate discard; although this does not then explain their high incidence in pits (think about this a bit harder!).

Re-use and residuality

Residuality, is a product of re-deposition - the disturbance and re-laying down of deposits subsequent to their initial creation. The most readily evidence of this is the presence of residual finds within assemblages, being artefacts that occur in deposits later than the date of their origin and dispersal (Brown 1995, 1)

The exploration of residuality and the processes of deposition and re-deposition that produce it is largely dependent on the analysis of finds assemblages. On the whole, it is accepted that different types of artefact have different histories of use, perhaps re-use, discard and survival - all of which may have a bearing on the nature of their re-deposition. An understanding of the likely nature of deposition of a context does, of course, supply the context for the re-deposited material so that the stratigraphic and artefactual studies are symbiotic. To gain an insight into the varying ways in which different artefact types behave when redeposited, some of what have been deemed to be the more reliable indicator finds are discussed below. Selected primarily because they have early and restricted currency at Elms Farm, their occurrence in post-dating periods and feature types is considered in order to try and determine how residual material behaves and, more fundamentally, what it looks like.

Mention focus on incidence and fragmentation in this study.

<u>Loomweights</u>

Briquetage

The apparent abandonment of Red Hills and, by inference, the cessation of salt-winning along the Essex estuaries, is generally regarded to have occurred during the 2nd century (Rodwell 1979; Fawn *et al* 1990, Sealey 1995 and 1996; Going 1996). It should therefore be possible to expect a similar cut-off for the currency of briquetage and that its appearance in later deposits should normally be regarded as residual. Briquetage occurred widely across the site. Most areas yielded at least 10kg each, the exceptions being the smaller peripheral (E, Q, R) and temple (J) areas. Its almost total absence at the latter must surely be a result of functional differences. Five areas produced over 20kg each, and 3 more 15kg each. Through time, the distribution is much less uniform (Table 00). On the face of it, this is a 'classic' distribution for material with an early use life and later appearance only as residual finds.

On the strength of this, it may reasonably assumed that briquetage production and use ended around the end of Period III or early in Period IV. It should thus be possible, on the basis of feature date, to search for differences between briquetage that was still in use roughly contemporary with its context (i.e. primary material) and that which had become incorporated into a deposit via some secondary process. However, aspects of the data are equivocal. In those features in which briquetage occurred, an overall average of around 150g per context can be calculated. This varied little through time, and the variation did not follow an expected pattern (Table 00).

Period	II	III	IV	V	VI	VII
Total weight (kg)	40	75	20	→	12	←
Avg. wt. per context (g)	115	174	133	130	125	85
Avg. wt per piece (g)	26	39	43	51	62	41

Table 00. Average briquetage content of context (g), and average weight of each piece of briquetage

It might be expected that the notional primary deposits (i.e. dated to Periods II and III) would contain the greatest quantity of material; this is only partially true. In terms of overall weight per period this is indeed the case. However, Period II briquetage clearly occurred in smaller quantities per context and was more fragmentary than at any other time in the life of the settlement. Bearing in mind that pits were the most numerous in the LIA, it is likely that this material was simply more widely dispersed. It is evident that pit frequency decreased markedly through time and thus, although the amount of available briquetage was also reduced, this was concentrated in fewer features. Increasing average fragment weight through time may at least partly be accounted by greater secondary use of briquetage. Clearly, the location of its primary use was not within the settlement confines, but at the Red Hills in the inter-tidal zone of the estuary. It must be borne in mind that, if the identification of briquetage as the fabric of evaporation tanks and associated equipment (i.e. fire-bars, pedestals, etc.) is strictly correct, then its occurrence at Elms Farm is entirely secondary. Indeed, as appreciated previously in consideration of the circumstance of its deposition within the settlement, it is evident that briquetage was used as a construction material in ovens and hearths. If this was its main use within the settlement, then we might assume that its eventual discard could have been somewhat delayed and that the constancy/continued increase in fragment size past its currency (through Periods IV to VI) might constitute the wider robbing and re-use of material from recently abandoned salt-winning sites. Thus, it is suggested that only a (small?) portion of briquetage in mid and late Roman contexts may have been truly residual (i.e. of the level seen in LIA contexts), a significant proportion being newly released from its secondary function [it really depends on where you measure residuality from - end of primary use or actual discard? Not that these are easily distinguished]. Average context and fragment weights only lower as the settlement declines and is abandoned in Period VII.

Grog-tempered pottery

A particularly distinctive and definitively early material that has much potential for residuality study at Elms Farm is grog-tempered pottery (hereafter referred to as GROG). With a relatively precise cut off in terms of its production, though not necessarily its final use, of c.AD70, large quantity and widespread distribution across the settlement area, this pottery fabric should be an ideal indicator. Unlike briquetage, this locally-made pottery had a more-or-less single use (i.e. domestic vessel) and its post-discard behaviour can be examined over a period of some 300 years or more.

Recast this table by site period, to Period VII?

	Early-mid 1st cent	Mid-late 1st cent	Late 1st/early 2nd cent	mid/late 2nd cent	
Total wt (kg)	350	150	40	17	
Ave wt per ctxt (g)	500	400	200	?	
Ave sherd wt (g)					

Table 00. Incidence of Grog-tempered pottery over time

Overall, the temporal patterning of GROG is encouragingly close to the expected pattern (Table 00.). It is most common in contexts of the 1st century AD, rapidly dropping to a greatly reduced occurrence immediately on cessation of production, beyond which it maintains a reasonably steady, but low, 'background' occurrence. A similar pattern is evident in the average GROG weight per context.

However, when individual sherds size (i.e. fragmentation) is considered, the picture is much less clear. The average sherd weight in contexts current with GROG production/use is 20.4g. Although there is a trend towards a slight decline (to c.15g by the end of the fourth century), the decline is neither uniform nor necessarily especially significant. Indeed, grog-tempered sherds found in contexts of the early 2nd century are, on average, *larger* than those of the middle and mid-late 1st century.

Need a table of sherd wt and feat type and through time? **HERE**

Consideration of the pottery on the basis of feature type reveals other intriguing trends. In ditches, for example, there is a gradual diminution in sherd size in the periods immediately after the circulation-life of the pottery, but then the average sherd weight picks up again markedly in contexts of the later 3rd century and beyond. In pits, the sherd size drops markedly during the currency of the fabric, continues a much more gradual fall throughout most of the Roman period, before recovering in the second half of the 4th century (albeit from a by now very tiny sample). It is also worth noting that the average sherd size of pottery found in pits is always greater than that of pottery from ditches, except for a minor aberration in the late 3rd-early 4th century. Interestingly, when averaged out, this difference is in the region of 5g per sherd (quite a substantial difference?) but the divergence narrows markedly over time. This may suggest that pottery in ditches has already undergone more fragmentation episodes by the time it is deposited in the ditch than the corresponding sherds in pits, but that pit finds in later periods have undergone more subsequent disturbance than earlier finds, thus bringing the difference between the two feature types down. In turn, this may suggest that deposition in ditches was always already secondary deposition?

Pottery from layers, however, undergoes quite the opposite trend, when trended out over the entire life of the site: its size increases through time, almost exactly inversely to the decrease seen in ditches. I think this may be totally *due to the high reading from a tiny number of sherds (3) in cp23.*

If these were ignored, the sherd size in layers would average out almost flat across the whole life of the site, suggesting that pottery in layers has reached its minimum size threshold.

Dressel 1 and 2-4 amphora

Samian

- Mention animal bone and its problems
- Re-use and recycling

General
Often difficult to estimate how many times material has been disturbed and redeposited. Sometimes LIA pot in LRom pits is large and unabraded and may have only been moved once. But artefacts generally have a minimum sherd/fragment size (dependent on robustness of the material) beyond which it is difficult/impossible to tell if they have been disturbed once or several times. Of course, a single deposit may contain both primary deposited artefacts and a range of material that may have been disturbed any amount of times before finally being deposited in the same feature.
The picture is also complicated by recycling and re-use of material and by the postulated importance of middening to the process of rubbish management and disposal (see above). Middens perhaps represent the continual (or periodic) disturbance/reworking of above-ground rubbish deposits (i.e. more intensive disturbance, etc.).

Phenomenon of *increasing* sherd/frag size in LRom period.

Clearly, it is apparent that residuality cannot be considered in isolation and that the effects of formation, deposition and settlement history must also be brought to bear. Different materials and artefact types behave in varying ways and are influenced by such factors as recycling, reuse and no doubt a whole host of other criteria that are not readily apparent in the archaeological record.

In terms of choosing reliable artefactual indicators of residuality, it appears that briquetage is not one of them. The distribution and deposition patterns of material and artefacts that have significant use/value beyond that of their primary function can often be significantly different to those that do not. As such, what constitutes truly residual material can be difficult to identify.

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Further notes:
Decrease in number of pits and increase in their rubbish content - explain

Pit size

Recycling

Recast pit contents graphs?

Rubbish disposal in ditches = rural? Pits = urban/settled places?

- Why is tile thrown? Is it used as capping?
- Incidence of sealing layers of clean silts, sand, clay, ?other, in pits?
- What really goes into pits? – anything and everything, or smelly squishy organics? – if the latter, why so much soil and other inorganic debris?
- Soil in pits – generally significantly gravelly, compared to topsoil/subsoil? Mounds of mixed natural and soil by side of pit gradually thrown in to cap individual (small?) deposits of organic refuse?
- Animal bone – fragmentation by phase (p.10) late Rom deposits contain bigger fragments – esp. Areas J, K and L. Are public and adjacent areas quickly cleared of rubbish?
- Pits contain over half the bone assemblage. The layers, then ditches (= a third combined), then wells, post-holes, 'floors' and gullies (p.13)

Residuality
- Good indicators: pottery (GROG, samian, amphora), Loomweights, ?briquetage,
- Mention animal bone and its problems
- Re-use and recycling

Non-human agencies
- Grazing animals – compaction, reworking, manuring.
- Flooding???
- Scavenging animals

Steve's thoughts on pottery and formation study:
Ritual or rubbish?
The 51 complete pots may thus sometimes have been the result of deliberate or structured deposition. Another category of unusual artefact found on the site could be important information for other processes of context formation. A minimum of 206 contexts produced complete or virtually complete *profiles* of pots, but not complete vessels as such. (The number of actual profiles recorded is slightly higher, over 225, with at least 16 contexts producing more than one, up to five in the same context. This figure is a minimum because it is likely that not all reconstructable complete profiles were recorded, as this information was not specifically targeted during the recording process.)

There are a number of possible reasons why so much of a given vessel would end up together in a deposit: deliberate deposition is again possible. By far the most likely explanation, however, is simply that the accidentally broken vessel was disposed of relatively quickly after breaking. This implies that this form of rubbish at least was not subjected to lengthy intermediate processes between breakage and deposition in the ground, such as might be expected if middening was a standard feature of rubbish disposal. Although this observation is based purely on the

treatment of broken pottery, it seems reasonable to extend similar treatment to other domestic refuse.

This phenomenon was observed in all phases of the occupation, broken down as follows:

	Contexts	% of occurrences	% expected
Period II	34	17	24
Period III	66	32	23
Period IV	42	20	11
Period V	29	14	6
Period VI	27	13	6
Not closely phased	8	4	25

(a few contexts have been assigned to the latest phase they could belong to, so contexts phased II-III have here been taken as III. This is a minor component of periods III and IV totals, but accounts for half of Periods V and VI.)

If these pots were distributed randomly through time, based on the proportions of all dated contexts, there should be 9 Period II pots, 7 Period III, four of IV and 2 of V to every pot of Period 6. The apparent under-representation of period II contexts could be the result of a number of factors, mostly related to the nature of the ceramics themselves. It may be that completely reconstructable profiles were less likely to be recognised when the assemblage consisted overwhelmingly of a single fabric, and a limited range of forms, as tends to be the case in Period II. Or grog-tempered vessels may break into less diagnostic shapes.

Other factors need to be considered, though. Period II deposits were more likely to be disturbed by later features, resulting in a greater chance of dispersal of sherds of a single vessel *after* disposal. That this may be an important factor is suggested by the over-representation of the later periods. Periods V and VI (including Iv-V, as has been done for the figures above) account for only 12.3% of site contexts (or 14% of *dated* contexts), but here 56 of 206 complete profiles (27%, twice as high as expected). One ought to expect the same disturbance factor to operate on Period III contexts also, albeit to a lesser extent. Period III, however, provides *more* than the expected proportion of these finds.

More significantly, shallow forms such as platters and dishes will be more prone to break in ways that leave full profiles than taller vessel types, and of course, dishes are characteristic of periods later than II. The importance of this factor is confirmed when we note that of the 225 records of complete vessel profiles, 126 were dishes and 44 platters, compared to only 55 of all other types combined. Dishes, it will be noted, predominantly date to the later third century and later, although platters were markedly an early form. Dishes, indeed, form a dominant proportion of the whole ceramic assemblage for much of the later end of the Roman period. So we may conclude that the chronological distribution is primarily a reflection of this entirely separate ceramic trait, and cannot be linked to changing patterns of rubbish disposal.

Further, even at the period of their greatest dominance in the ceramic assemblage, dishes never accounted for 50% of the vessels in use (as measured by rim-EVE: their peak was 47%), while they account for 56% of all complete profiles, or more pertinently, 68% of those from periods III onwards. This lends solid support to the suggestion that recovery of complete profiles is strongly dependent on the form of the vessel rather than any other factor. Thus variation in the occurrence of complete vessel profiles can be reasonably confidently ascribed to a particular vessel form and its period of circulation rather than to changes in rubbish disposal practices.

Almost exactly half of these occurrences (102) were in pits; the other half being evenly divided between ditches (35), layers (31) and other feature types (38). No detailed comparison of other finds types associated with this phenomenon has been attempted.

In conclusion, there is strong evidence that factors other than behaviour or rubbish disposal factors account for variations in the appearance of complete or completely-reconstructable vessel

profiles in deposits. But does this therefore mean that complete vessel profiles are not to be regarded as 'special' deposits?

Rather than relying, therefore on the nature of the finds themselves, a whole range of factors needs to be addressed in defining 'special' or 'structured' deposition; the formation process of the fills of well 9421, for example, suggest very deliberate selection of the materials included in the lower fills, presumably those representing the deliberate decommissioning of this well; the upper fills, meanwhile, look much more like normal rubbish deposited as the deliberate fills settled and the ex-well just became another hole in the ground.

Discuss other well fill sequences in detail ?Especially the apparent capping deposits.