Channel Tunnel Rail Link

London and Continental Railways

Oxford Wessex Archaeology Joint Venture

The Roman pottery from Pepper Hill, Southfleet, Kent (ARC PHL97, ARC NBR98)

by Edward Biddulph

with contributions by Joanna Bird and Brenda Dickinson

CTRL Specialist Report Series

2006

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1 INTRODUCTION

Some 27,000 sherds, weighing 193 kg, were recovered from the site. Of the two principal campaigns of excavation - Pepper Hill in 1997 (PHL) and New Barn Road (NBR) in 1998 - the latter revealed more graves and appeared to yield more pottery. Certainly, it achieved a higher sherd count, though its overall weight was marginally less than that of the 1997 excavation. In broad terms, however, both assemblages are of reasonably equal size, and correspond neatly to the division of the site itself, with the earlier excavation encompassing the southern half of the site, and New Barn Road taking the northern half. The entire assemblage was generally poorly preserved. Vessels were very fragmentary, including ceramic grave-goods, which comprised few complete, unbroken vessels.

Table 1: Pottery recovered from the two excavation events.

Event	Sherds	Weight (g)	MV	EVE
ARC NBR 98	16394	92116	378	134.53
ARC PHL 97	10467	100521	249	107.32
Total	26861	192637	627	241.85

The pottery was recorded using the standard methodology devised for the recording of Roman pottery from sites along the CTRL Section 1 route. Fabrics were assigned codes devised by the Canterbury Archaeological Trust (Macpherson-Grant et al 1995), though to allow analysis on a more general level, and particularly to facilitate inter-site comparisons, each record was also assigned one of nine ware group codes. Quantification was by sherd count and weight, and where possible, minimum number of vessels (MV) based on a count of rims, and estimated vessel equivalence (EVE), calculated from the surviving proportions of rim pieces. Forms were matched primarily with descriptions in the Southwark typology (Marsh and Tyers 1978; Davies *et al* 1994, 6-8), although in practice Monaghan's corpus of North Kent and Upchurch ware types (1985) proved to be more useful for identification and dating. Two categories of information were specific to Pepper Hill. *Interpretative types* (IT) are a series of codes that assist the classification of funerary vessels - even those lacking clear diagnostic traits - into functional type. This was crucial for an assemblage that included so many poorly preserved vessels. Only vessels securely attributed to graves were assigned these codes. This effectively introduced a further method of quantification: number of funerary vessels based on count of interpretative types. *Completeness* (COM) comprised codes that described the extent of preservation of individual vessels. Again, the category was used only for funerary pottery.

Table 2: Interpretative type. Codes assigned to secure ceramic grave-goods only.

IT Code	Description
AJ	Ancillary vessel - precise function uncertain (jar)
AM	Ancillary vessel - miscellaneous types
AU	Ancillary vessel - unidentified
DB	Drinking vessel - beaker
DC	Drinking vessel - cup
DJ	Drinking vessel - small jar or 'drinking-jar'
LF	Liquid container - flask or flagon
OB	Open form - bowl
OD	Open form - dish
OP	Open form - platter
UB	Cinerary vessel (urn) - bowl
UD	Cinerary vessel (urn) - dish
UF	Cinerary vessel (urn) - flask or flagon
UJ	Cinerary vessel (urn) - jar
UL	Cinerary vessel (urn) - beaker
UP	Cinerary vessel (urn) - platter
UU	Cinerary vessel (urn) - unidentified

This report describes the results of the analysis of the assemblage, with particular emphasis on the pottery specifically from graves. First, a general summary of overall assemblage composition is given, followed by consideration of the condition and origin of the pottery. The rest of the report deals with the funerary pottery. The major themes to be discussed include vessel selection and supply, and the treatment and positioning of pottery. An inter-site comparison has also been made, with consideration given to what the results reveal about funerary rites and the status of Springhead's inhabitants buried there.

2 THE FABRICS

P Prehistoric fabrics

SAND	Sand-tempered fabrics (TF8)
FLINT	Flint-tempered fabrics (TF13)

S Samian wares

R42	South Gaulish samian ware
R43	Central Gaulish samian ware
R46	East Gaulish samian ware
R46.1	?East Gaulish/Pulborough samian ware

F Fine wares

R25	Lower Rhineland colour-coated ware
R29	Highly micaceous wares from ?Canterbury
R33	Colchester colour-coated ware
R36	East Gaulish 'Rhenish' ware
LR11	Nene Valley colour coated ware

R151 Unsourced fine sandy colour-coated ware

M Mortaria

R61 North-Gaulish/SE England mortarium fabric 1
R65 Verulamium-region white-ware mortaria
R99 Unidentified mortarium fabric

W White wares

R15 Verulamium-region white ware
R75 Unidentified white or cream wares
R89 North-Gaulish/SE England white ware
R150 White/buff fine fabric with black sand (?glauconite)
R152 Moderately sandy white or buff ware with occasional grog and limestone pellets

Q White-slipped wares

R16.1 Fine white-slipped grey 'Upchurch' ware
R18.1 Fine white-slipped oxidised 'Upchurch' ware
R105 Coarse white-slipped oxidised sandy ware

E 'Belgic'-type wares

B1 Fine grog-tempered wares
B1.1 Fine/coarse grog-tempered wares
B2 Coarse grog-tempered wares
B3 Grog-tempered wares with sparse flint
B4 Grog-tempered wares with chalk grits
B5 Grog-tempered wares with sand
B5.1 Grog and shell tempered fabric
B6 Shell-tempered wares
B8 Fine sandy wares
B9 Coarse sandy wares
B9.1 Glauconitic Medway Valley ware
B9.2 Glauconitic ware with calcined flint
LIAB1 Flint-tempered fabrics
R154 Fine red-surfaced grog-tempered wares

O Oxidised 'coarse' wares

R8.1 Fine orange sandy wares
R8.2 Fine red sandy wares
R8.3 Fine buff sandy wares
R9.2 Canterbury fine pink or buff sandy ware
R17.1 Fine orange 'Upchurch'-type ware
R17.2 Fine red 'Upchurch'-type ware
R17.3 Fine buff 'Upchurch'-type ware
R68 'Patch Grove' grog-tempered ware
R71 Unidentified pink or buff wares
R74.1 Coarse orange sandy wares
R74.2 Coarse red sandy wares
R74.3 Coarse buff sandy wares
R153 Severn Valley ware

R Reduced 'coarse' wares

R16 Fine grey 'Upchurch' fabrics I and II
R67 Highgate Wood fabric C
R73 Fine Thameside grey ware
R73.2 Early Thameside fine sandy grey ware
R73.3 Early Thameside medium sandy grey ware
R73.4 Earliest Thameside handmade 'sooted' sand-tempered fabric
R100 General grey/black sandy ware
R102 Flint and sand-tempered ware
LR2.1 Late Thameside medium sandy grey ware

B Black-burnished wares

R13 Black-burnished ware, category 1
R14 Black-burnished ware, category 2

C Shell-tempered wares

R69 South Essex/north-west Kent shell-tempered wares

2.1 Assemblage composition

Table 3: Quantification of fabrics

CAT fabric	Sherds	% Sherds	Weight (g)	% Wt	MV	% MV	EVE	% EVE
P								
SAND	4	<1%	21	<1%	-	-	-	-
FLINT	97	<1%	291	<1%	1	<1%	0.03	<1%
S								
R42	195	1%	3428	2%	51	8%	13.38	6%
R43	185	1%	6137	3%	32	5%	13.72	6%
R46	60	<1%	3112	2%	13	2%	8.33	3%
R46.1	4	<1%	21	<1%	2	<1%	0.09	<1%
F								
R25	56	<1%	177	<1%	3	<1%	1.26	1%
R29	1	<1%	128	<1%	1	<1%	1.00	<1%
R33	1	<1%	61	<1%	1	<1%	0.80	<1%
R36	1	<1%	1	<1%	-	-	-	-
LR11	3	<1%	18	<1%	-	-	-	-
R151	116	<1%	341	<1%	2	<1%	1.25	1%
M								
R61	2	<1%	63	<1%	1	<1%	0.10	<1%
R65	2	<1%	50	<1%	-	-	-	-
R99	1	<1%	130	<1%	-	-	-	-
W								
R15	422	2%	6950	4%	12	2%	11.00	6%
R75	14	<1%	133	<1%	1	<1%	1.00	<1%
R89	343	1%	1425	1%	2	<1%	2.00	1%
R150	2	<1%	41	<1%	-	-	-	-
R152	106	<1%	721	<1%	1	<1%	0.20	<1%
Q								
R16.1	2	<1%	4	<1%	1	<1%	0.25	<1%
R18.1	2571	10%	14417	7%	37	6%	19.64	8%

CAT fabric	Sherds	% Sherds	Weight (g)	% Wt	MV	% MV	EVE	% EVE
R105	266	1%	645	<1%	-	-	-	-
E								
B1	183	1%	855	<1%	12	2%	0.66	<1%
B1.1	1	<1%	6	<1%	-	-	-	-
B2	64	<1%	634	<1%	3	<1%	1.18	1%
B3	43	<1%	169	<1%	2	<1%	0.11	<1%
B4	1	<1%	6	<1%	-	-	-	-
B5	110	<1%	735	<1%	5	1%	2.74	1%
B5.1	155	1%	625	<1%	2	<1%	0.68	<1%
B6	73	<1%	427	<1%	-	-	-	-
B8	225	1%	1243	1%	-	-	-	-
B9	30	<1%	280	<1%	3	<1%	0.26	<1%
B9.1	5	<1%	32	<1%	-	-	-	-
B9.2	11	<1%	27	<1%	-	-	-	-
R154	13	<1%	295	<1%	1	<1%	0.90	<1%
LIAB1	171	1%	503	<1%	2	<1%	0.44	<1%
O								
R8.1	2	<1%	8	<1%	-	-	-	-
R8.2	54	<1%	154	<1%	1	<1%	0.25	<1%
R8.3	60	<1%	177	<1%	1	<1%	0.10	<1%
R9.2	4	<1%	10	<1%	-	-	-	-
R17.1	708	3%	1591	1%	8	1%	3.86	2%
R17.2	820	3%	2055	1%	11	2%	5.20	2%
R17.3	60	<1%	101	<1%	1	<1%	0.13	<1%
R68	1364	5%	19481	10%	12	2%	2.83	1%
R71	261	1%	1585	1%	2	<1%	1.45	1%
R74.1	242	1%	1394	1%	3	<1%	1.64	1%
R74.2	32	<1%	165	<1%	1	<1%	0.80	<1%
R74.3	141	1%	2680	1%	2	<1%	1.50	1%
R153	30	<1%	362	<1%	1	<1%	0.60	<1%
R								
R16	3812	14%	16071	8%	96	15%	40.63	17%
R67	58	<1%	258	<1%	1	<1%	0.15	<1%
R73	723	3%	7146	4%	21	3%	14.05	6%
R73.2	63	<1%	184	<1%	-	-	-	-
R73.3	9238	34%	69071	36%	185	30%	59.77	25%
R73.4	236	1%	1800	1%	5	1%	1.86	1%
R100	1193	4%	7650	4%	15	2%	5.97	2%
R102	2	<1%	3	<1%	-	-	-	-
LR2.1	375	1%	3762	2%	11	2%	5.70	2%
B								
R13	18	<1%	485	<1%	1	<1%	1.00	<1%
R14	196	1%	3769	2%	14	2%	8.58	4%
C								
R69	1630	6%	8523	4%	44	7%	4.76	2%
Totals	26861	-	192637	-	627	-	241.85	-

Table 4: Quantification (by EVEs) of form by fabric

CAT fabric	Flagons/ flasks (I)	Jars (II)	Beakers (III)	Dishes/ bowls (IV)	Platters (V)	Cups (VI)	Mortaria (VII)	Others (IX)	Total
P									
FLINT				0.03					0.03
S									
R42				2.97	8.33	2.34			13.38
R43				10.8	0.22	2.02	0.68		13.75
R46				5.13		3.2			8.33
R46.1				0.09					0.09
F									
R25			1.26						1.26
R29				1					1
R33			0.8						0.8
R151			1.25						1.25
M									
R61							0.1		0.1
W									
R15	11								11
R75	1								1
R89	2								2
R152	0.2								0.2
Q									
R16.1			0.25						0.25
R18.1	19.64								19.64
E									
B1		0.54	0.12						0.66
B2		1	0.1	0.08					1.18
B3		0.11							0.11
B5		0.9		1	0.65			0.19	2.74
B5.1		0.68							0.68
B9		0.13		0.13					0.26
R154					0.9				0.9
LIAB1		0.2			0.24				0.44
O									
R8.2			0.25						0.25
R8.3			0.1						0.1
R17.1	1.4		1.86		0.6				3.86
R17.2	1.03		2.11	1.06	1				5.2
R17.3			0.13						0.13
R68		2.78		0.05					2.83
R71	1.45								1.45
R74.1		0.64			1				1.64
R74.2			0.8						0.8
R74.3	1	0.5							1.5
R153								0.6	0.6
R									
R16	1.1	5.07	18.4	3.33	12.71				40.63
R67		0.15							0.15
R73		2.55	6.1	2	3.4				14.05
R73.3	1.45	29.3	4.79	12.6	10.06			1.57	59.77
R73.4		0.75						1.11	1.86
R100	1	2.91		2	0.06				5.97

CAT fabric	Flagons/ flasks (I)	Jars (II)	Beakers (III)	Dishes/ bowls (IV)	Platters (V)	Cups (VI)	Mortaria (VII)	Others (IX)	Total
B									
R13				1					1
R14				8.58					8.58
C									
R69		3.38		1.18				0.2	4.76
Total	42.57	52.3	41.03	54.77	39.17	7.56	0.78	3.67	241.85
% Total	18%	22%	17%	23%	16%	3%	<1%	2%	-

Samian wares (S) arrived from Gaul throughout the life of the cemetery. They take a 15% share of the assemblage by EVE. This was dominated by South and Central Gaulish samian wares (fabrics R42 and R43 respectively), which were present in roughly equal proportions. South Gaulish samian reached the site during the second half of the 1st century AD. Almost all of it was produced at La Graufesenque. A platter deposited in a mid 1st century inhumation grave (892) was exceptional, having probably arrived from Le Rozier. Concomitant with sites across the region, conventional supply of South Gaulish samian ceased at the beginning of the 2nd century AD. Although the ware was available for deposition after this date - a South Gaulish vessel had been placed in a mid 2nd century cremation grave (11961), for example - the extent of this phenomenon was very limited, presumably since the rise of Central Gaulish samian ensured continued primary samian supply. The earliest Central Gaulish products were from Les Martres-de-Veyre, which reached the site during the first quarter of the 2nd century. Most Central Gaulish products, however, were manufactured at Lezoux and exported to south-eastern Britain after *c* AD 120 until the end of the 2nd century. East Gaulish samian (R46) was less well represented. Sources favoured were the earlier established factories at La Madeleine and Heiligenberg, which were exporting during the 2nd century. Products from Rheinzabern were relatively few, as the factory's main period of exportation coincided with the decline and eventual abandonment of the cemetery. Samian wares selected for burial were predominantly in open, shallow, forms. South Gaulish platters (Drag. 18 and Drag. 15/17) and central (and occasional East) Gaulish dishes or bowls (Drag. 18/31 and Drag. 31) were common. Cups inevitably consisted mainly of Drag. 27 (usually in R42) and Drag. 33 (R43). Drag. 46 types, usually from East Gaul, were surprisingly commoner as grave-goods than Drag. 33 types, indicating preferential selection of the type. Overall, however, cups were poorly-represented and none existed in other wares. Decorated samian was limited to body sherds belonging to Drag. 29, 30 and 37.

Other than samian, fine wares (F) contribute a small amount to the ceramic assemblage - less than 1% by weight and 2% by EVE. The early Roman period was poorly served by fine wares. In this respect, supply to the cemetery follows the pattern witnessed at the settlement at

Springhead and beyond (Pollard 1987, 36); Gallo-Belgic and Central Gaulish wares, for example, were entirely absent. In their place was a single dish in a highly micaceous fabric (R29), which dated up to *c* AD 80 and was recovered from a grave. The site received further fine wares in the 2nd and 3rd centuries. Three Lower Rhineland (R25) and one Colchester colour-coated ware (R33) roughcast bag-shaped beakers (*Cam* 391) were broadly contemporaneous, all belonging to the mid 2nd century. Dating to the late 2nd or early 3rd century, East Gaulish 'Rhenish' ware is evidenced by a single sherd, recovered from a deposit overlying the Hollow Way. Fabric R151, a late 3rd/early 4th century fine sandy buff fabric with a dark slip, of unknown source, is represented by just two vessels, both indented beakers (Monaghan type 2C) and from graves. Three sherds of Nene Valley colour-coated ware were also present.

Given the general absence of the form in cemetery assemblages, mortarium fabrics (M) unsurprisingly make a token contribution to the assemblage with a total of five sherds. Mortaria in fabrics R61 (SE England/NW Gaul) and R65 (Verulamium) were produced alongside white ware flagons, which were those industries' principal export to the site up to the mid 2nd century; the occasional mortarium presumably travelled with them. The sole mortarium to belong securely to a burial was in Central Gaulish samian ware (Drag. 45).

White wares (W) account for 7% by weight and were confined to the second half of the 1st century AD and first half of the 2nd. Verulamium-region white ware (R15) was commonest. It was among the earliest of regional imports, arriving from the mid 1st century in the form of collared or 'Hofheim' flagons (IA). These were replaced by ring-necked types (IB), which lasted until production of the ware terminated around AD 160 (Davies *et al* 1994, 41). Fabric R89 encompasses a range of similar fabrics that have been attributed to Kentish or North Gaulish workshops. The fabric is conventionally dated within the period *c* AD 50-100, a date supported by the Pepper Hill examples, based on form (eg disc-mouthed flagon ID) and associated pottery. The source of fabric R152 may be more local to the site, but it shares forms and date with R89. The majority of the white wares were securely assigned to burials. White-slipped wares (Q) accounted for 8% by EVE. The category was dominated by fabric R18.1 from North Kent. This fabric was a key component of pottery supply, and was available for deposition throughout the life of the cemetery. Its principal period of supply occurred, however, during the early Roman period. This is amply demonstrated with the observation that just two forms were assigned to the fabric: collared (IA) and ring-necked (IB) flagons. The other fabrics - a sandier white-slipped oxidised ware of unknown source (R105) and a white-slipped reduced 'Upchurch'-type ware (R16.1) - made only token appearances.

'Belgic' wares (E) account for 3% of the total late Iron Age/Roman pottery assemblage by weight. As might be expected, grog-tempered (B1/B2) and sandy wares (B8), ubiquitous in the region during the late Iron Age, formed the largest groups. Both fine and coarse grog-

tempered wares were present, although the fine wares tended to be somewhat lumpy. A red-surfaced grog-tempered fabric (R154) was a little finer. Exclusively shell (B6) or flint-tempered (LIAB1) fabrics were important too, with the former proving marginally more popular than the latter. Production was centred in north-western Kent and south Essex. Glauconitic wares (B9) deriving from the Medway Valley (Pollard 1988, 31) were available in the Springhead area. These wares contained distinctive black sand inclusions and formed a significant group among 'Belgic' wares. The majority of the 'Belgic' assemblage was recovered from contexts broadly dated from the late 1st century BC to the mid 1st century AD, with its period of use terminating around AD 70. Some wares, particularly coarse grog-tempered ware (B2) and shell-tempered ware (B6), retained their currency beyond this period. The availability of the former probably continued until the end of the 1st century AD, while the use of the latter, developing into 'Romanised' fabric R69, extended into the 2nd century. E wares were typologically restricted. Jars were predominant and, because of the poor survival of rims generally, undiagnostic in terms of detailed type. However, bead-rimmed jars (IIA), some with grooved rims, were available in sandy and shell-tempered wares. Occasional carinated bowls (eg *Cam* 214) and platters were recorded in grog-tempered ware, including R154.

Oxidised wares accounted for around 15% of the ceramic assemblage by weight and 8% by EVE and encompassed a range of fabrics. 'Upchurch'-type fabric R17 was commonest as measured by rim-equivalence. Forms were typically small and thin-walled beakers (eg globular beaker IIIB) and fine platters (Monaghan type 7A). Like the white-slipped variant (R18.1), fabric R17 was deposited most frequently during the early Roman period. Pollard (1987, 211) gives a Flavian date for its introduction to the region, and there is little in the Pepper Hill assemblage to place manufacture firmly before *c* AD 70. Vessels in the fabric were chosen for primary deposition as grave-goods into the second half of the 2nd century AD, but no certain 3rd century vessels are known from the site. Grog-tempered Patch Grove ware (R68) made a significant contribution to the assemblage, although its presence at the cemetery was limited largely to cinerary vessels. While the extent of pre-Conquest production is unknown, the ware only achieved wider distribution after AD 43. Vessels were deposited into graves during the early Roman period. The fabric occurs after *c* AD 130, but this is in secondary contexts where incidences may be residual. However, production of storage jars continued into the 3rd century. Oxidised wares from further afield than north and west Kent are rare. Canterbury may be the origin of a fabric tentatively identified as R9.2. A tankard in Severn Valley ware (R153) is rarer still. Although the fabric has been recorded in London (Tyers 1996, fig. 254), Kent is far from its normal area of distribution in western England. Clearly exceptional, the single vessel at Pepper Hill (probably from grave 10362) may have been a personal possession, travelling with its owner during the later 1st century, rather than

arriving through the standard means of ceramic supply. The remaining oxidised fabrics comprised unsourced material of probable local origin.

Reduced wares (R) formed the single largest ware category, accounting for over 50% of the assemblage by weight and EVE. Their origin was almost exclusively local; kilns producing coarse grey wares are known around Springhead (Jessup 1928). Grey wares may have arrived from outside the North Kent/Thameside region, but if so, the fabrics were indistinguishable from local products at up to x20 magnification. Thameside grey ware (R73.3), a coarse, sandy grey fabric, sometimes black-surfaced, was ubiquitous, and was the most common single fabric by all measures. A wide range of forms was produced, but jars, beakers and flasks were commonest. The fabric was nominally dated up to the late 2nd century, but there was little difference beyond form between it and its successor, LR2.1. Fine reduced 'Upchurch' ware (R16) made a significant contribution to the assemblage, accounting for 17% by EVE. Bowls, jars and flasks were all produced, but poppy-headed beakers (Monaghan type 2A), carinated beakers (Monaghan type 2G), and bead-rimmed platters (Monaghan type 7A) were the most popular types at Pepper Hill. Dating of reduced 'Upchurch' ware has conventionally followed the chronology established at London (Davies *et al* 1994, 152) and by Monaghan (1987); both provide a late 1st century date for its commencement. However, Dr Malcolm Lyne (pers. comm.) considers the fabric to have emerged earlier, possibly soon after the Roman conquest. The presence of 'Upchurch' ware in pre-Flavian groups at, for example, Worth (Lyne 2000) and Deal (Lyne 2003) appears to confirm this. Type 7A platters and 2G beakers were probably among the earliest products. Their occasional association in graves with early samian forms and some of the earliest Thameside products, such as 7B platters and 1E5 'Hofheim' flagons, suggests that 7A and 2G types began to be deposited at Pepper Hill before AD 70. A small amount of fine grey ware derived from kilns at Highgate Wood. Fabric R67 was allied with R16 in form (present as poppy-headed beakers) and fabric characteristics. Its dating, however, was confined to *c* AD 70-160. The remaining fabrics were variants of R73.3 and almost certainly of local origin. Fabric R73.4 was among the more distinctive of these fabrics. This handmade fabric with blackened, almost sooted, surfaces was limited to the early Roman period. Forms included spouted 'infant feeders' (IXJ).

Black-burnished wares (B) contributed a relatively paltry 2% by weight to the ceramic assemblage, though 4% by EVE. That the ware was not better represented is perhaps surprising, given the local production of wheel-thrown BB2 (R14), which formed the bulk of this group. Production of BB2 commenced *c* AD 120; current evidence identifies early centres in north Kent (Pollard 1987, 88); the ware was also produced in Essex at Mucking and Colchester (Tyers 1996, 186), whose products may have reached Springhead also. Most vessels in BB2 from the cemetery, typically bead- and plain-rimmed dishes (IVH and IVJ

respectively), appear to be confined to the 2nd century, although production continued into the 4th century. Handmade BB1 (R13) is very scarce. Pollard (1987, 89), among others, has noted the paucity of the ware in Kent before the later 3rd century. By that time, the cemetery had all but been abandoned. Shell-tempered ware (R69) developed from late Iron Age fabrics (essentially B6), and remained in production in the Thames Estuary until *c* AD 130/140 (although storage jars continued to reach the region beyond this time (Pollard 1987, 89)). Fabric R69 accounted for 2% of the assemblage by EVE. Bead-rimmed jars (IIA) or ledge-rimmed jars (IIA16) were predominant; bead-rimmed dishes were also available.

3 CHRONOLOGICAL SUMMARY

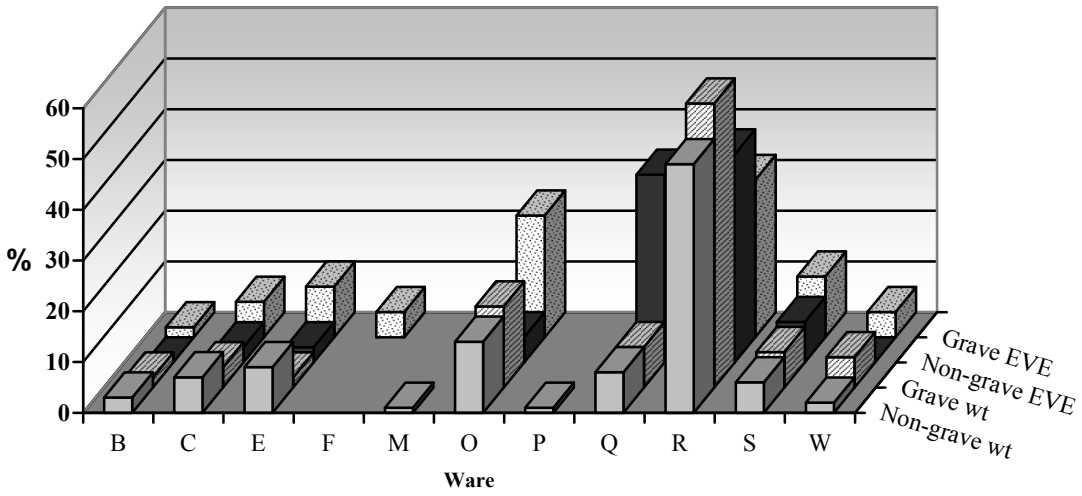
Table 5: Pottery by site phase

Phase	Approximate date range	Sherds	% sherds	Weight (g)	% wt	MV	% MV	EVE	% EVE
Iron Age	350 BC-AD 43	17	<1%	87	<1%	-	-	-	-
Early Roman	43-120/130	13827	51%	82594	43%	272	43%	116.43	48%
Early-mid Roman	43-260	3020	11%	19375	10%	27	4%	6.93	3%
Mid Roman	120/130-260	6973	26%	69193	36%	204	33%	88.53	37%
Mid-late Roman	120/130-410	388	2%	3866	2%	13	2%	5.71	2%
Late Roman	260-410	288	1%	2439	1%	9	1%	5.03	2%
Roman	43-410	194	1%	644	<1%	10	2%	0.53	<1%
Unphased		2154	8%	14439	7%	82	13%	18.69	7%
Total		26861		192637		627		241.85	

A small amount of Iron Age pottery was found in association with no other datable material, suggesting that the features from which it was recovered are likely to date to the Iron Age. However, most Iron Age sherds were residual in later contexts. Early Roman deposits accounted for the largest group of phased pottery, reflecting the chronological emphasis of the cemetery with the majority of phased graves dating between *c* AD 43 and 120/130. From then on, the level of activity on the site declines, though only marginally during the earlier part of the mid Roman period. Most pottery belonging to that phase dates before the end of the 2nd century AD. Relatively few 3rd century graves are recorded, and by the late Roman period (from AD 260) the use of the site virtually ceased; just four graves were assigned to this period, resulting in a very small pottery assemblage. There remains, however, a substantial proportion of the overall assemblage that could not be closely dated within the Roman period, or was recovered from unphased deposits (for example topsoil or undefined layers over graves). This reflects both the somewhat difficult task of dating graves from single vessel groups of undiagnostic pottery where associations with better dated material is lacking, and the very disturbed nature of the site.

4 THE ORIGIN OF POTTERY NOT SECURELY ASSIGNED TO GRAVES

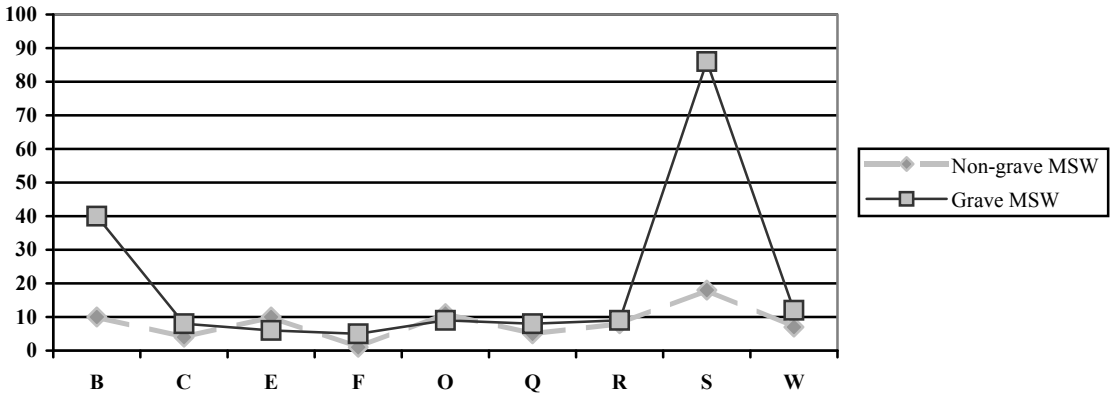
Figure 1: Comparison of wares from the non-grave assemblages and pottery securely attributed to graves. Quantification by weight (g) and EVE



Most of the Roman-period pottery is likely to derive from the cemetery. The pottery was, in other words, deposited originally as grave-goods. A comparison between pottery securely assigned to graves and pottery recovered from grave backfills and features other than graves reveals an almost identical distribution of wares. By weight, proportions between the two sets are reasonably similar for most major ware categories (B, C, O, Q, R and S). However, white wares are not so close, nor mortaria (M), 'prehistoric' (P) and 'Belgic' (E) wares. In all cases except white wares, the proportions of non-grave pottery are higher compared with secure grave pottery. This confirms that pre-conquest activity was largely unrelated to the cemetery. Differences are more evident when comparing the two sets of pottery by EVE. Higher proportions of Q wares are recorded among the non-grave pottery compared with secure grave pottery. The reason for this difference is uncertain. It may be that the rims of Q ware vessels, typically narrow-mouthed flagons, tend to survive with higher average rim-percentages compared with, say, jars (mainly R) and dishes (eg S). But flagons were also available in white wares, so the explanation is not totally convincing. That said, the mean sherd weights for grave pottery is consistently higher - though by very little for most wares - than that for non-grave pottery, supporting the view that the non-grave pottery has been subject to disturbance and relocation. Intriguingly, except for E ware, which was less broken

as non-grave pottery, the 'peaks and troughs' of mean sherd weight values for the two assemblages are identically placed. The significance of this is unclear. It appears to confirm the trend seen in Figure 1 that 'Belgic' wares derived from outside the cemetery. But the pattern may reflect 'standard' breakage rates (for example, a shell-tempered fabric may consistently break differently from a fine ware), linked with vessel type. It further supports the view that most of the pottery is funerary-context derived: the pottery in graves might be expected to fracture in a certain way based on funerary-specific factors, for example intercutting and post-cemetery use. Pottery used at a settlement would be subject to different discard and post-depositional factors and therefore break differently from funerary pottery. Thus, most of the non-grave pottery at Pepper Hill should resemble the secure funerary assemblage because it had been placed originally in burials. It is only a little more broken because of subsequent redeposition. Not all of the pottery was buried first as grave-goods, though. Mortarium fragments are present in the assemblage, but none, save for a single samian vessel, was found as a certain funerary offering. While the very small proportion present suggests that the assemblage overall is funerary in nature, the mortaria may have derived from the settlement, or perhaps were used in the vicinity of the cemetery for funerary purposes.

Figure 2: Comparison of mean sherd weights (MSW), measured in grammes, of wares from non-grave assemblage and pottery securely attributed to graves



5 POTTERY CONDITION

The funerary assemblage was in poor codition. Vessels were rarely whole; many were fragmented into small sherds. The mean sherd weight of vessels securely assigned to graves was just 9 g, only marginally better than 7 g obtained for the entire assemblage. The non-funerary pottery averaged 4 g. Ceramic grave-goods were assigned one of six codes denoting

the extent of vessel completeness: A = complete, B = incomplete before burial (though usually more than 50% complete), C = 80% or more complete, D = 50-80% complete, E = 10-50% complete, and F = fragmentary, less than 10% complete. The mean sherd weight for vessels belonging to categories A to C was just 18 g. The mean weight (as opposed to the mean *sherd* weight) of these vessels was 359 g. That the mean sherd weight is very far from this figure provides a stark indication of a severely damaged assemblage. Some 62% of vessels by vessel count were more than 50% complete, though only 12% of vessels were whole.

Table 6: Condition of pottery securely assigned to graves, giving row percentage: interpretative types (IT)

A = complete, B = incomplete before burial, C = 80% or more complete, D = 50-80% complete, E = 10-50% complete, F = fragmentary, less than 10% present. Quantification by vessel count.

Interpretative Type	**Completeness**						**Number of vessels**	**Mean sherd weight (g)**
	A	B	C	D	E	F		
AJ Ancillary vessel - jar		3%	5%	18%	37%	37%	38	7
AM Ancillary vessel - miscellaneous	9%	36%	36%		9%	9%	11	13
AU Ancillary vessel - unidentified					17%	83%	6	2
DB Drinking vessel - beaker	4%	11%	25%	22%	26%	12%	103	4
DC Drinking vessel - cup	57%	14%		14%		14%	7	25
DJ Drinking vessel - small jar	21%	7%	21%	29%	14%	7%	14	7
LF Liquid container - flask or flagon	6%	13%	18%	25%	25%	13%	114	7
OB Open form - bowl	16%	11%	26%	26%	21%		19	12
OD Open form - dish	40%	25%	13%	15%	5%	3%	40	47
OP Open form - platter	35%	6%	20%	16%	12%	10%	49	12
UB Cinerary urn - bowl	30%		10%	40%	20%		10	25
UD Cinerary urn - dish			100%				1	18
UF Cinerary urn - flagon					100%		1	14
UJ Cinerary urn - jar		2%	11%	30%	44%	14%	64	10
UL Cinerary urn - beaker				100%			1	1
UU Cinerary urn - unidentified						100%	1	1
Number of vessels	58	49	83	106	117	65	479	

Table 7: Condition of pottery securely assigned to graves, giving row percentage: wares

A = complete, B = incomplete before burial, C = 80% or more complete, D = 50-80% complete, E = 10-50% complete, F = fragmentary, less than 10% complete. Quantification by vessel count

Ware group	**Completeness**						***Number of vessels***	**Mean sherd weight (g)**
	A	B	C	D	E	F		
S Samian wares	33%	33%	15%	10%	3%	5%	39	86
F Fine wares		14%	29%	43%	14%		7	5
W White wares	13%	17%	8%	25%	38%		24	12
Q White-slipped wares	6%	6%	15%	23%	28%	23%	53	8
E 'Belgic' wares			43%	29%	29%		7	6
O Oxidised 'coarse' wares	4%		22%	27%	31%	16%	45	9
R Reduced 'coarse' wares	11%	9%	18%	23%	23%	15%	286	9
B Black-burnished wares	63%	13%	13%		13%		8	40
C Calcareous wares			10%	20%	70%		10	8

Ware group	**Completeness**						***Number of vessels***	**Mean sherd weight (g)**
	A	B	C	D	E	F		
Number of vessels	58	49	84	106	117	65	479	-

The distribution of vessel classes across the categories of completeness reveals that jars and flagons/flasks tended to be recovered as incomplete vessels. Cups, dishes and platters, in contrast, tended to be found in a more complete condition. Of the wares, samian (S) and black-burnished wares (B) tended to be more complete; vessels in reduced (R), white-slipped (Q) and oxidised wares (O) were more often fragmentary. Mean sherd weights for each fabric confirm these trends: samian and black-burnished wares have the highest figures (86 g and 40 g respectively), indicating relatively good preservation, while most of the remaining fabrics are poorly preserved with an average weight of less than 10 g. Examination of the plan of the cemetery reveals that the pottery was disturbed by the severed truncation and intercutting of grave dug upon grave; ploughing has caused further damage. The presence of many incomplete grave-goods suggests that the pottery was not removed entirely by later disturbance, but broke and partly remained *in situ* with only a portion of the vessel disappearing into the backfills of subsequent graves. The figures relating to the condition of the grave-goods indicates that dishes and platters, and especially samian, resisted this disturbance better than most other pottery. Their shallow and relatively robust structure gave the vessels a strength that other vessels, particularly round and tall forms like jars and flagons (the latter available mainly in white-slipped fabrics), lacked.

Some of the pottery was worn; much of the wear was doubtless caused by the soil conditions. The condition of the samian, for example, was generally poor, the slip on external and internal surfaces being flaky and matt. Other pottery had similarly suffered. Fine Upchurch wares, for example, tended to be soft and powdery to the touch. However, the wear on some vessels was more concentrated. A Drag. 27 samian cup from cremation grave 291 was in relatively good condition, except for a circular area of wear in the centre of the internal base. The wear-pattern is consistent with a mixing or grinding function (see J. Bird, samian report), and suggests that this vessel was used in the household before being released for burial.

6 CERAMIC PYRE-GOODS

Table 8: Ceramic pyre-goods; summary of ware and interpretative type. Quantification by vessel count

Ware group	Interpretative type			Total vessels
	AJ	DB	LF	
C	1			1
O		1	1	2
Q			2	2
R		1	1	2
W			1	1
Total vessels	1	2	5	8

Eight vessels were recovered from five pyre sites. All but one were drinking-related, with flagons or flasks proving most numerous. Eating-related types were entirely absent. Perhaps unsurprisingly, two of the three vessels from *busta* - a category of grave related to pyres - were also liquid-servers. Preservation was generally poor from the pyre sites, and just three vessels could be identified beyond broad functional class. A neckless, bead-rimmed jar was recovered from pyre site 10424, while 11182 contained a oval-shaped beaker with an everted rim. A small, black-surfaced flask from pyre-site 10687 resembled a feeder bottle, though it lacked a spout. Oxidised wares, whether white or buff/orange-surfaced, were favoured. The bead-rimmed jar was shell-tempered. The significance of the strong showing of oxidised wares is unclear. White surfaces may have represented purity (J. Hayes, pers. comm.) or light, similar perhaps to the use of chalk in grave cuts (eg Barber and Bowsher 2000, 321). It is an interesting observation that the pottery extracted from the *bustum* at the Watling Street cemetery in London comprised white ware lamps and 'incense-bowls' or *tazze* (Mackinder 2000, 33-37). A connection may exist between pyres and, in a broad sense, white objects, but more work is required on the phenomenon before a firm judgement can be made.

Table 9: Pottery recovered from pyre-sites not identified as certain pyre-goods. Quantification by weight

Ware group	Type				Total weight (g)	%
	No type	Flask/flagon	Jar	Beaker		
C	9		184		193	10%
E	114		19		133	7%
O	337			146	483	26%
Q	87	318			405	22%
R	79		180		259	14%
W	370	7			377	20%
Total weight	996	325	383	146	1850	-
%	54%	18%	21%	8%	-	-

More pottery was recovered from pyre sites, comprising small sherds from substantially incomplete vessels. Their condition prevents more certain identification as pyre-goods. However, the range of types and wares seem to preserve the trends identified among definite pyre-goods. Drinking-related vessels are well represented, while eating forms are absent. White- and buff/orange-surfaced pottery also dominates. This close similarity between the two suggests that most vessels were deposited as pyre-goods. Michel Polfer notes (2000, 35) that ceramic pyre-goods deposited in graves at Septfontaines, Luxembourg, also tended to be drinking-related, although vessels from the *ustrinum* - the crematorium - had stronger eating associations. At that site, certain vessels were deliberately selected out of the ceramic pyre-goods assemblage after cremation. The pyre-specific function of vessels deposited on or near the pyre might well have been different from that of ancillary vessels placed in the grave. The role of pyre-goods may have ceased once the vessels had been deposited - or discarded - into the pyre site after cremation. In contrast, the deposition and covering of ancillary vessels represented the beginning or further stage of their mortuary functions. The conventional interpretation of ceramic grave-goods as receptacles of food and drink to be taken by the deceased on the journey to the next world may be more appropriately applied to pyre-goods. One function - perhaps the chief reason - of cremation was to consume the body by fire, transforming the deceased into a vapour and enabling it to take to the journey to the afterworld (Gräslund 1994, 20). If so, food and drink were similarly consumed and accompanied the deceased into the ether. Like the aluminium cans in modern kitchen waste, the pottery found in the pyre site was empty, discarded packaging.

7 COMPOSITION OF THE ASSEMBLAGE SECURELY ATTRIBUTED TO GRAVES

7.1 Cinerary vessels

Table 10: Cinerary vessels; summary of ware and interpretative type. Quantification by vessel count

Ware group	**Interpretative type**						**Total vessels**	**%**
	UB	UD	UF	UJ	UL	UU		
C		1		5			6	8%
E				2			2	3%
O	1		1	12			14	18%
R	8	1		44	1	1	55	71%
Total	9	2	1	63	1	1	77	-
%	12%	3%	1%	82%	1%	1%	-	

Cremated bone from 77 graves - 55% of cremation burials - was contained by ceramic vessels. Cinerary vessels - or urns - represent 16% of the entire funerary ceramic assemblage

by vessel count. Jars were by far the commonest vessel class (Table 10). Many of these had been subject to post-depositional truncation and could not be assigned specific types. Of those whose typological traits were identifiable, selection was made mainly around four basic types: narrow-necked jars (Monaghan (1987) type 3A), storage jars (type 3D), cooking-jar types (type 3J) and ledge-rimmed jars (type 3L). Other types were present, but these accounted for very few of the class. None of the type 3L jars had been accompanied by ceramic lids, though its design enabled the type to accommodate a lid if required. Indeed, ceramic covers were rare. Just one purpose-made lid was associated with a cinerary vessel; a lid accompanied a narrow-necked grey ware jar in grave 11638, although it was found apart from the jar during excavation and may never have been used as a cover. Bowls were the second most popular vessel class of cinerary vessel. These were, however, invariably jar-like, being mainly large, robust, wide-mouthed vessels. Despite typological differences, there may have been little distinction made between the functional attributes of jars and these bowl types. A single beaker - a carinated beaker from 11053 - was selected to contain cremated remains. Examples of dishes and flagons were also used in this way.

Cinerary vessels were found exclusively in coarse wares. Reduced wares predominated; sandy fabric R73.3 alone represented over 50% of vessels by count. Thirteen vessels were present in grog-tempered Patch Grove ware (R68; the absence of rims in some examples accounts for the discrepancy between the sum of minimum number of vessels (MV), based on rims, in Table 10, and the number of funerary vessels in the fabric, based on interpretative type count). Vessels in the fabric were almost exclusively selected as cinerary vessels; Patch Grove ware ancillary vessels were rare. Seven vessels were in comparatively fine reduced 'Upchurch' wares (R16). This was used for fine carinated or cordoned bowls (Monaghan types 4G and 4J) from graves 11098 and 11474, a large bead-rimmed dish (grave 10744), as well as the beaker from 11053. But these are unusual; the heavy emphasis on coarse ware jars suggests that, overall, cinerary vessels were selected on strictly utilitarian grounds. The practice of depositing cremated remains within a pot appears to have increased in frequency after *c* AD 120/130. A greater proportion of mid Roman cremation burials were provided with cinerary vessels, compared with the early Roman period, when the majority of cremation burials were 'unurned'.

Table 11: Chronological distribution of cinerary vessels

	Unurned	**Urned**	**Number of graves**
Early Roman	54%	46%	61
Mid Roman	33%	67%	36
Number of graves	45	52	

7.2 Ancillary vessels

Table 12: Ancillary vessels securely attributed to graves, cenotaphs and busta; summary of ware and interpretative types. n = total number of vessels

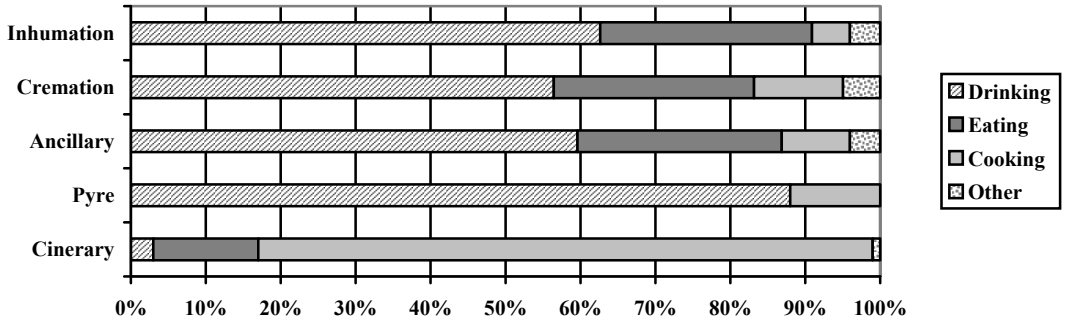
Ware group	**Interpretative type**										***Number of vessels***	**%**
	AJ	AM	AU	DB	DC	DJ	LF	OB	OD	OP		
B									6		6	2%
C	2										2	1%
E						1		1		3	5	1%
F				6				1			7	2%
O	2	1	1	9			11	1		3	28	7%
Q				1			50				51	13%
R	29	8	5	82		12	24	10	15	35	220	58%
S		1			7			5	16	8	37	10%
W		1					21				22	6%
Number of vessels	33	11	6	98	7	13	106	18	37	49	378	
%	9%	3%	2%	26%	2%	3%	28%	5%	10%	13%		

Ceramic vessels other than cinerary containers were deposited in some 230 graves. Thus, out of a total of more than 560 graves, around 40% yielded ancillary vessels. Analysis of the ancillary vessel assemblage by interpretative types reveals a bias towards drinking-related vessels, accounting for 59% by vessel count. Eating-vessels (bowls, dishes and platters) contribute 28%, while cooking or storage vessels take a 9% share. The drinking-related category is dominated by beakers - typically poppy-headed and carinated types - and liquid-containers (flasks and collared and ring-necked flagons). Cups and beaker-sized jars take only minor shares of the assemblage. This is unsurprising, since the types contributed only small numbers to most domestic assemblages (together accounting for less than 8% of selected groups by vessel equivalence at Springhead's Roman settlement (Booth 1998, table 2) for example). Cups in particular did not hold a significant place in local potters' repertoires (cf Monaghan 1987, 157), with most examples, as at Pepper Hill, deriving from continental sources. Among the eating-related open forms, platters appeared most frequently. These were often samian Dr. 18-inspired bead-rimmed types (Monaghan type 7A), although straight-sided or carinated forms of Gallo-Belgic derivation were also available. Dishes accounted for 10% of the ancillary vessel assemblage. Forms were restricted mainly to plain-rimmed types (Monaghan type 5E). Bowls followed dishes in absolute numbers. Since usual bowl forms included robust, high-shouldered varieties (Monaghan types 4A and 4B), cooking/storage might seem a more appropriate functional interpretation for this group. If this interpretation is applied, the proportion of jar and jar-like vessels would be boosted to third place behind flagons and beakers. In any case, the strong presence of such vessels suggests that items familiar in the kitchen or away from the dining setting continued to find a significant place in

the funerary assemblage beyond the role of cinerary container. More unusual vessels are grouped in the miscellaneous category (AM). These include five 'infant feeders' or *tettine* - identified by their small, bulbous bodies, short, narrow necks, and short spouts (Monaghan type 13). An *unguentarium* was also recovered. Burial 648 yielded a samian ware mortarium (Dr. 45). That mortaria are very rare in funerary assemblages is well-known. Usually absent at cemeteries, parallels must be sought beyond the region. For example, a single coarse ware mortarium was recovered from a 2nd century grave at Great Dunmow, Essex (Wickenden 1988, 21).

Most pottery contributing to the ancillary vessel assemblage was produced locally. This is evident from the high proportion of coarse reduced wares (Table 12), which take a 57% share by vessel count. The group was headed by sandy grey wares (R73.3) and fine reduced 'Upchurch' ware (R16). Each accounted for 40% of the ware category by vessel count. Fine grey ware (R73) also made a significant contribution of 10%. All three fabrics were linked to the Thameside region. Both oxidised and white-slipped wares were similarly dominated by North Kent products, which mainly comprised 'Upchurch' wares (R17 and R18). Unlike other coarse ware categories, however, much of the supply of white ware relied on sources beyond northern Kent. The Verulamium region was the single largest contributor of white ware ancillary vessels. Other white wares, for example R89, may have originated in Canterbury or northern Gaul. Samian and other fine wares were likewise imported from continental or regional sources. The former took a share of 10% of the ancillary assemblage by vessel count, becoming the third largest ware group behind white-slipped and reduced wares. The two sub-sets of the funerary pottery - cinerary vessels and ancillary vessels - differ in terms of the functional attributes of their assemblages. This is clearly illustrated by Figure 3.

Figure 3: Ceramic vessels from funerary contexts: functional distribution



The ancillary assemblage was weighted towards drinking-related vessels, followed in order of contribution size by eating-related vessels and cooking or storage vessels. Differences between inhumation and cremation burial pottery are few, but potentially

significant. The proportion of jars from cremation burials was higher than that from inhumation graves. Conversely, drinking-related forms were slightly better represented in inhumation graves. As cinerary vessels, cooking or storage vessels dominated, while drinking-related containers were barely represented. The ceramic pyre-goods assemblage contrasted sharply with cinerary vessels, with their drinking-vessel bias, low count of jars and absence of eating-vessels. These remarkable differences highlight the obvious point that different assemblages were selected depending on the stage in the mortuary process in which they were used. Each had a function specific to its context.

Table 13: Ancillary vessels; distribution of interpretative types through time based on vessel count

Phase	**Interpretative type**										**No. vessels**
	AJ	AM	AU	DB	DC	DJ	LF	OB	OD	OP	
Early Roman	7%	4%	1%	26%		1%	33%	5%	2%	22%	193
Mid Roman	9%	1%	1%	22%	4%	7%	23%	5%	22%	4%	138
Late Roman				57%			29%		14%		7

Table 14: Ancillary vessels; distribution of wares through time based on vessel count

Phase	**Ware group**									**No. vessels**
	B	C	E	F	O	Q	R	S	W	
Early Roman		1%	2%	1%	11%	16%	54%	6%	9%	193
Mid Roman	4%		1%	2%	3%	10%	61%	18%	1%	138
Late Roman				29%	14%		43%		14%	7

Changes over time in the composition of the ancillary vessel assemblage can be detected. Ceramic groups buried during the initial decades in the life of the cemetery (up to *c* AD 70) comprised a relatively narrow range of vessel types - jars, beakers, flagons and platters. In the late 1st century, dishes and bowls were added to the range available for selection. The proportion of flagons remained reasonably constant thereafter, resting between *c* 20-30% by vessel count. Dishes take on greater importance from the mid Roman period onwards (from AD 120). Beakers fluctuate somewhat, but the trend is upwards, with the form attaining its largest share after *c* AD 200. Much of this pattern can be attributed to factors relating to regional pottery supply (cf Monaghan 1987). Flagons and platters are typically early Roman in date; dishes, either bead-, plain- or flange-rimmed types or in samian fabrics, are invariably of 2nd century date or later. Drinking-jars, which often take the form of black-burnished cooking-jars, also appear mainly in the 2nd century. The cemetery assemblage therefore conforms to wider supply patterns. The implication that funerary pottery was selected out of a supply primarily intended for domestic use is supported by the distribution of wares through time. Black-burnished wares did not appear in the cemetery until the later 2nd century, mirroring the 2nd century introduction of the wares into the region generally (Pollard 1988). Shell-tempered and 'Belgic' wares were as expected confined to the early Roman period,

except as residual occurrences. Fine wares were available predominantly in later Roman fabrics, while the presence of Central and East Gaulish fabrics gives the distribution of samian wares a mid 2nd to early 3rd century emphasis. The proportion of white-slipped wares, available almost exclusively as flagons, consequently declines over time. The range of forms and fabrics seen at Pepper Hill is by no means unusual set against the generalised supply pattern to the region. While certain forms were favoured for funerary use, the supply from which the pottery was taken belongs recognisably to that intended for household use. Any changes in funerary assemblages over time are likely to reflect wider supply changes, rather than changes in funerary practice.

8 ANACHRONISTIC GRAVE-GOODS AND MEANS OF POTTERY ACQUISITION

Thirty-seven vessels are dated earlier than the 30 graves that contained them; that is, the terminal date of the pottery is no later than the beginning of the graves' chronological range. Table 15 summarises interpretative type and ware group of these vessels. Flagons form the largest group, though most types - beakers, bowls, platters - are reasonably similar in terms of vessel count. Cinerary vessels in graves 92 and 11961 were dated to the 1st century AD, but found in 2nd century graves. A 1st century AD pedestal jar, the cinerary container in grave 11206, was clearly residual on typological grounds. A clearer pattern emerges when the proportions are compared with the distribution of types across the entire funerary assemblage. Cups (DC), bowls (both ancillary (OB) and cinerary (UB) in function) and platters (OP) are better represented among anachronistic survivals compared with their usual level of incidence. Wares are dominated by reduced coarse wares as residual occurrences, but poorly represented set against the entire assemblage. Samian wares (S), 'Belgic' wares (E), shell-tempered wares (C) and white wares (W) are well represented as older survivals. The 'anachronistic' vessels were on average a minimum of 42 years older than the date of their burial (as calculated from the difference between the maximum, or latest, vessel date and minimum, or earliest, possible date of burial). The mode, or commonest value, is lower than the mean at 10 years. Both figures hide a wide spread of values; a reduced ware platter in grave 11262 may have been deposited when the type had only just fallen out of production, and both grave and vessel could have been contemporaneous. Conversely, a white ware flagon from grave 1148 was no less than 180 years old before burial. The wide dispersion provides a relatively high standard deviation of 43 years.

Table 15: Anachronistic pottery: assemblage composition. Quantification by vessel count. All pottery comprises all cinerary and ancillary vessels

Ware	**Interpretative type**								**Total**	**% total**	**% all pottery**
	AJ	DB	DC	LF	OB	OP	UB	UJ			
C	1								1	3%	10%
E					1	1		1	3	8%	33%
Q				2					2	5%	4%
R	2	3		3	2	4	5	5	24	65%	8%
S			3		1				4	11%	10%
W				3					3	8%	13%
Total	3	3	3	8	4	5	5	6	37	-	-
% total	8%	8%	8%	22%	11%	14%	14%	16%	-		
% all pottery	7%	3%	43%	7%	20%	10%	50%	10%	-		

The phenomenon of anachronistic pottery has been recognised at other cemetery sites. In Colchester, the Butt Road cemetery produced a number of 'antique' vessels. One, a colour-coated bag-shaped beaker, was at least 100 to 150 years old at the time of burial (Going 1993, 49). London's Eastern cemetery yielded similarly anomalous evidence (Barber and Bowsher 2000, 122). Going linked the survivals with the cycles of pottery production; low volumes of pottery supply led to a shortage of vessels for funerary use. Grave-diggers might then have supplied pottery taken from earlier, disturbed graves (Going 1993, 49). Barber and Bowsher (2000, 122) noted signs of household use on the pottery, regarding them as heirlooms, though more for their function (for example as storage vessels), rather than their aesthetic qualities. At Pepper Hill, another factor may be considered. Here, the dense burial distribution and complex intercutting suggests that grave-digging inevitably (though not deliberately) would have lifted older pottery to the surface. This explanation gains support from the location of the pottery within the graves. On average, the anachronistic vessels were found *c* 0.2 m above grave bases, surrounded by subsoil. Some vessels were much closer to the floor of the grave, but overall, the positioning of these vessels suggests accidental re-interment on backfilling. In addition, the distribution of anchronistic pottery appears to match the parts of the site where graves are densest, and where the level of disturbance would be highest. The principal reason cited for the selection of residual pottery at Butt Road, Colchester was recession-induced pottery shortages (Going 1993, 49). This does not seem to apply at Pepper Hill. Most graves containing residual ceramic grave-goods date to the 2nd century, usually after *c* AD 120/130 and during a 'log' period, characterised by abundant pottery supply (Going 1992). Some pottery was deposited during the materially stagnant 'lag' periods, but not enough to suggest that pottery shortages were the main motivation for interring old vessels.

Table 16: Anachronistic pottery: dates of graves, with phase descriptions after Going 1992

'Log' = period of abundant pottery supply, 'lag' = pottery shortages

Period	No. graves	Going phase
70-100	3	Log
100-120	1	Lag
100-170	1	-
120-170	7	Log
120-200	4	Log
120-230	1	-
170-200	4	Log
190-230	2	Lag
200-230	1	Lag
200-260	1	Lag
200-400	3	-
260-350	1	Log

Accepting this premise, it is perhaps surprising, then, that anachronistic pottery is scarce - just 8% of the total number of vessels. As intriguing is the composition of this small assemblage; one might expect that the accidental retrieval of pottery from earlier burials would create a random residual assemblage that reflects the funerary assemblage overall. However, the distribution of wares and types appears to lack the element of chance. As already noted, cups, bowls and platters were better represented in the anachronistic assemblage, compared with their place in the funerary assemblage. After *c* AD 140, platters ceased to be produced in the region. Similarly, few bowl types were manufactured after *c* AD 150 (Monaghan 1987). Although fresh supplies were reaching Britain at the time of burial, a high proportion of cups at Pepper Hill were residual. For these three types, supply trends conspired to reduce their availability; platters and bowls were no longer being produced, while cups - relatively rare at lower-order settlement cemeteries - may always have retained a novelty or prestige value. These pieces were at the tail-end in the life of the classes they represent, and were rare survivals beyond their usual lifespan. The principle similarly explains the higher proportions of shell-tempered, 'Belgic', samian and white wares, and conversely the low proportion of locally-produced and constantly available reduced ware. It is easy to imagine such vessels staying within the household for years for the reason outlined by Barber and Bowsher or for their intrinsic qualities, before being released for burial perhaps no more than three generations after the pottery arrived in the home. These factors introduce doubt into the explanation of anachronistic pottery as accidentally relocated vessels. However, neither interpretation is conclusive. If such pottery was deliberately interred as at Colchester, mourners rarely, if ever, relied on disturbed pottery to fulfil their requirements, nor did they supplement their conventionally acquired grave assemblages with extra vessels.

9 VESSEL TREATMENT

Most vessels had been deposited upright within the grave and, allowing for post-depositional disturbance, pottery was generally complete. However, almost 10% of funerary vessels by vessel count had been placed in a pose other than upright, while 8% of vessels showed signs of damage inflicted prior to burial. In addition, some vessels had been burnt before burial. Other treatment includes the placement of pottery in relation to other vessels or non-ceramic grave furniture.

9.1 Vessel pose

Table 17: Vessel pose, summary of interpretative type. Quantification by vessel count

Vessel pose	Interpretative type									Total vessels	% total
	AJ	AM	DB	DC	DJ	LF	OB	OD	OP		
Inside	2	1	5	2	2		1	1	2	16	36%
Inverted			1				1	2	1	5	11%
Lid	1							2		3	7%
Side	2	1	5		1	8		2	2	21	47%
Total	5	2	11	2	3	8	2	7	5	45	-
% total	11%	4%	24%	4%	7%	18%	4%	16%	11%	-	

Table 18: Vessel pose, summary of ware groups. Quantification by vessel count

Vessel pose	Ware group								Total vessels	% total
	B	C	F	O	Q	R	S	W		
Inside				1		10	3		14	33%
Inverted						2	3		5	12%
Lid						2			2	5%
Side	1		1	1	2	10	2	4	21	50%
Total	1	1	1	2	2	24	8	4	42	-
% total	2%	2%	2%	4%	4%	57%	19%	10%	-	

Other than upright, vessels could be placed inside other vessels, laid on their sides, inverted, or used as lids. Tables 17 and 18 summarise vessel types and ware groups represented against the range of positions, showing that vessels placed on their side were commonest. Beakers and liquid-containers, usually reduced, account for many of the vessels thus treated, although this is perhaps in any case to be expected given the dominance of the types in the site assemblage. Whether this pose represents a deliberate placement is a moot point. Being typically tall with narrow bases, beakers, flasks and flagons may have been placed upright within the grave, but subsequently fallen over during backfilling. Other forms, especially shallow platters and dishes, though, cannot be dismissed with this explanation. For example, inhumation grave 10532 yielded two vessels, both found lying on their sides. One, a platter, was evidently placed up against the side of the grave cut. The other, a flagon, was unsupported, but in view of the evidence of the platter, its placement may well have been

intentional. In such cases, any contents would have tended to escape their containers, or else vessels were empty on deposition.

A number of vessels were found inside larger vessels. Drinking-types - 'hand-sized' beakers, cups and 'drinking-jars' - were typically selected for such treatment, though not exclusively so. Open forms and larger jars were also represented. Almost all of these vessels had been placed within cinerary containers, thus placing them in direct contact with the cremated remains. This may provide some explanation for this treatment. If the vessels contained sustenance - often drink - then the deceased was able to take the liquid directly; conversely, vessels not in direct contact may never have contained foodstuffs, or contained such items but for different purposes, such as offerings to the spirits of the departed. Another, but related, explanation sees the vessels placed inside cinerary containers as pyre-goods. Identifying such items is beset by difficulties. In addition to pottery collected from pyre-sites, vessels burnt to the extent of distortion are obvious candidates, but had every heat-affected vessel been placed on the pyre prior to deposition within the grave? Assuming that some funerary vessels had seen service first in the household, we might expect the occasional pot burnt by cooking to be present. More problematical are the implications of Fitzpatrick's note (2000, 17) that an object placed on the pyre need not exhibit signs of burning, depending on its location. This presents the impossible task of separating pyre-goods from grave-goods whose condition is identical. Fitzpatrick's suggestion that objects found in direct association with cremated remains - normally brooches and the like, but by extension vessels placed inside cinerary containers - should be regarded as pyre-goods could be considered a possible solution. That the pottery placed inside cinerary vessels and on the pyre were both biased towards drinking adds weight to this interpretation. There is a difference, however: the drinking-related vessels recovered from pyre-sites tended to be multiple-portioned flasks or flagons, while those placed in the grave were single-serving beakers, cups and small jars. This perhaps reflects the individual requirements of the deceased's cremated remains once interred in the grave, against the more communal nature of the cremation itself.

Vessels used as lids or simply inverted vessels were found infrequently. Just three purpose-made lids were recovered (graves 10805, 11440 and 11638); in all remaining cases, other types were used. Grave 254 was exceptional, yielding two lids: an inverted samian dish that covered an upright reduced ware dish, and an upright jar base that rested over the mouth of a jar-beaker. Intriguingly, just one lid accompanied a cinerary vessel, though it is uncertain that the lid covered the urn; some vessels used as lids were deposited within inhumation graves. This contrasts with graves from, for example, Canterbury (Pollard 1987, 291) and Ospringe (Whiting *et al* 1931, 36; 66), in which covers for urned cremated bone were occasionally provided. If lids only served the practical purpose of protecting vessel contents from contamination, then for whatever reason cremated bone at Pepper Hill did not require

protecting. Moreover, the vessels below the lids must have contained items that the remaining cover-less vessels did not. However, the infrequency of the practice throughout the region (Biddulph 2002, 104) perhaps allows for a more conceptual, albeit as yet unknown, explanation. This is further supported by a purpose-made lid from cremation burial 231 from London's Eastern Cemetery which was found below the cinerary vessel (Barber and Bowsher 2000, ibid, 159), evidently not fulfilling its earthly function. Inverted vessels not functioning as lids were largely restricted to open forms. Grave 254 yielded an inverted samian dish that was laid over another inverted vessel or lid, also a samian dish. An inverted carinated beaker retrieved from grave 327 was far more unusual. The vessel lacked its lower half, so that it rested upright on its carination. A dish was then placed upright on top of its rim. The vessel was clearly no longer functioned in a practical sense as a beaker, and its inclusion may have been simply to act as a stand for the dish. If so, then the motivations behind the inverted dish in grave 254 and others were different, since the open forms were isolated or above other vessels; in these cases, the beliefs governing inverted vessels and 'lids', given the slight need for covers displayed at Pepper Hill, may have been very close.

9.2 Mutilated or 'killed' vessels

Table 19: Mutilated or 'killed' vessels. Quantification by vessel count

Ware	**Interpretative type**							**Total vessels**	**% total**
	AM	DB	LF	OB	OD	OP	UJ		
B					1			1	3%
Q			2					2	5%
R	2	9	8	1			1	21	55%
S	1				8	1		10	26%
W	1		3					4	11%
Total	4	9	13	1	9	1	1	38	-
% total	11%	24%	34%	3%	24%	3%	3%	-	

The phenomenon of mutilated vessels is well-known in cemetery contexts. The cemetery at Great Dunmow, Essex (Wickenden 1988, 12-23), for example, produced a number of vessels that had apparently been deliberately damaged prior to burial. Going (1988, 23) identified three principal types of damage: perforated body, usually flagons; fragments detached from rims, usually open forms; and perforated bases (jars). A similar range of evidence is available from Pepper Hill (Table 19). Removal of a rim fragment was the commonest means of damaging vessels, with *c* 70% of mutilated vessels being treated this way. Open forms were often selected, but apparently were not as popular as drinking-related forms, especially flagons and flasks. At a site like Pepper Hill, where the integrity of individual graves has suffered from inter-cutting and truncation from ploughing, the question of whether such damage was in reality accidental is a fair one. A review of factors, such as positioning within

the grave and the nature of the break, leads one to conclude, however, that much of this treatment must be deliberate. The plough on striking the narrow top of a flagon or delicate beaker rim would tend to damage the entire rim. Instead, the surviving rim portions are well-preserved. The breaks are also old breaks, with the exposed fabric oxidising within the soil. Usually the detached rim sherds are entirely absent from the grave, although the detached rim pieces from a flagon in Grave 10710 were dispersed through the upper part of the skeleton. Perforation was another method of mutilation. Holes tended to be made through the base, rather than the wall. Grave 472 yielded a poppy-headed beaker with a perforated base; part of its rim was also missing. Two small holes had been drilled through the base of a bowl in grave 11366, although more holes were attempted, as if a strainer was intended. Deliberately smashed vessels are almost impossible to distinguish from post-depositional damage on a site crowded with later burials and disturbed by the plough. Most mutilated vessels were in reduced wares, but samian was also well-represented. Its share of 26% by vessel count is greater than its overall 10% share within the ancillary vessel assemblage. As at Great Dunmow (Going 1988, 23) samian vessels appear to have been deliberately selected as ideal types for mutilation.

While mutilated vessels can be identified with a high level of confidence, the motivations behind the practices remain very far from view. The near-absence of mutilated cinerary vessels restricts the phenomenon to grave-offerings only indirectly related to the physical human remains. The part or total destruction of such vessels renders them all the poorer as practical receptacles. The beaker in grave 472 or the base-less flagon in grave 1028 could not have held liquid. This questions the strongly-held view (eg Hicks 1998, 115; Jones 2003, 21) that pottery and its contents were necessarily spiritually transported into the afterworld to provide sustenance for the deceased's journey (cf Biddulph 2002), but does not discount the possibility that those vessels continued to serve a liquid-related function. Liquid may have been poured into them, perhaps more than once, to drain directly into the earth as an offering to the spirits of the underworld. This interpretation is consistent with the evidence of at least six vessels from Ospringe - all of them flasks - which were perforated at the base of the neck with what were described as 'vent holes' (eg Whiting *et al* 1931, 66). Damaged rims may similarly relate to offerings, perhaps symbolising a food or liquid sacrifice. Indeed, since most funerary vessels, whether mutilated or not, explicitly pertain to food and drink and derive from a domestic supply (Biddulph, forthcoming), it has been suggested that all vessels represented the consumption or sacrifice of food and drink analogous to the consumption of the body by fire as an act of remembrance (Williams 2004). Alternatively, some societies believe that the afterlife is a mirror of earthly existence; thus an item must be damaged so that it can be complete in the afterlife. That mutilation remains a rare, though widespread, practice within the region seems to rule this out. As Going (1988, 23) notes, analysis of mutilated

vessels that encompasses many more sites is required before a firmer resolution can be gained.

9.3 Burnt vessels

Table 20: Burnt vessels. Quantification by vessel count

Burial type	**Interpretative type**								**Total vessels**
	AJ	AM	DB	LF	OD	OP	UB	UJ	
cremation burial	2	1	1			3	2	5	14
inhumation burial		1	2	4	1	3			11
Total	2	2	3	4	1	6	2	5	25
% total	8%	8%	12%	16%	4%	24%	8%	20%	-

Some twenty-seven funerary vessels had been burnt prior to deposition. Most of these had black- or red-scorched external surfaces, usually confined to only part of the vessel. A white-slipped flagon from grave 11682, or a red-surfaced grog-tempered ware platter from grave 787 are reasonably typical, having scorched bases and sides. Two vessels - a shell-tempered jar from inhumation grave 11801, and a Verulamium white-ware flagon from inhumation grave 12011 - were similar to a shell-tempered jar from pyre-site 10426, in that they had been burnt to the extent that their surfaces were distorted from the heat. The shell-tempered fabric especially had become light and porous, like pumice. Burnt vessels were recovered both from inhumation and cremation burials. Some differences in the types of vessels represented could be discerned. Both burial traditions had similar proportions of platters and miscellaneous types. However, inhumation burials had a stronger drinking element with a higher proportion of beakers and flasks or flagons, while burnt jars were found exclusively in cremation burials, either as ancillary vessels or cinerary containers. This seems to reflect the differences already observed among the ancillary assemblage overall. That burnt ceramic grave-goods can be interpreted necessarily as pyre-goods is evidently unsupportable. Some of them may well be, but the very burnt flagon from inhumation grave 12011 is a reminder of the weakness of this interpretation. Assuming that some funerary vessels could have been taken from the household, the pottery may exhibit signs of domestic use. But while cooking jars may be expected to be burnt, domestically-scorched beakers and flagons, which one might intuitively place in a dining setting, are more surprising. If such vessels were recovered mainly from cremation burials, then a pyre-good interpretation would carry greater weight. However, given the inhumation burial context, an explanation for vessel selection is not immediately forthcoming. It is possible that drinking-related vessels could be heated in the kitchen. Indeed, the use of flagons as containers in which to heat water or other liquid has some basis in evidence from Germany and north-eastern Gaul (F. Hanut, in a paper delivered at a conference in Arras, October 1998 organised by the *Centre de Ceramologie Gallo-Romaine*

and the Study Group for Roman Pottery). Alternatively, vessels may have been placed on a fire as part of the funerary rite relating perhaps to the giving of offerings. If so, then the activity was restricted mainly to the inhumation tradition.

Table 21: Possible pyre-goods; sherds associated with cremated bone or redeposited pyre-debris

Ware group	Sherds	% sherds	Weight (g)	% weight	Mean sherd weight (g)
C	8	3%	13	2%	2
E	17	7%	33	5%	2
O	33	13%	145	23%	4
Q	7	3%	31	5%	4
R	189	74%	395	62%	2
W	3	1%	16	3%	5
Total	257	-	633	-	2

Burnt sherds found in association with cremated remains, but not deliberately or carefully placed, may also be interpreted as the remains of ceramic pyre-goods. Invariably, substantial portions of individual vessels have been lost. The collection is summarised in Table 21. The assemblage mainly comprised undiagnostic body sherds. Typological information is largely absent; just two types were recognised on rims - a bowl and a jar. However, the range of types must be wider, since white-slipped (Q) and white ware (W) sherds typically belong to flagons. Coarse ware fabrics were favoured. Both oxidised (O) and reduced (R) wares are well-represented. The assemblage is therefore characterised by robust vessels with cooking or storage functions and liquid serving vessels, both having communal, rather than individual, use. This assemblage and the burnt 'complete' vessel assemblage are thus tentatively allied.

9.4 Vessel placement

Table 22: Vessel placement within inhumation graves (interpretative types). Absolute vessel counts provided as totals

Placement	Interpretative type								Number of vessels
	AJ	AM	DB	DJ	LF	OB	OD	OP	
Inside coffin	7%	7%	28%	4%	26%	3%	19%	8%	53
Outside coffin	1%	4%	23%	4%	36%		10%	20%	69
Total	4	6	31	5	39	2	17	18	122

Table 23: Vessel placement within inhumation graves (wares). Absolute vessel counts provided as totals

Placement	Ware group								Number of vessels
	B	E	F	O	Q	R	S	W	
Inside coffin	3%	2%	6%	2%	13%	51%	17%	6%	53
Outside coffin	1%	3%	1%	1%	17%	57%	9%	10%	69
Total	3	3	4	2	19	66	15	10	122

As wood did not survive, the size and shape of inhumation burial coffins were conjectured from soil stains and the outline produced from iron nails and fittings. Ceramic grave-goods were determined to have been placed either inside or outside coffins depending on their location in relation to the nails or soil stains. Some vessels may have been placed originally on top of the coffin lid, but had become displaced in time as the lid rotted away. In plan, then, such vessels appeared to have been located within the coffin, with only their heights in relation to the base suggesting otherwise (that is, with the vessel 'floating' within the grave backfill, rather than resting on the floor of the grave). This exercise produced a total of 122 vessels whose location could be determined. Of these, 53 vessels had been placed within the coffin and 69 placed without. Analysis of the distribution of vessel types revealed some differences between the two locations (Table 22). Dishes tended to be placed inside coffins, while platters were more often placed outside coffins. Liquid-containers were marginally better represented outside coffins, while beakers were favoured inside coffins. In broader functional terms, however, there is virtually no difference. The proportions of grouped drinking-related vessels (DB, DJ and LF), eating vessels (OB, OD and OP), cooking or storage types (AJ), and others (AM) placed inside coffins matched those found outside coffins. Wares appear to have a more distinctive distribution (Table 23); black-burnished (B), fine (F), oxidised (O) and samian (S) wares tended to be placed inside coffins, while 'Belgic' (E), white-slipped (Q), white (W) and reduced (R) wares were better represented outside coffins. Table 24 suggests that the placement of vessels outside coffins was commonest during the 1st and early 2nd centuries AD, while placement inside coffins grew in importance from the mid 2nd century onwards. Set against this view, vessel choice appears to be determined more by pottery supply than funerary-specific motivations. Confined to the early Roman period, platters were more likely to have an outside-coffin placement. In contrast, dishes - typically mid 2nd century or later - were associated with an inside-coffin placement. These trends appear to conflict with the evidence elsewhere. At the late Roman cemeteries at Butt Road, Colchester (Crummy and Crossan 1993) and London's eastern cemetery (Barber and Bowsher 2000), vessels were preferably located outside coffins. Analysis of a larger assemblage is required before one can determine whether Pepper Hill is anomalous or that it fits other patterns. Consideration, too, should be given to the changing beliefs and motivations that governed vessel location.

Table 24: Vessel placement within inhumation graves by period

Placement	Early Roman	Mid-late Roman	No. vessels
Inside coffin	16	39	55
Outside coffin	45	21	66
Total vessels	61	60	121

10 FUNERARY FEASTING?

In addition to seven carefully deposited vessels, grave 254, dated to the mid 2nd century, yielded almost 150 sherds of broken pottery, summarised in Table 25. The assemblage was weighted towards dining; drinking and eating vessels accounted for 64% of the group by EVE. The wares reflect a strong dining element. Fine or oxidised wares, typically encountered as beakers (III), dishes (IV) or flagons (I), contribute 33% by sherd count, or 55% by EVE. Some sherds were burnt, but as they covered an inhumation burial, it seems unlikely that the vessels had been placed on the pyre. The assemblage recalls pottery recovered from the backfills of early Roman cremation graves at Alton, Hampshire, which was also weighted towards dining (Millett 1986). Those groups have been interpreted as the remains of funerary feasts (Pearce 1998). The assemblage from grave 254 might be similarly interpreted. The presence of burnt sherds, given the context of inhumation, indicates that some vessels had been placed close to a fire, perhaps as part of a sacrificial rite. In some respects a closer parallel is seen in an inhumation burial of *c* AD 160-170 from Westhawk Farm, Ashford, the fills of which produced a very large pottery assemblage (2065 sherds, 26.19 EVEs) derived mainly from a number of freshly-broken, but rarely complete, vessels (Lyne forthcoming). Here liquid-related vessels comprised just over a quarter of the assemblage. While this figure is distinctly lower than in the Pepper Hill groups, it is anomalous in comparison with other domestic assemblages at Westhawk Farm. A connection with feasting is therefore also possible here.

Table 25: Pottery other than grave goods from inhumation grave 254

Fabric	**Type**							**Total EVE**
	I	II	III	IV	IV/V	V	VI	
R16			0.3					0.3
R17.1			0.23					0.23
R18.1	0.2							0.2
R42						0.06		0.06
R43				0.06			0.11	0.17
R46.1				0.06	0.03			0.09
R73.3		0.7	0.19					0.89
Total EVE	0.2	0.7	0.72	0.12	0.03	0.06	0.11	1.94

Another assemblage with a potential feasting element was recovered from cobble surface 10438. Disuse deposits that covered the feature yielded a total of 264 sherds, although the feature had not been fully excavated, and therefore more pottery might have been present originally. Some 69% of the assemblage by EVE comprised dishes or platters. This contrasts with the group from grave 254, which had a greater emphasis on drinking. The assemblage from the surface was not without a drinking element, however; apart from a samian ware cup, oxidised or white-slipped sherds may once have belonged to flagons. Jars formed a minor part

of the assemblage by EVE, although coarse wares, including shell-tempered and reduced wares, contributed over half of the group by sherd count.

Table 26: Pottery from cobble surface 10438

Fabric	**Type**				**Total EVE**
	II	IV	V	VI	
B5		0.1			0.1
R16		0.08			0.08
R17.1			0.3		0.3
R42			0.05	0.03	0.08
R69	0.13				0.13
R73.3	0.11	0.07			0.18
Total EVE	0.03	0.25	0.35	0.03	0.87

The assemblage from 10438 shares its emphasis on eating with pottery from the *ustrinum* or crematorium from Septfontaines (Polfer 2000, 35). Indeed, surface 10438 may be interpreted as an *ustrinum* on structural grounds, although the paucity of burnt areas agues against this. The alternative interpretation based on the pottery focuses on the potential feasting function of the assemblage. But this contrasts with the drinking-orientated group from grave 254, which is allied far more closely with standard grave groups in which drinking associations were dominant. While both assemblages appear to relate to communal feasting, they took place at different stages of the funerary process. The assemblage from the surface, if not deposited on the pyre, may have derived from a ritual feast preliminary to or only indirectly related to the act of burial itself. Classical sources record feasts conducted at intervals after burial, such as the *silicernium*, the *Parentalia*, or the *Lemuria*. Beans were consumed at all three (Lindsay 1998, 72, 75; Toynbee 1971, 64), and presumably required the use of dining vessels. We must be cautious, however. The pottery derived from disuse deposits and need not be directly associated with the use of the surface. Sherds were small - on average weighing just 4 g - and residual pottery was evident. It remains a strong possibility that the pottery was introduced after the surface had been abandoned. The assemblage from 254, however, derived from activity more closely associated in time and space with burial. Williams (2004) gives prominence to communal feasting as a method of creating and reinforcing social memory during funerals. The assemblage from grave 254 highlights the strong role that drink played in that activity.

11 FUNCTIONAL/WARE COMBINATIONS

Drinking-related items dominate the pottery assemblage. This is reflected in the functional ranges represented in grave groups. Drinking-related vessels, chiefly beakers and flagons, were present in over 80% of pottery-yielding graves (Table 27). Eating or dining vessels were present in *c* 40% of such graves, while 14% contained cooking or storage vessels. Drinking

vessels (beakers) containing a single portion, as opposed to multiple-portioned liquid-servers or containers (flagons or flasks), were best-represented as a single category. But liquid-servers alone were deposited in a large number of graves. That liquid-servers were accompanied by drinking vessels in relatively few graves suggests that those responsible for vessel choice were not always concerned with providing an appropriate suite in practical terms. What appeared to matter most is what the vessels represented, rather than their proper use in life. Thus, some graves demonstrate a choice of vessels with individual use and even single portions, while others suggest more communal offerings. Whether a flagon (either full or empty) represents feasting or offerings in the realm of the living, or drinking in the afterlife is an intriguing, but perhaps futile, question. More important is the emphasis that grave groups have, in either world, on a shared or individual experience. Given the lack of eating vessels in the majority of pottery-yielding graves, a full earthly dining-suite - as perceived in a modern sense - was rarely represented in death. There was no strong requirement for food and drink to be provided together. Indeed, since over half of all graves contained no ancillary vessels, there was no strong requirement to offer sustenance of any kind on archaeologically-recognisable vessels. This suggests that the beliefs governing the deposition of ceramic grave-goods were not universally held or were unessential to physically represent in the grave. This pattern contrasts with Ospringe, where the semblance of a dining-set is more strongly represented, with proportionally more liquid-servers accompanying drinking vessels in graves. However, graves with flagons or flasks or beakers only are frequent; at Ospringe, too, the dining-suite was not standard.

Table 27: Functional representation among ancillary vessels. Not including 'other' functions

Data only on eating and drinking vessels was collected for Ospringe

	Number of graves	
Combination (function)	Pepper Hill	Ospringe
Drinking	47	18
Liquid-servers	45	35
Eating + drinking	28	22
Eating	22	8
Cooking	21	-
Liquid-servers + eating	19	20
Eating + drinking +liquid-servers	18	31
Liquid-servers + drinking	13	32
Cooking + eating	4	
Eating + drinking + cooking + liquid-servers	3	
Cooking + drinking + eating	2	
Cooking + drinking	2	
Cooking + drinking + liquid-servers	1	
Cooking + liquid-servers	1	
Total	226	

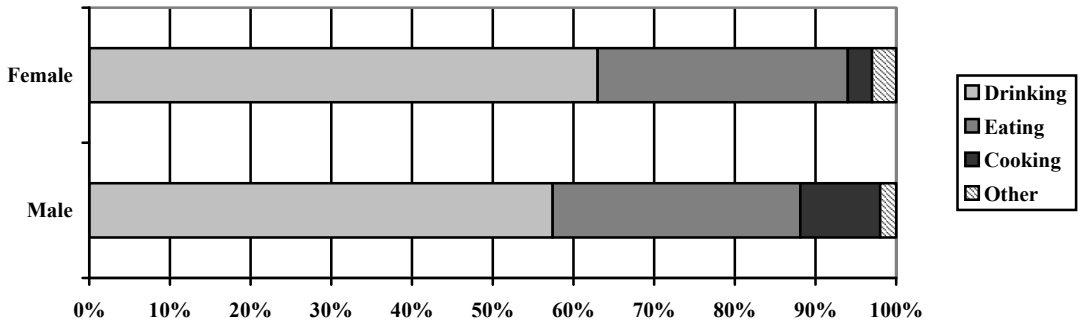
Table 28: Representation of wares among ancillary vessels

Combination (ware)	Number of graves
Reduced only (ware groups E, R, B and C)	104
Reduced + oxidised	44
Oxidised only (ware groups W, Q and O)	42
Reduced + fine	21
Fine only (ware groups S and F)	9
Fine + oxidised	6
Reduced + fine + oxidised	5
Total	231

As expected, the majority of pottery-yielding graves contained reduced wares (Table 28). Mirroring the distribution of wares among the ancillary vessel assemblage in terms of vessel count, oxidised and white wares were present in half the number of graves that yielded reduced wares. The combination of reduced wares with pottery of a contrasting surface colour, particularly white (white wares and white-slipped wares) and red or orange (oxidised wares) may have held a symbolism now lost to us. However, the fact that the most popular forms - beakers and flagons - were available commonly in fabrics other than grey or black suggests that the combinations of wares are an inevitable consequence of pottery production and supply.

12 COMPARISON OF ANCILLARY VESSELS BY SEX

Figure 4: Ancillary vessels from sexed graves.



Thirty-five graves yielded human bone that could be sexed with any degree of certainty, representing just 6% of all graves. This provides only a small sample with which to identify patterns of ceramic selection; the resultant pottery assemblage totals 87 vessels, or 23% of the overall ancillary vessel assemblage. Caution must accompany any results of analysis, especially given the tentative sexing of most human remains. Figure 4 shows the functional distribution of ancillary vessels. While broadly similar, 'male' graves have a slightly lower proportion of drinking-related vessels compared with 'female' graves. This is met by a higher

proportion of cooking or storage vessels. The proportion of eating vessels is identical in both male and female graves. However, these differences were not found to be significant when tested statistically by means of a chi-squared test. Perhaps more interesting, then, is a comparison of specific vessel types, which reveals starker differences, particularly among drinking-related vessels. Beakers are better represented in male graves, while flasks or flagons are better represented in female graves. Male graves are also devoid of cups and drinking-jars. Such observations are also deceptive; statistically, there is no significant difference in the distribution of drinking-vessels (such as beakers) and liquid-servers (for example flagons). Of the eating forms, dishes are present only in female graves. Platters and bowls are both better represented in male graves. Yet again, such differences are not significant. For all observations, the somewhat limited sample seems to have produced a slightly unevenly distributed assemblage, but one that is nevertheless broadly identical for both male and female graves.

13 INTER-SITE COMPARISON

Pepper Hill has few comparable pottery assemblages in the region. Ospringe (Whiting 1926; Whiting *et al* 1931), near Canterbury, is equal to Pepper Hill in assemblage size, but suffers from a number of factors. Though excellent as a product of the 1920s and 1930s, the report by modern standards lacks necessary detail, chiefly relating to pottery fabrics and contextual information. To allow comparison, ware data have been deduced from the invariably equivocal individual vessel descriptions. Inevitably, this has introduced an additional layer of interpretation, which is itself made more onerous by the lack of consistency in the use of certain terms. For example, 'fumed' litters the text, but it seems unlikely on typological grounds that all fabrics thus described are BB1 or BB2; in most cases, vessels have been placed in R wares, but the proportion of black-burnished wares calculated here is probably something of an under-representation. Similarly, fabrics of other vessels are described as 'Belgic', but given the cemetery's mid and late Roman emphasis, late Iron Age/early Roman grog-tempered and allied wares are probably largely absent. The lack of contextual clarity has affected the functional interpretation of vessels. Cinerary vessels cannot easily be identified from the text. There is the occasional reference to a particular vessel as 'urn'. An ambiguous statement accompanies the description for Group 73, which hints that vessels labelled '*olla*' generally contained cremated remains. Additionally, *ollae*, as with certain urns, always receive first mention in the text, with other vessels described in relation to those jars. For the purpose of this study, such vessels have therefore been identified as cinerary vessels. Caution should also be applied in the use of the illustrations (M. Lyne, pers. comm.).

The few other Kentish cemetery sites are much smaller. Cranmer House, Canterbury (Pollard 1987, 285-295), Each End, Ash, near Sandwich (Hicks 1998), Leafy Grove, Keston

(Philp 1973), Monkton (Perkins 1985) and Westhawk Farm, Ashford (Booth et al, forthcoming) yielded between them fewer vessels than either Ospringe or Pepper Hill. Unlike Pepper Hill, and possibly Ospringe, these sites are unlikely to have been fully excavated, resulting in potentially biased assemblages. However, in a region hardly overwhelmed with suitable material, they must be considered alongside Pepper Hill, caveats notwithstanding. The numerous isolated burials that have been found across Kent are useful as points of reference, but inappropriate for statistical analysis.

Table 29: Comparison of ware groups of ancillary vessels from cemeteries in Kent. Quantification by vessel count. Cinerary vessels have been excluded.

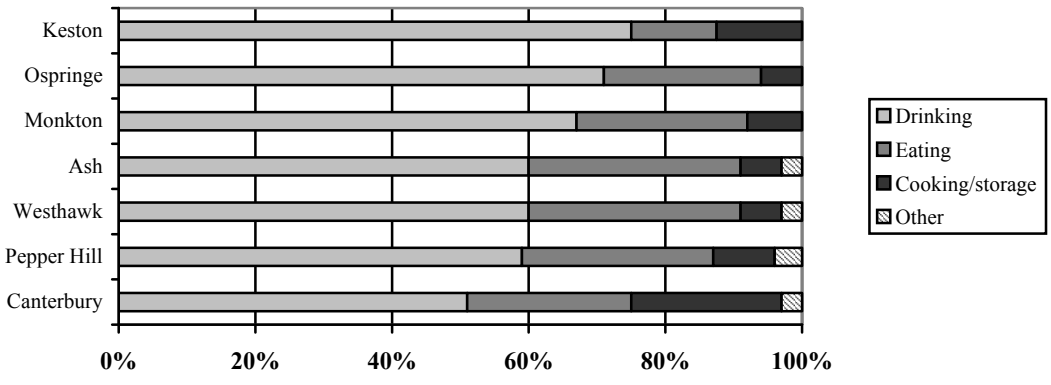
Site	**Ware group**										**Number of vessels**
	A	B	C	E	F	O	Q	R	S	W	
Each End, Ash	3%				6%	26%	3%	26%	37%		35
Canterbury		12%		2%	9%	15%	5%	48%	10%		82
Keston						38%		38%	25%		8
Monkton				8%	8%	8%		67%		8%	12
Ospringe		3%			6%	12%	4%	55%	18%		393
Pepper Hill		2%	1%	1%	2%	7%	13%	58%	10%	6%	378
Westhawk Farm		6%		9%	3%	23%		26%	34%		35

Looking first at wares among ancillary vessels, differences between sites can be observed. Table 29 presents a summary of ware distribution. The level of reduced wares, predominant at Pepper Hill, is variable across other sites. Like the Springhead assemblage, this ware group contributes over 50% of vessels at Monkton and Ospringe. The sites of Each End (Ash), Westhawk Farm and Keston share similar proportions of reduced wares (under 50%), oxidised wares and samian wares. Pepper Hill has the highest proportions of white-slipped and white wares. Indeed, only at Monkton is the latter also available. The explanation may rest both with geographical and chronological factors. Ash, Canterbury and Ospringe are neighbours, being situated towards the north-eastern part of the county. Canterbury-based potters were the main supplier of oxidised wares to Ash and Canterbury itself (Savage 1998, 134). Crucially, white-slipped vessels were not among the principal products of that aspect of Canterbury's industry (Pollard 1987, 212). This is in sharp contrast to the Pepper Hill assemblage, dominated as it is by North Kent products, in which white-slipped 'Upchurch' ware plays an integral role. Ospringe received North Kent products (M. Lyne, pers. comm.), but the 3rd and 4th century emphasis of the cemetery precludes a strong presence of the white-slipped fabric (R18.1), given its decline in the early 3rd century (Pollard 1987, 211). White wares across Kent were dominated largely by Verulamium products (R15) and a group of wares of similar style produced in south-eastern England (including Canterbury (Pollard 1987, 178)) and northern Gaul (R89). Their *floruit* lies within the later 1st and 2nd centuries (eg Davies *et al* 1994, 62), beyond which time Ospringe, Canterbury and Ash were in use.

The distribution of fine wares and to a lesser extent black-burnished wares also follows well-established patterns of ceramic supply, with Kentish sites receiving progressively higher proportions of fine ware vessels through time as local industries declined to be replaced by large-scale regional concerns in Oxfordshire and the Nene Valley (cf Pollard 1987; Going 1992). Additionally, early 3rd century 'Rhenish' ware vessels were present at Canterbury and Ospringe, but absent at Pepper Hill. Higher levels of samian ware compared with domestic sites generally characterise cemetery assemblages, a feature that all six sites exhibit.

Sites appear to be a little more homogeneous in terms of broad functional attributes. Excluding cinerary vessels, the Pepper Hill assemblage is joined by the other sites in having drinking-dominated assemblages, in which the category accounts for more than 50% by vessel count (Figure 5). (It should be noted, however, that the figures for Westhawk Farm exclude those from grave 8160, discussed above, for which no vessel count data were retrieved). Beakers (DB) and flasks and flagons (LF) are the main contributors to the category, the latter always being slightly better represented. Notably, flasks, not flagons as at Pepper Hill, are the principal liquid-server at Ospringe. Cups (DC) - almost exclusively samian - and beaker-sized jars (DJ) are relatively minor forms. The former takes a 2% share at Pepper Hill; higher levels are recorded at the remaining sites, except Monkton, where cups are absent. Ospringe stands alone in its much higher proportion of beaker-sized jars, which account for 8%, compared with 4% and 1% at Pepper Hill and Cranmer House respectively. The Canterbury site had the lowest overall percentage of drinking-related vessels. Conversely, it had the highest proportion (almost 22%) of cooking or storage vessels (mainly jars). The category accounts for around 10% or less of vessels at the remaining sites. The proportion of eating-related forms is reasonably consistent across all sites except Keston, accounting for between 23% and 31% in each assemblage. Platters (OP) are present only at Westhawk Farm, Keston and Pepper Hill, but this is due to chronological factors, as the early Roman form is naturally absent at sites dating after the later 2nd century.

Figure 5: Ancillary vessels: inter-site comparsion. Quantification by vessel count



Under the broad categories of drinking, eating and cooking, it can be seen that assemblages are functionally similar; intriguingly, Each End (Ash) and Westhawk Farm are identical. Despite some differences - Cranmer House, for example, has a stronger association with jars compared with Pepper Hill and others - a degree of standardisation in terms of functions represented in cemetery assemblages can be detected. Within those categories, however, further differences are evident. A higher proportions of cups at Each End, Westhawk Farm and Ospringe compared with Pepper Hill hint at cultural or social differences in life, since certain drinks (such as wine and ale) may have required different vessels. It is perhaps unsurprising, too, that Pepper Hill should be different under detailed examination, locked as it is within Thameside/North Kent supply patterns. And, as has been seen, chronological factors also play their part in determining the shape of assemblages.

Parallels to Pepper Hill may be sought beyond the boundaries of Kent. A number of large, pottery-rich cemeteries from neighbouring counties provide useful ceramic landmarks that help to characterise the Pepper Hill assemblage. But, like the Kentish evidence, data from those sites are of variable quality and need to be treated with caution. The reports on the assemblages from London's eastern cemetery (Barber and Bowsher 2000), Skeleton Green, Hertfordshire (Partridge 1981), and two Essex sites - Great Dunmow (Wickenden 1988) and Kelvedon (Rodwell 1988) - carry comprehensive form and fabric information. Cemetery assemblages from St Stephen's, Verulamium (Davey 1935), St Pancras, Chichester (Down 1971), and Beverley Road, Colchester (May 1930) have less useful records. As with Ospringe, fabric data especially are not directly comparable with Pepper Hill and others. Vessels have been assigned standard ware codes based on the published descriptions, although the inconsistency with the use of key terms (for example buff, creamy-buff, and dark-red) is problematic. The paucity of descriptions for the Colchester assemblage means that no reliable ware data are available. For Chichester and Verulamium, the comparative distribution of wares provides something of a check to this process (Table 29). The much poorer representation of reduced wares at Verulamium is notable. Jars were invariably described in Davey's report as 'urns'; cremated remains were noted in some vessels, but not all. All have been treated as cinerary vessels for the purpose of this study, although some may never have contained cremated bone. It is entirely possible, then, that ancillary jars are under-represented. It is also possible that the proportion of reduced wares at the site is higher than the 27% shown here, but this low figure is probably to be explained by the occurrence of jars in Verulamium-region white ware.

Correspondence analysis (ca) is an effective tool with which to compare site assemblages based on their attributes (wares or vessel types). The scattergram, an end-product of analysis, provides a useful visual means of comparison. The plots shown here display two

axes of a four-dimensional space. Sites that are similar in terms of their assemblage composition should cluster. Looking first at types, Figure 6 shows the distribution of sites along axes 1 and 2. To ensure compatibility of chronologically variable assemblages, platters and dishes have been merged. London and Colchester, strongly associated with miscellaneous types (AM), particularly ceramic lamps and lids, are located away from the others. Pepper Hill joins Each End, Westhawk Farm, Verulamium, Skeleton Green and Ospringe in a strong association with beakers (DB) and liquid containers (LF), although Ospringe is a little dislocated, given its higher proportion of beaker-sized jars (DJ). These sites oppose Kelvedon and Great Dunmow. Their association with jars (AJ) and bowls (OB) is stronger than at any other site. Chichester and Canterbury provide something of a bridge between these opposing groups having strong links with eating/cooking and drinking forms. Their assemblages appear to be associated particularly with cups (DC), though the scattergram is a little misleading. When viewed along axes 1 and 3 (Figure 7), the pattern becomes more realistic as Chichester alone congregates towards cups. Each End, Westhawk Farm and Skeleton Green form a tight cluster (along with Solre-sur-Sambre, Belgium (Brulet 1972)) with dishes/platters and liquid-containers as their focus. They move closer to cups, while Pepper Hill is drawn away as its strong association with beakers becomes clearer. The Canterbury assemblage is also associated with jars along with the two Essex cemeteries and London to a lesser extent. It is worth remembering that the axial intersection represents the average profile across all assemblages. Beakers, liquid-containers, and dishes are closest to this point, since they are common throughout the dataset and can be regarded as standard choices for deposition in graves, though they are not necessarily found together in individual burials.

Figure 6: Ca *scattergram for the overall dataset of ceramic ancillary vessels, showing relationships between sites and vessel types.*

Percentage of *inertia*: horizontal axis (axis 1) 36.6%; vertical axis (axis 2) 28.3%. Total *inertia* 64.9%.

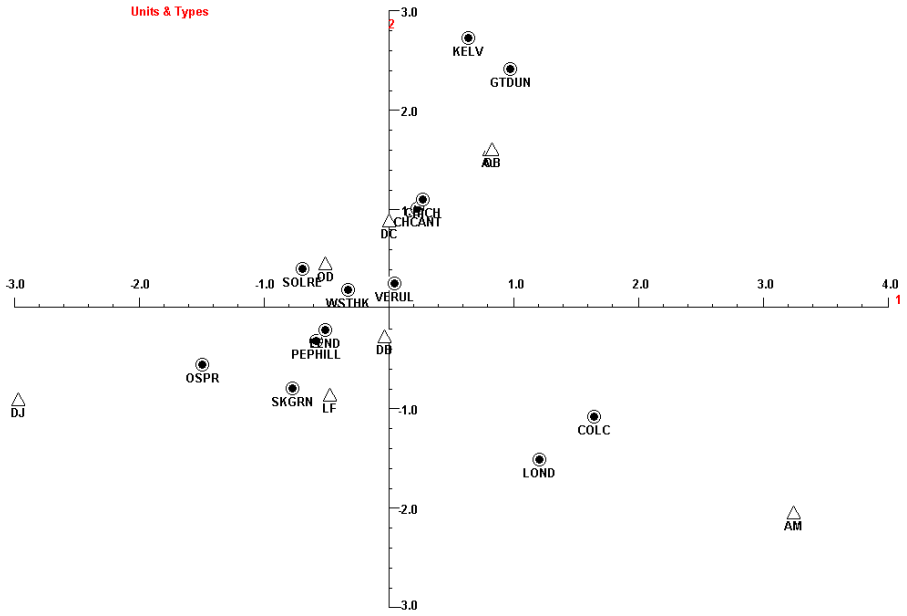
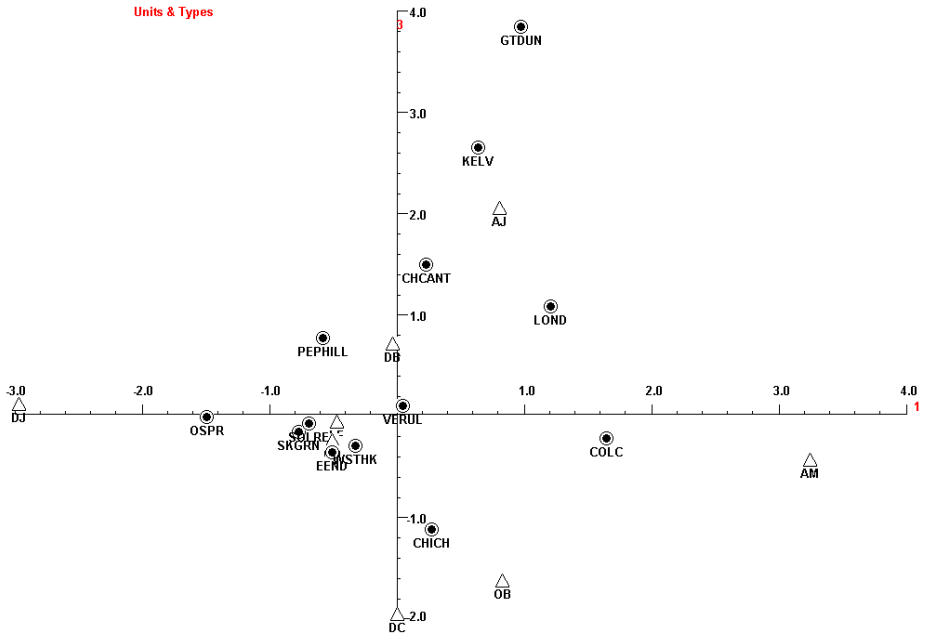


Figure 7: Ca *scattergram for the overall dataset of ceramic ancillary vessels, showing relationships between sites and vessel types.*

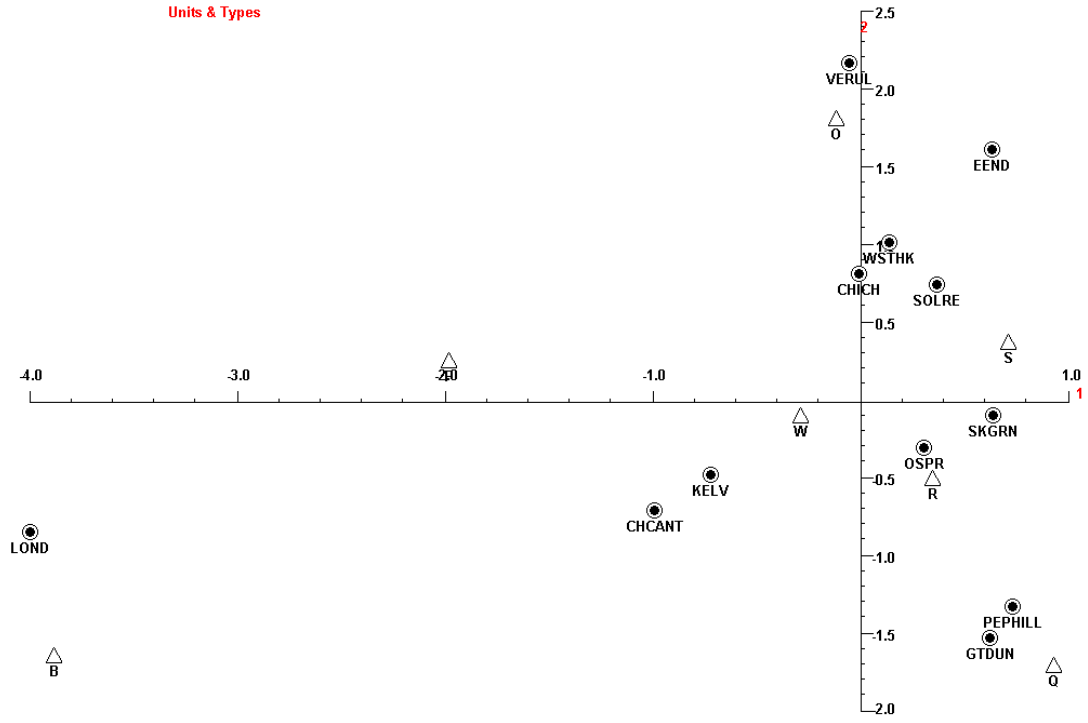
Percentage of *inertia*: horizontal axis (axis 1) 36.6%; vertical axis (axis 3) 18.7%. Total *inertia* 55.3%.



The exercise can be repeated for wares. Similarly for reasons of compatibility, shell-tempered (C) and 'Belgic' wares (E) have been merged with reduced wares (R). Amphoras have been excluded. Figure 8 shows assemblages plotted along axis 1 and 2. London is isolated; essentially a late Roman cemetery, its assemblage is strongly associated with black-burnished (B) and fine wares (F). The remaining sites are narrowly distributed along axis 2. Pepper Hill is allied with Great Dunmow by a strong association with white-slipped wares (Q). Verulamium, Each End, Westhawk Farm, Skeleton Green, Chichester and Ospringe have a stronger association with samian (S), compared with the other sites. However, that fact that reduced (R) and samian wares are close to the axial intersection demonstrates the importance of these wares in most assemblages. Verulamium, Each End and Chichester also have a relatively strong association with oxidised wares. The apparent association of Canterbury and Kelvedon with white wares is again misleading; viewed along axes 1 and 3, their stronger fine ware and oxidised ware associations are clearer.

Figure 8: Ca *scattergram for the overall dataset of ceramic ancillary vessels, showing relationships between sites and wares.*

Percentage of *inertia*: horizontal axis 46.0%; vertical axis 26.2%. Total *inertia* 72.2%.



A number of factors may explain these patterns. The distribution of wares is determined by pottery supply trends, as well as the personal choice of mourners or other individuals. Thus, the Pepper Hill assemblage, dominated by reasonably local Thameside/Upchurch pottery,

received a high-proportion of white-slipped ware, one of the staple products of that industry (cf Monaghan 1987). Great Dunmow and, probably, Skeleton Green, received white-slipped products from the nearby Hadham kilns. Kelvedon and Canterbury produced 3rd and possibly 4th century burials; the rise of the Dorset, Nene Valley and Oxfordshire-based industries during this time undoubtedly contributed to a strong fine ware and black-burnished ware association that more readily characterises the London late Roman assemblage. Canterbury's own pottery industry declined during the second half of the 2nd century (Pollard 1988, 178), but the currency of oxidised wares may have continued longer than that of grey wares (cf Savage 1998, 134). This may explain the dominance of oxidised wares at Each End. These observations introduce a regional identity to cemetery data. Personal choice - or funerary convention - must remain, however, a factor in the development of cemetery assemblages, as suggested most obviously by the generally higher representation of samian wares in cemeteries compared with domestic contexts.

The distribution of forms is determined to some extent by the status of the accompanying settlement. Ceramic lamps (here labelled AM) were apparently associated with high-status sites (cf Eckardt 2002). Colchester, a *colonia*, has the highest proportion, as evident from the scattergrams, but lamps were also recorded in burials at Chichester, a *civitas* capital, and London's eastern and Watling Street cemeteries (Barber and Bowsher 2000, 174; Mackinder 2000, 33-37). The two lamps from Skeleton Green were found within casket-burials, one of which also yielded glass and metal vessels (Partridge 1981, 264-5). Pepper Hill, attached to the 'small town' of Springhead, lacks such objects. Cups also appear to be somewhat high-status items. The type accounts for 2% of Pepper Hill's assemblage by vessel count, but 5% at Canterbury, 6% at Colchester, and 10% at St Pancras, Chichester. Many of the cups at Chichester were made locally, suggesting that the form (and function) was assimilated into local culture. For the inhabitants at sites where cups were mainly in samian fabrics, the form retained an exotic and exclusive character. Set against these sites, the 9% represented at Each End hints at a special status for its associated settlement, while the 11% at Westhawk Farm fits well with the settlement's status as a religious centre (Booth 2001).

The predominance of drinking forms and platters at Pepper Hill sets it apart from the jar- and bowl-orientated assemblages of Great Dunmow, Chichester, and Canterbury. In this respect, the assemblage is reminiscent of some Gallo-Roman assemblages, for example that at Solre-sur-Sambre, Belgium (Brulet 1972). Its cemetery assemblage, dated mainly to the 1st century AD, is beaker-dominated; flagons and platters also make important contributions. In contrast to the seemingly continental-inspired Pepper Hill assemblage, the pottery of Great Dunmow and others may find its origins in the 'Belgic' cemetery assemblages of south-eastern Britain. That at Allington, Kent (Thompson 1978) is characterised by robust bowls and jars with only occasional platters and flagons.

14 NUMBERS OF VESSELS PER GRAVE

More than half of the total number of graves yielded no ceramic grave-goods. Including these, each grave contained an average (mean) of 0.9 vessels. Excluding graves without pottery, the mean increases to 1.9 vessels; removing cinerary vessels, the mean is slightly reduced at 1.7 vessels per grave. Most pottery-yielding graves (90%) contained one or two vessels only. Some 56% of inhumation graves contained 1 vessel, compared with 41% of cremation graves. Fewer graves - 33% of inhumation graves and 38% of cremation graves - contained two vessels. Inhumation grave 253 yielded the highest number of seven vessels, although not all were complete; one of the vessels - a grey ware jar base - had been inverted and used as a lid to cover a beaker-sized jar. In addition, fragmented pottery representing a further fifteen vessels had been scattered through the backfill at the of the 'foot' end of the grave cut. Graves belonging to the middle Roman period (*c* AD 120-260) enjoyed a higher average of two ancillary vessels, compared with 1.6 vessels for the early Roman period (*c* AD 40-120). However, having a greater standard deviation, the middle Roman population was more dispersed than the latter group. Thus, the results of a statistical non-parametric test - in this case the median test - suggests that burial groups were not significantly larger during the mid Roman period. Few graves belonged to the late Roman period. Those available produced an average of 1.8 vessels, although the size of the population is not comparable with those of the earlier periods. Of the two principal burial rites, cremation burials tended to contain more vessels than inhumation graves; the former had a mean of 1.8 ancillary vessels per grave, compared with 1.6 vessels in the latter, although, again, the difference is slight.

Table 30: Mean number of vessels per grave. Cinerary vessels, pyre-goods and graves without ancillary vessels have been excluded from calculations

Site	Mean no. vessels per grave	Standard deviation (sd)	Coefficient of variation (sd/mean)	Number of graves
Colchester, Butt Road	1.2	0.6	0.5	31
London, Eastern cemetery	1.4	0.7	0.5	85
Kelvedon	1.6	1.2	0.8	37
Pepper Hill	1.7	0.9	0.5	227
Ospringe	2.1	1.0	0.5	191
Verulamium, St Stephen's	2.3	2.0	0.9	51
Skeleton Green	2.5	1.4	0.6	51
Canterbury, Cranmer House	2.7	1.9	0.7	30
Ashford, Westhawk Farm	2.7	2.4	0.9	13
Chichester, St Pancras	3.1	2.9	0.9	201
Each End, Ash	3.2	2.1	0.7	11
Great Dunmow	3.3	1.9	0.6	16
Colchester, Beverley Road	3.5	2.5	0.7	105

Pepper Hill had one of the lowest averages compared with sites in the region and beyond (Table 30). The lower means from London's eastern cemetery (Barber and Bowsher 2000) and the 3rd and 4th century cemetery at Butt Road, Colchester (Crummy and Crossan 1993)

are consistent with a general trend of comparatively small later Roman burial groups. Kelvedon, a 'small town' cemetery like Pepper Hill, produced a lower mean, but a relatively high standard deviation. Its grave-groups were more variable than Pepper Hill in terms of vessel numbers, and this is reflected in the *coefficient of variation* statistic, which standardises the measure of dispersion for comparing samples of different sizes (Shennan 1997, 44); the higher the figure, the greater the range of values within the sample. Grave groups at Kelvedon experienced a decline in vessel numbers through time. Its 3rd and 4th century groups are of similar size to Butt Road and London, as shown by its low overall mean. Cemeteries that accommodated greater proportions of earlier Roman burials, Ospringe, Chichester and Colchester-Beverley Road among them, generally yielded larger grave groups than Pepper Hill. Notably, however, the size of grave groups tends to be more variable at those sites. Pepper Hill in contrast had very few grave groups with more than one or two ancillary vessels. Colchester-Beverley Road produced three graves each containing more than 10 vessels.

The differences in the means between Pepper Hill and some of the sites, for example Ospringe and Verulamium-St Stephen's, are statistically insignificant, yet the question of why most sites are more variable than Pepper Hill remains an intriguing one. At the three *civitas* capitals of Canterbury, Colchester and Chichester, one might expect social or economic differentiation among their inhabitants. If one accepts the number of vessels per grave as an index of wealth and status (which is not certain), then the variable group sizes suggests that the rich were buried alongside the poor at Colchester, Chichester and others. At Pepper Hill, such differences may have been less pronounced. Certainly, the evidence of the walled cemetery at Springhead, which dates to the third century but appears to have contained re-burials originally dating to the 2nd century (Davies 2001, 165), suggests that the dead were segregated on wealth or social grounds, with the very rich buried away from the Pepper Hill site. Such divisions would perhaps lower the average number of vessels per grave. However, the relationship between status and vessel numbers is ambiguous. Down (1971, 71) notes that burial 87 at the St Pancras site contained a rare bronze mirror, bangle and needle, but a single ceramic jar. Items such as lamps and glass vessels may be regarded as better indicators of economic or social status. Graves in which such objects have been found tend to produce ceramic groups of variable size. At Ospringe and Skeleton Green, graves containing glass vessels yielded an average of two ancillary vessels; the mean at Chichester was higher at four vessels. Lamps are absent at Pepper Hill, while glass vessels are limited to single fragments from grave backfills. The most complete and securely provenanced example, a glass unguent bottle from grave 12038, was not certainly accompanied by pottery; the remains of a ceramic flagon were found in the backfill, but this may be residual. However, if more prestigious items did not *add* to ceramic vessels, but instead *replaced* them, then group sizes with glass

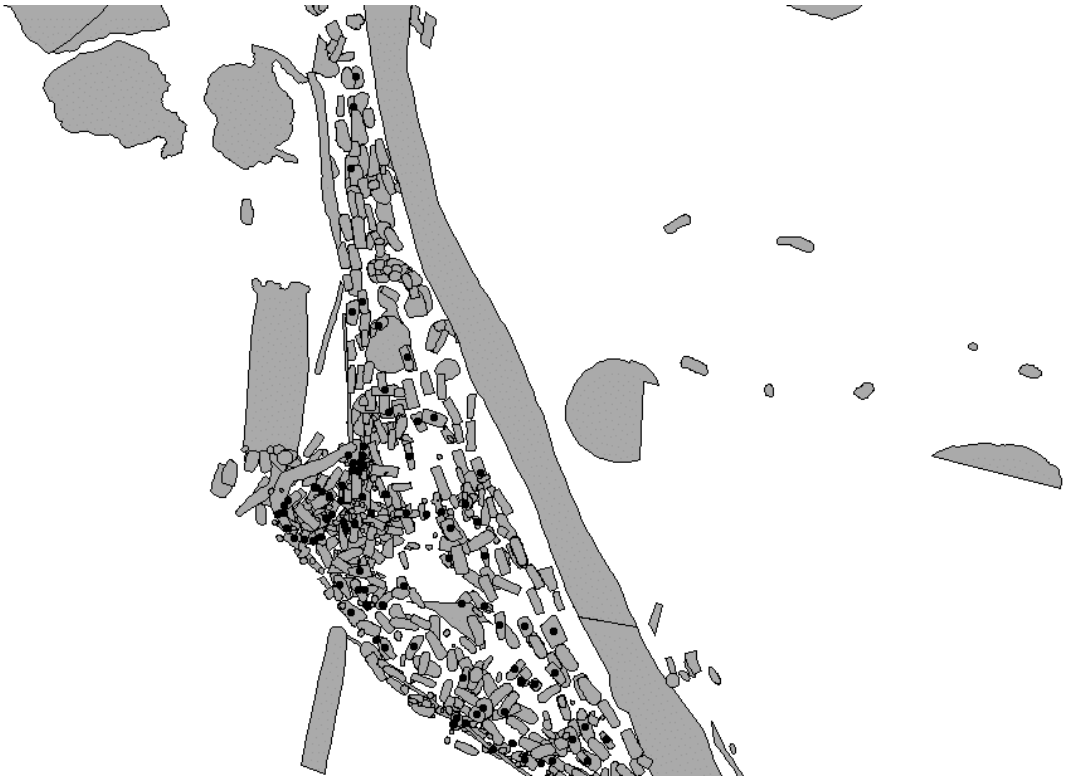
and the like should not necessarily be larger than those without. Among pottery, samian may be regarded as prestigious. This seems to be the case in high-status graves, such as the Bartlow Hills (VCH 1963, 39-43), or at Stansted (Brooks and Bedwin 1989; Havis and Brooks 2004), in Essex. When selected for deposition in high-status burials, pottery almost exclusively comprised samian. Coarse wares, except *amphorae*, were rarely chosen (Biddulph 2005). That samian is indicative of comparatively high social or economic status gains some support from grave group sizes. Groups with samian at Pepper Hill yielded a mean of 2.3 vessels per grave with a coefficient of variation of 0.7, suggesting that samian-yielding groups (though not all) tended to be larger than those lacking the ware.

15 SPATIAL ANALYSIS

Pepper Hill cemetery was revealed almost in its entirety by excavation. This provides an unparalleled opportunity to study the spatial distribution of the pottery assemblage. Of course, the range of spatial queries that one could use to interrogate the data is limitless, while practical resources are not. For the purposes of this study, then, analysis has been restricted to funerary vessels and focused on the distribution of certain types and wares as a way of examining spatial organisation. Also, the examination of the distribution of pottery preservation adds to the discussion of site disturbance and truncation.

The major vessel types were plotted onto a digital plan of the cemetery. Generally, centrally-located graves and those along the western edge in the southern part of the site received pottery. The northern half and extreme southern part contained relatively few pottery-yielding graves. Jars (as ancillary vessels) favoured the western side of the cemetery. Two concentrations were revealed: along the lower western boundary gully and within the dense cluster of grave west of centre. It was noted above that a higher proportion of ancillary jars was recovered from cremation graves, compared with inhumation graves. This goes some way to explain the distribution, since cremation burials are concentrated in the same areas. Flasks and flagons have a reasonably uniform distribution across the central (west and eastern sides) and southern portion of the cemetery. This is as expected, since the liquid-server was something of a standard type in graves. Dishes and platters, as a single class, likewise enjoyed a uniform distribution. Beakers were similarly distributed uniformly across pottery-yielding graves, although the distribution revealed a concentration of particular interest.

Figure 9: Distribution of graves containing beakers as ancillary vessels



In Figure 9, a circle of beakers can be observed within the densest part of the site at the westernmost extent. The beakers were recovered mainly from broadly contemporaneous cremation burials. Grave 11530 is among the earliest, dating from *c* AD 60-90. The latest is 11297, which dates to AD 169-190. The beakers are of mixed fabric and type; carinated, poppy-headed and globular beakers are represented. Two inhumation graves, 11998 and 11689, are at the centre of the 'beaker-ring'. Both are dated *c* AD 80-110, and could have immediately provided a focus for the subsequent cremation burials. However, there is little to identify the individuals they contained as remarkable people. Both are adult (nothing more is known); one of the graves (11998) contained a samian dish, while the other yielded a copper alloy brooch. The configuration of beakers in this area is intriguing, but its significance remains elusive.

Samian grave-goods have a south-western and central distribution. This more-or-less correlates with the areas of higher grave density. The link between the two is somewhat impressionistic. A more rigorous approach is to set the samian distribution against a nearest neighbour plot based on counting the number of grave centroids within a given radius - in this case 1.5 m. The distribution combined with this *local density analysis* suggests that there are higher than expected proportions of samian in the south-western and central areas of the cemetery. That samian-yielding graves tended to contain more than average numbers of ceramic vessels suggests that samian was 'higher-status' or more special than other pottery. If

so, then the concentrated distribution of samian may reveal those areas as especially desirable parts of the cemetery. The distributions of other 'high-status' objects, such as personal dress items (brooches, pins, bracelets, beads and the like) and vessel glass, provide a useful counterpoint.

Figure 10: Distributions of graves containing samian grave-goods (black), personal dress-items (light grey), and vessel glass (striped)

The vessel glass is limited to parts of two unguent bottles, single fragments from grave backfills and a piece recovered from within a ceramic vessel. While the integrity of its findspots is dubious, the distribution of glass nevertheless matches that of the better provenanced dress items. Both distributions appear to correspond to the pattern of the samian. The association of dress items and samian (which form two samples of reasonably equal size) was tested statistically. An 8 x 4 grid was imposed on the site plan. The presence or absence of the types in each square was noted. A chi-squared test was carried out, giving a chi-squared statistic of 10.1 (applying Yates' Correction, given the use of a 2x2 contingency table), which was significant at the 5% level and suggested a strong association between dress items and samian ware distributions.

Table 31: Contingency table for chi-squared test, showing the number of quadrats (squares) that contain one or other, both, or no types

	● Present	Absent	**Total quadrats**
○ Present	7	4	11
Absent	1	20	21
Total quadrats	8	24	32

○ = dress-items; ● = samian

Table 32: Chi-squared test, giving value for x^2

Observed frequency (O)	**Expected frequency (E)**	**O-E**	**(O-E) - 0.5 (Yates' Correction)**	**$(O-E)^2/E$**
7	2.8	4.2	3.7	4.9
1	5.3	-4.2	3.7	2.6
4	8.2	-4.2	3.7	1.7
20	15.8	4.2	3.7	0.9
Total (x^2)				10.1

These results confirm that the classes of objects deemed to be high-status were buried in identical parts of the cemetery. There are outliers - dress-items are also located at the extreme southern and northern ends of the cemetery, for example. Mainly, though, the objects cluster in four areas: east of centre, west of centre, north of centre and along the south-western boundary. These comparatively rich graves in terms of vessel numbers or object types suggest that the areas had significance for the socially- or economically-richer inhabitants of Springhead. As higher-status medieval burials would be made close to or within a church, these areas were highly desirable for burial. Clearly those areas were available to others without obvious material advantage - there are empty graves, of course - but the fact that the samian distribution is more aggregated compared with, say, the flagon or dish distributions reveals that the inhabitants with samian could not consider other parts of the cemetery for their eternity in death.

Figure 11: Distributions of 'completeness'

■ = A, ▲= C, pentagon = D, x = E, + = F.

Every vessel securely attributed to a grave was assigned one of six codes which described its completeness; these ranged from 'A', which denoted a fully complete vessel, to 'F', which indicated a fragmentary vessel, less than 10% complete. Vessels incomplete before burial, being mainly deliberately mutilated vessels, were given code 'B' (see above Tables 6 and 7). All six distributions were plotted. Code 'As' are distributed across the site; there is a concentration where graves are densest, but, as would be expected, the best preserved pottery is also located in the least disturbed parts of the site. Pottery assigned to categories C, D and E appear to share the distribution; certainly, no strong patterns emerge to suggest a gradual aggregation towards highly disturbed areas commensurate with the decline of pottery completeness (no lower than 10%). In contrast, fragmentary vessels (F) were more concentrated along the south-western boundary and west of centre, correlating more closely with the pattern of grave density. The distributions of A and F vessels were compared using nearest neighbour analysis, in which the type nearest to a given object (its nearest neighbour) is recorded. The counts were chi-squared tested, with the result suggesting no positive association between the two. This does not necessarily indicate segregation; indeed, a second measure of association (Pielou's coefficient) suggested that the two distributions were random. The distribution of A was then compared with that of C. The result was highly significant, which meant that the null hypothesis of no association could be rejected. Pielou's

coefficient added further weight to this view with a statistic close to -1, denoting positive association. The analysis suggests that all parts of the site that received pottery grave-goods yielded the pottery in varying states of completeness. However, the level of disturbance must have been a factor in vessel preservation, even if, generally, no strong patterns have emerged. That vessels over 80% complete were located together should be expected if the parts of the site in which they were found had suffered comparatively little from later truncation and farming activity. Those found in very dense areas may have been in graves high in the stratigraphic sequence, but more work is required before a firm conclusion can be drawn.

Figure 12: Distribution of mutilated and anachronistic ceramic grave-goods

● = anachronistic vessels, * = mutilated vessels

Mutilated vessels and anachronistic pottery are widely distributed in the central and southern parts of the cemetery; mutilated vessels extend further north. Both overlie areas of highest grave density, although mutilated vessels are additionally located in less disturbed parts and follow a similar distribution to near-complete vessels; the argument that mutilated pottery was accidentally damaged is therefore not convincing. The association between pottery location and high grave density seems strongest for anachronistic vessels, with local density analysis suggesting good correlation. This observation alone is not enough to suggest that anachronistic pottery was brought to the surface and re-interred in later burials, especially given the element of selection highlighted above, or the lack of association between such

pottery and category E vessels (most anachronistic vessels were more than 50% complete). But the cumulative weight of evidence - its distribution and location in the grave - nevertheless leans towards accidental interment. With this in mind, it is perhaps no coincidence that cups and platters, which make important contributions to the anachronistic assemblage, also share its distribution. Quadrat analysis suggests a strong association between the distribution of these types and anachronistic vessels, although the relationship is not as strong with nearest neighbour analysis.

16 CONCLUSIONS

The excavation of the Pepper Hill cemetery has provided a ceramic funerary assemblage set apart from most cemeteries within the region in terms of its size and the settlement to which it is attached. It has permitted answers to be sought for a range of questions, which may more usually have been conjectured from uncertain evidence. Analysis has suggested a number of key points. It is likely that most of the pottery not securely assigned to graves once belonged to burials, but became dislocated through intercutting and later disturbance. Of the more definite funerary assemblage, cinerary vessels were largely confined to jars. Ancillary pottery was biased towards drinking-related forms, followed in preference by eating, then cooking or storage types. There was no set combination of vessels represented within individual graves although the selection of vessels for cemetery use conformed to standard, funerary-related, norms. Pottery was mainly of local origin and drawn from the ceramic supply otherwise intended for domestic use. Indeed, the presence of worn or burnt vessels suggest that some pottery had first seen household use. Some ‘antique’ grave-goods may have remained in the household for generations before burial, though others had already been buried, only to be re-interred accidentally after later grave-digging and backfilling. There was no significant difference between inhumation- and cremation-derived assemblages, and no firm conclusion could be drawn about selection of pottery based on the sex of the individual. Evidence for a range of treatments was found. Some vessels had been deliberately mutilated, inverted or laid on their sides. Pottery placed inside cinerary vessels may first have been placed on the pyre. Pottery recovered from inhumation graves tended to be located outside the coffin during the 1st and early 2nd centuries, but inside the coffin from the mid 2nd century onwards.

The Pepper Hill assemblage is reasonably similar to other cemetery collections in Kent and beyond. All are dominated to lesser or greater extents by drinking-related forms, followed by eating, then cooking or storage types. However, correspondence analysis has revealed more subtle differences between them. Pepper Hill is closer to sites that appear to conform to Continental patterns of assemblage composition, in contrast to those that retain elements of regional late Iron Age practices. However, the economic or social status of the cemetery’s

inhabitants was relatively poor. High-status indicators, such as lamps and cups, are lacking or are poorly represented.

This study in no way represents an exhaustive treatment of the assemblage. More work is necessary - vital, even - before a comprehensive understanding of funerary pottery can be achieved. Chief among the aspects which demand attention is a comparison between the funerary pottery and the domestic assemblages from Springhead. This is likely to reveal significant differences, but may also confirm the means by which pottery was supplied to the cemetery. Secondly, residue analysis must be undertaken. General understanding of what, if anything, ancillary vessels contained has not progressed beyond a most basic level. Residue analysis should help to identify contents, and clarify the function of pottery within graves. The Pepper Hill assemblage retains a store of suitable vessels for analysis, which must be regarded as a future research priority.

17 APPENDIX: SAMIAN WARE

An assessment of the samian ware was carried out by Margaret Ward. A detailed report was prepared by Joanna Bird and a separate report was provided on the stamps by Brenda Dickinson. Their full reports are given here.

17.1 Samian potters' stamps from the Pepper Hill cemetery

by Brenda Dickinson

Each entry gives: excavation number, potter (i, ii etc, where homonyms are involved), die, form, reading, reference to published drawing (where available), pottery of origin, date.

Superscript a, b and c indicate:

a A stamp attested at the pottery in question.

b Not attested at the pottery, but other stamps of the same potter used there.

c Assigned to the pottery on the evidence of fabric, distribution, etc.

Ligatured letters are underlined**.**

1 PHL97 257 <4255> Albinus iv 6a 18/31 [·ALB]INI·M (Ludowici 1927, 207, c) Lezoux[a]. *c*. A.D. 135–155.

2 PHL97 1090 Aprilis iii 1a 31 AP·RI ISFC, in guide–lines, East Gaulish. Another of the potter's stamps, from a different die, is known from Pont–des–Rèmes (Argonne), but some of the fabrics of the pots stamped with 1a, including the Springhead one, suggest that the die may have been used at La Madeleine. *c*. A.D. 130–160.

3 PHL97 344 Caletinus 1c 33 CALETI I Lezoux[c]. *c*. A.D. 160–200.

4 PHL97 314 Divicus 4a 33 DIVICFC Lezoux[b]. *c*. A.D. 125–150/160.

5 PHL97 976 <4303> Felix i 4b' 18 oF·FEΓI (4a oF·FEΓICI) Le Rozier[a]. *c*. A.D. 55–70.

6 NBR98 11556 <4188> Frontinus 2a 18 OF[F]R[ON]+N, with first F in the O (Ulbert 1959, Taf. 41, 27) La Graufesenque[a]. *c*. A.D. 75–100.

7 PHL97 642 + 644 <4330> Gabrillus i 2a 33 GABRILLIM Lezoux[b]. *c*. A.D. 130–155.

8 PHL97 256 <2456> Gatus ii 3c 18/31 GATVSF retr., in a frame with ansate ends (Hartley 1970, 26, 25) La Madeleine[a]. *c*. A.D. 130–160.

9 PHL97 348 layer 301 Gnatius ii 7a 33 GNΛTOS (Romeuf 2001, pl. 35, 89) Les Martres–de–Veyre[a]. *c*. A.D. 130–160.

10 PHL97 597 <4605> Paternulus 1a 27 PAT RNVLI (AT, R ligatured) Lezoux[a]. *c*. A.D. 125–135.

11 NBR98 10645 Patricius i 5a 18 OFPΛTRC (Polak 2000, pl. 16, P28) La Graufesenque[a]. *c*. A.D. 70–90.

12 PHL97 1003 Rufus iv 1a 33 RVFVS·F Lezoux[c]. *c*. A.D. 150–180.

13 NBR98 12033 <4210> Sacironos 1a 18 SACIRONOS La Graufesenque[a]. *c*. A.D. 55–75?

14 PHL97 (1) C. Silvius Patricius 18d 18 CSILVI (Polak 2000, pl. 16, P43) La Graufesenque[a]. *c*. A.D. 65–85.

15 PHL97 431 <4553> AQV….? on form 18/31, Central Gaulish (Lezoux). Hadrianic or early–Antonine.

16 PHL97 1040 <4354> A……? on form 18/31, East Gaulish (Blickweiler?). Hadrianic or early–Antonine.

17 PHL97 1094 <4281> ……...VSF on form 18/31, East Gaulish (La Madeleine). Hadrianic–Antonine.

18 PHL97 950 <4315> I\ΛΛIIIΛΛI on form 42, with strap–handles, South Gaulish (La Graufesenque). Flavian or Flavian–Trajanic.

17.2 Catalogue of samian ware

by Joanna Bird

The catalogue is listed by site and then by context, followed by the small-find number in triangular brackets and the Sub-group number where present. Vessels with joining sherds are described once, with cross-references (marked 'q.v.') under the other relevant contexts. The form is given first, following the traditional typologies (illustrated in Oswald and Pryce 1920). The source is given by name, followed by the Canterbury fabric code; since these codes are not precise enough for samian, the fabric code from the National Roman Fabric Reference Collection (Tomber and Dore 1998) is given as well. Comments on the condition of the vessel come next, then a note of whether a stamp is present, with a cross-reference to Brenda Dickinson's report where appropriate. Graffiti are noted, and the basic dimensions of

the pots are recorded where possible, since so many of them are complete. The date is given at the end.

The entries in square brackets are contexts which have not been seen by JB; the identifications come from Margaret Ward's assessment or from the preliminary lists of samian.

17.2.1 ARC PHL 97

1. Bowl, Drag 38, two body sherds: = vessel in 123, q.v., and 1286

1. Platter, Drag 18, La Graufesenque: R42/LGF SA. Small piece of the rim/body and most of the base; complete profile. Slip good, except for the foot. Stamped by C. Silvius Patricius (B. Dickinson report, no. 14). D. rim approx 160 mm, foot 82; height 49. *c* AD 65-85

1. Cup, Drag 33, Lezoux: R43/LEZ SA2. Rim/body sherd. Slip good but worn on rim. D. rim approx 140 mm. *c* AD 150-190

1. Bowl, Drag 31 or 31R, Lezoux: R43/LEZ SA2. Base sherd. Slip lost from interior, good on exterior. c AD 150-190

44. Grave 48. Cup, Drag 46 with upright rim; East Gaul, from one of the earlier factories, possibly Heiligenberg: R46/possibly HGB SA. Low footring; the exterior has been poorly turned. Five sherds, complete except for tiny chips off the breaks. Slip flaked and missing, especially on interior, rim, carination and foot. No trace of stamp. Two graffiti, both X, one on the exterior below the rim, the other inside the footring. Diam. rim 110 mm, foot 44; height 38. *c* AD 140-170

61. <4510> Grave 1438. Cup, Drag 46 with rim rolled over; East Gaul, from one of the earlier factories, possibly La Madeleine: R46/possibly MAD SA. Complete except for two small pieces from the rim. Slip flaked, especially on rim and interior. No stamp present. D. rim 98 mm, foot 40; height 33. *c* AD 130-160

82. Grave 69. Dish, Curle 15, rim sherd: = vessel in 663, q.v.

123. <4575> Grave 117. Bowl, Drag 38, Rheinzabern: R46/RHZ SA. Seven sherds, including approx one-eighth of the rim and two-thirds of the foot. Slip largely lost except inside the footring. D. rim approx 140 mm, foot 68. = vessel in 1 and 1286. *c* AD 200-250

140. <4644> Grave 198. Platter, Drag 18, La Graufesenque: R42/LGF SA. Two sherds, approx one-eighth of the rim and body. Slip lost from rim and carination. D. rim 150 mm. *c* AD 55-75

227. Bowl, Drag 31 or 31R, Lezoux: R43/LEZ SA2. Rim sherd. Slip flaked on both surfaces. D. rim approx 190 mm. *c* AD 150-190

[239. Bowl, Drag 31, Lezoux: R43/LEZ SA2. Two sherds. *c* AD 150-190]

256. <2456> Grave 254. Dish, Drag 18/31, La Madeleine: R46/MAD SA. Four sherds, lacking approx two-fifths of the rim/body; complete profile. Slip damaged but largely present except on the rim, the centre of the floor, the carination and the foot. Stamped by Gatus ii (B. Dickinson report, no. 8). D. rim 173 mm, foot 82; height 49. Graffito under the base, probably a rough star rather than letters. *c* AD 130-160

257. <4255> Grave 254. Dish, Drag 18/31, Lezoux: R43/LEZ SA2. Two sherds, lacking approx two-fifths of the rim/body; complete profile. Slip damaged but largely present except on rim, carination and foot. Stamped by Albinus iv (B. Dickinson report, no. 1). D. rim 164 mm, foot 87; height 41. Graffito X under the base. *c* AD 135-155

314. Cup, Drag 33, Lezoux: R43/LEZ SA2. Base sherd. Slip flaked on foot. Stamped by Divicus (B. Dickinson report, no. 4). D. foot 36 mm. *c* AD 125-150/160

344. Sub-group 293. Cup, Drag 33, Lezoux: R43/LEZ SA2. Three sherds, body and base. Slip slightly flaked. Stamped by Caletinus (B. Dickinson report, no. 3). D. foot 58 mm. *c* AD 160-200

348. Sub-group 293. Cup, Drag 33, Les Martres-de-Veyre: R43/LMV SA. Base sherd. Slip flaked. Stamped by Gnatius ii (B. Dickinson report, no. 9). D. foot 43 mm. Probably = pot in 350 and 352 and possibly = pot in 547. *c* AD 130-160

350. Sub-group 293. Cup, Drag 33, body sherd: probably = vessel in 348, q.v., and 352 and possibly = pot in 547

352. Sub-group 293. Cup, Drag 33, body sherd: probably = vessel in 348, q.v., and 350 and possibly = pot in 547

363. Grave 254. Cup, Drag 33, Lezoux: R43/LEZ SA2. Rim/body sherd. Slip good. D. rim approx 90 mm. *c* AD 130-170

364. Grave 254. Dish, Drag 18/31, with the dark overfired fabric and slightly uneven surface characteristic of the samian factory at Pulborough in Sussex: R46.1/PUL SA (cf 526 and 602). Rim/body sherd. Slip good. *c* AD 110-135

431. <4553> Cremation-related feature 590. Dish, Drag 18/31, Lezoux: R43/LEZ SA2. Two sherds, lacking approx one-sixth of the rim/wall; complete profile. Stamp present but abraded in the centre: Aqu...? (B. Dickinson report, no. 15). Slip now matt but present apart from rim and stamp. D. rim 180 mm, foot 83; height 41. *c* AD 130-160

[437. Grave 254. Platter, Drag 18, La Graufesenque: R42/LGF SA. Sherd. *c* AD 60-90]

452. Grave 451. Cup, Drag 33, Lezoux: R43/LEZ SA2. Two sherds, rim/body. Slip slightly flaked on exterior. D. rim approx 100 mm. *c* AD 130-180

455. <4341> Grave 451. Cup, Drag 46 with upright rim; East Gaul, from one of the earlier factories, possibly La Madeleine: R46/possibly MAD SA. Complete except for four small chips from rim. Slip missing from floor, rim and foot, and flaked elsewhere. No stamp now present. D. rim 122 mm, foot 49; height 59. *c* AD 130-160

463. Grave 465. Dish/bowl, Drag 31 or 31R, Lezoux: R43/LEZ SA2. Rim sherd. Good slip. *c* AD 150-190

526. Grave 254. Dish, Drag 18/31 with the dark overfired fabric and slightly uneven surface characteristic of the samian factory at Pulborough in Sussex: R46.1/PUL SA. Body sherd. Slip good. Probably = vessel in 602 (cf 364). *c* AD 110-135

543. Grave 544. Bowl, Drag 31, Lezoux: R43/LEZ SA2. Two sherds, rim/body, probably one vessel. Good slip, scratched on exterior. *c* AD 140-170

547. Sub-group 484. Cup, Drag 33, Lezoux: R43/LEZ SA2. Rim sherd. Slip flaked. D. rim approx 100 mm. Possibly = vessel in 348, 350 and 352. *c* AD 130-170

586. <4353> Grave 451. Bowl, Curle 11, Lezoux: R43/LEZ SA2. Two sherds; the base is complete but approximately half the rest is missing. Unstamped. There were probably originally eight barbotine leaves on the flange, rather unevenly spaced. Slip largely gone on lower interior and pitted on exterior. D. rim 115 mm, foot 23; height 54. *c* AD 125-150

[589. Dish sherd, probably Les Martres-de-Veyre: R43/probably LMV SA. *c* AD 100-130]

592. <777> Sub-group 23 (road). Dish/bowl, Drag 18/31 or 31, Lezoux: R43/LEZ SA2. Body sherd. Slip good but flaked. *c* AD 130-180

597. <4605> Grave 291. Cup, Drag 27, Lezoux: R43/LEZ SA2. Two sherds; complete apart from a small piece missing from rim. Interior base shows concentric wear lines, as though used for stirring; slip otherwise present apart from rim, carination and foot, and over the potter's fingermarks. Stamped by Paternulus (B. Dickinson report, no. 10). D. rim 96 mm, foot 40; height 44: footring rather uneven. *c* AD 125-135

602. Grave 254. Dish, Drag 18/31, rim sherd: R46.1/PUL SA. Probably = the Pulborough vessel in 526 (cf 364). *c* AD 110-135

[640. Grave 630. Cup, Drag 27, La Graufesenque: R42/LGF SA. Sherd. *c* AD 60-90]

642/644. <4330> (? originally 642/643 <161> and 645/44 <162>) Grave 651 (642) and 652 (644). Cup, Drag 33, Lezoux: R43/LEZ SA2. Seven sherds, approx one-third of the pot, giving complete profile. Slip in good condition. Stamped by Gabrillus i (B. Dickinson report, no. 7). D. rim 155mm, foot 57; height 66. Three parallel lines have been incised across the footring. Joins vessel in 649. *c* AD 130-155

649. Cup, Drag 33, six rim/body sherds: joins stamped vessel in 642/644, q.v.

663. Grave 653. Bowl, Drag 31, Lezoux: R43/LEZ SA2. Four base/body sherds. Slip good on exterior, flaked on interior. Three lines have been cut across the footring, a diagonal between two verticals. Probably = vessel in 724. *c* AD 150-190

663. Grave 653. Dish, Curle 15, Lezoux: R43/LEZ SA2. Two sherds, rim and foot, probably same pot. Slip worn on rim and interior. D. rim approx 210 mm. = vessel in 82. *c* AD 150-190

683. Grave 792. Dish, Drag 18/31, Les Martres-de-Veyre: R43/LMV SA. Five base sherds. Flaked slip. *c* AD 100-130

709. <190> Grave 254. Cup, Drag 33, Lezoux: R43/LEZ SA2. Body sherd. Good slip. *c* AD 150-190

[715. Grave 792. Central Gaulish sherd: R43/LMV SA or LEZ SA2. 2nd century]

724. <195> Grave 720. Bowl, Drag 31, body sherd: probably = vessel in 663, q.v.

724. <195> Grave 720. Bowl, Drag 31, Lezoux: R43/LEZ SA2. Two rim/body sherds, probably one vessel. Slip rather abraded. *c* AD 140-170

766. <4352> Grave 787. Mortarium, Drag 45, Lezoux: R43/LEZ SA2. Around one-third of the rim/wall missing; complete profile. Slip worn on the interior and flaking on the exterior; grits or partial impressions of them are still present, indicating that the interior damage is due

to soil conditions rather than use. The applied lion's head mask over the spout is small and blurred; there is a mark round the join showing that it had been wiped with a cloth and some of the incised lines round the mask are cut over this. M. Pierre-Henri Mitard has examined a photograph of the mask and comments: 'Type 001d (h. 25/26 mm), variété assez évoluée que je propose de dater 210-240' (M. Mitard's catalogue and discussion of Central Gaulish mortaria is currently in preparation). Given the extremely rare occurrence of early 3rd-century Lezoux ware in Britain, a date in the earlier part of the range is likely. D. rim 160 mm, foot 66; height 88.

838. Grave 837. Bowl, Drag 31, Lezoux: R43/LEZ SA. Two rim/body sherds. Slip slightly flaked. *c* AD 150-180

865. Grave 864. Cup, Drag 33, East Gaul and probably Heiligenberg: R46/probably HGB SA. Two rim/body sherds, approx three-eighths of the rim. Flaked slip. D. rim approx 120 mm. *c* AD 140-180

865. Grave 864. Small sherd, Lezoux: R43/LEZ SA2. *c* AD 125-190

903. <4324> Grave 698. Bowl, Drag 31, Lezoux: R43/LEZ SA2. Complete apart from a small chip off the footring. Slip largely gone from both surfaces. Traces of the stamp remain but are indecipherable. D. rim 176 mm, foot 87; height 56. *c* AD 160-190

927. <4355> Grave 780. Platter, Ludowici Tg, Lezoux: R43/LEZ SA2. Complete except for three small pieces from the rim. Slip mostly lost, except inside the footring. No stamp survives. D. rim 299 mm, foot 149; height from 56 to 59. *c* AD 160-200

946. Grave 886. Dish, Drag 36, La Graufesenque: R42/LGF SA. Rim/body sherd. Flaked slip. D. rim approx 170 mm. *c* AD 70-100

950. <4315> Grave 911. Dish, Drag 42, with plain collared rim and applied scroll handles (cf Oswald and Pryce 1920, pl. 54, no. 7), La Graufesenque: R42/LGF SA. Four sherds, approx two-thirds of the pot, giving complete profile. Slip lost from rim and foot. Illiterate stamp (B. Dickinson report, no. 18). D. rim 158 mm, foot 69; height 46. *c* AD 70-110

976. <4303> Grave 892. Platter, Drag 18, Le Rozier: R42. Two sherds, but complete. Slip flaking on the rim and a little on the exterior, including over the potter's fingermarks. Stamped by Felix i (B. Dickinson report, no. 5). D. rim 166 mm, foot 82; height 42. *c* AD 55-70

1003. Cremation-related feature 1002. Cup, Drag 33, Lezoux: R43/LEZ SA2. Base sherd with low foot. Flaked slip. Stamped by Rufus iv (B. Dickinson report, no. 12). D. foot 41 mm. *c* AD 150-180

1003. Cremation-related feature 1002. Dish, Drag 18/31, Lezoux: R43/LEZ SA2. Rim/body sherd. Flaked slip. *c* AD 130-170

1040. <4354> Grave 1018. Dish, Drag 18/31, East Gaul and possibly Blickweiler: R46/possibly BLW SA. Complete apart from a small chip off rim. Slip mostly present apart from rim and foot and over the potter's fingermarks, and some pitting on interior. Stamped A...? (B. Dickinson report, no. 16). A slight sag in the floor near the centre is probably a flaw from firing. D. rim 180 mm, foot 89; height 41. *c* AD 130-160

1056. Grave 1087. Bowl, Drag 37, La Graufesenque: R42/LGF SA. Body sherd with fragment of decoration, a panel with corded bud on a tendril above a band of corded buds. Good slip. *c* AD 70-90

1090. Grave 1089. Bowl, Drag 31, possibly La Madeleine: R46/possibly MAD SA. Base sherd. Slip good but scratched. Stamped by Aprilis iii (B. Dickinson report, no. 2). D. foot approx 84 mm. *c* AD 130-160

1092. <317> Grave 1095. Dish, Drag 18/31, two rim sherds: join vessel in 1094, q.v.

1094. <4281> Grave 1095. Dish, Drag 18/31, East Gaul, La Madeleine: R46/ MAD SA. Lacking approximately one-quarter rim/body and chips from rim; the footring has been deliberately removed in antiquity. Slip pitted and flaked on interior floor, good on exterior. Stamped (B. Dickinson report, no. 17). D. rim 198 mm, foot at least 81. Joins rim sherds in 1092. *c* AD 130-160

[1096. Grave 1095. Five sherds, possibly one vessel, La Graufesenque: R42/LGF SA. *c* AD 60-90]

1115. <314> Grave 1117. Bowl, Drag 31, Lezoux: R43/LEZ SA2. Ten sherds. Slip worn on both surfaces. D. rim approx 180 mm. *c* AD 150-190

1116. <4283> Grave 1117. Bowl, Drag 31, Lezoux: R43/LEZ SA2. Fifteen sherds, approx three-quarters of the pot, giving complete profile. Slip largely missing from interior, especially floor and lower wall; damaged on exterior but only flaked off on rim, carination and foot and over the potter's finger marks. Stamp lost. D. rim 182 mm, foot 89; height 50. *c* AD 150-180

1169. <4268> Grave 1032. Platter, Walters 79, Lezoux: R43/LEZ SA2. Three sherds but complete. Slip almost all missing from interior and from most of exterior except under the floor. No trace of the stamp survives. D. rim 146 mm, foot 73; height 49. *c* AD 160-200

1226. Grave 1227. Bowl, Drag 31R, Lezoux: R43/LEZ SA2. Three sherds, giving whole profile. Slip badly damaged on both surfaces. Stamp and rouletted circle now lost. D. foot approx 96 mm, height approx 68. *c* AD 160-190

1263 and 1321. <4265> Grave 1137. Dish, Drag 32, Rheinzabern: R46/RHZ SA. Three sherds (one from 1321), missing about one-quarter of the rim/body; complete profile. Slip scratched and flaked on interior, less so on exterior where only patches are worn, including over the potter's finger marks. Stamp present but indecipherable: probably ends]SF . D. rim 248 mm, foot 97; height 69. *c* AD 200-250

1286. Bowl, Drag 38, four base and body sherds: joins vessel in 1 and 123, q.v.

1286. Bowl, Drag 31R (Ludowici Sb), Rheinzabern: R46/RHZ SA. Foot sherd. Slip flaked. *c* AD 180-250

17.2.2 ARC NBR 98

10004. Cup, Drag 46 with upright rim, La Graufesenque: R42/LGF SA. Rim sherd. Slip very worn. D. rim approx 90 mm. *c* AD 70-90

10004. At least three cups, Drag 27, La Graufesenque: R42/LGF SA. Three rim sherds from three vessels, one body sherd. Slip mostly gone. D. rim of one 90 mm, others too small to measure. *c* AD 70-100

10004. Bowl, probably Drag 29, La Graufesenque: R42/LGF SA. Body sherd with fragment of decoration. Slip mostly gone. *c* AD 70-85

10004. Platter, Drag 15/17, La Graufesenque: R42/LGF SA. Body sherd. *c* AD 50-75

10004. Four sherds, probably platters Drag 18 or 15/17, La Graufesenque: R42/LGF SA. Slip gone. *c* AD 50-100

10004. Two sherds, Les Martres-de-Veyre: R43/LMV SA. Good slip. *c* AD 100-130

10051. Dish, Drag 18/31, from one of the earlier East Gaulish factories such as Heiligenberg or perhaps from Pulborough in Sussex: R46.1. Body sherd, slip largely gone. *c* AD 120-140

[10228. Cup, La Graufesenque: R42/LGF SA. Body sherd. *c* AD 70-100]

10439. Cobble surface 10438 Platter, Drag 15/17, La Graufesenque: R42/LGF SA. Body sherd. Slip largely gone. *c* AD 50-80

10439. Cobble surface 10438. At least two platters, Drag 18, La Graufesenque: R42/LGF SA. Two rim sherds from two pots, and three body sherds. Slip largely gone. D. rim of one approx 170 mm. *c* AD 50-90

10439. Cobble surface 10438. Bowl, Drag 37, La Graufesenque: R42/LGF SA. Two body sherds. Slip largely gone. *c* AD 70-100

10439. Cobble surface 10438. Dish, Drag 18/31, Les Martres-de-Veyre: R43/LMV SA. Body sherd. Good slip. *c* AD 100-130

10566. <4085> Grave 10532. Platter, Drag 18, La Graufesenque: R42/LGF SA. Nineteen sherds, complete pot. Slip gone from interior, damaged on exterior. Stamp present but indecipherable. D. rim approx 165 mm, foot 83; height 41. *c* AD 55-75

10570. Platter, Drag 18, La Graufesenque: R42/LGF SA. Two rim sherds, foot and four body sherds, probably one pot. Slip flaked and worn. D. rim approx 175 mm, foot approx 80. *c* AD 50-70

10570. Dish, Drag 18/31, Lezoux: R43/LEZ SA2. Six rim sherds, approx half the rim, six body sherds. Slip flaked on rim and carination. D. rim approx 170 mm. *c* AD 125-150

10614. Dish, Drag 18/31, Lezoux: R43/LEZ SA2. Nineteen sherds, giving complete profile and approx three-quarters of rim. Slip good except on rim and carination. Stamp missing. D. rim approx 180 mm, foot approx 89; height 44. *c* AD 130-160

10614. Platter, Drag 15/17 or 18, La Graufesenque: R42/LGF SA. Base sherd. Slip largely gone, especially on interior. Stamp partly present but indecipherable. Graffito of at least three letters under base. *c* AD 50-80

10614. Platter, Drag 15/17, La Graufesenque: R42/LGF SA. Four rim, four body sherds, probably all one pot. Slip largely gone. D. rim approx 170 mm. *c* AD 60-80

10614. Platter, Drag 18, La Graufesenque: R42/LGF SA. Nine rim sherds, giving most of rim, and four body sherds, probably all one vessel. Slip largely gone, especially on interior. D. rim approx 165 mm. *c* AD 60-80

10614. Cup, Drag 27, La Graufesenque: R42/LGF SA. Two rim sherds. Slip largely gone. *c* AD 60-80

10614. Cup, Drag 35, La Graufesenque: R42/LGF SA. Six rim sherds, approx half the rim, and five body sherds. Slip gone, surface pitted on interior; the barbotine leaves on the rim are eroded. D. rim approx 120 mm. *c* AD 70-100

10614. Twenty-nine La Graufesenque sherds (R42/LGF SA), including one cup sherd; the rest probably platters (Drag 15/17 and 18). All very eroded. *c* AD 50-100

10645. Platter, Drag 18, La Graufesenque: R42/LGF SA. Two base sherds. Slip flaked, pitted under base. Stamped by Patricius i (B. Dickinson report, no. 11). *c* AD 70-90

10746. <4084> Grave 10744. Dish, Drag 18/31, East Gaul and possibly Heiligenberg: R46/possibly HGB SA. Eight sherds, complete except for small pieces from rim and body. Slip mostly present apart from rim, carination, centre of floor and foot. Stamp present but indecipherable. D. rim approx 185 mm, foot 88; height 48. *c* AD 140-170

10808. Platter, Drag 18, La Graufesenque: R42/LGF SA. Rim sherd. Slip lost; burnt. D. rim approx 170 mm. Joins vessel in 10867. *c* AD 50-80

10840. <4045> Grave 10838. Dish, Curle 15, a shallow version with a small foot and slightly domed floor (cf Oswald and Pryce 1920, pl. 56, no. 4, from Heiligenberg), East Gaul, and probably Heiligenberg: R46/probably HGB SA. Complete apart from four small chips from rim. Slip largely gone from interior; exterior better preserved but rather matt and flaking. No trace of a stamp. D. rim 154 mm, foot 63; height 30. *c* AD 140-170

10847. Grave 10846. Platter, Drag 18, La Graufesenque: R42/LGF SA. Rim sherd. Slip flaked. *c* AD 50-80

10867. Grave 10863. Platter, Drag 18, burnt rim sherd: joins vessel in 10808, q.v.

10966. Grave 10965. Platter, hybrid Walters 79/Ludowici Tl and Drag 36/ Ludowici Te, Rheinzabern: R46/RHZ SA. A Tl in form but with the rim of Te, the rim decorated with unusually complex barbotine: repeated pairs of straight lines separating at least three pairs of alternating leaves and scrolls. The scrolls are similar to those on the rim of Bird 1998, no. 1, from London, and the leaves to those on the floor of Bird 1998, no. 3, from Rheinzabern, both variant Dr 36/Ludowici To' dishes with elaborate barbotine on the rim and floor. Six rim and body sherds, giving the whole profile with the sherds from 11071. Slip largely gone, especially on interior. D. rim 210 mm, foot 96; height 37. *c* AD 220-250

10973. <4083> Grave 10972. Dish, Drag 18/31, Lezoux: R43/LEZ SA2. Eleven sherds, approx half the pot, giving complete profile. Slip largely gone from interior and badly worn on exterior. Stamp missing. *c* AD 125-145

11071. Grave 11070.Platter, hybrid Walters 79 and Drag 36, four sherds, rim/body and foot. = vessel in 10966, q.v.

11071. Grave 11070. Dish, Curle 15, Rheinzabern: R46/RHZ SA. Rim sherd. Slip largely gone. D. rim 140 mm. *c* AD 200-250

11081. <229> Grave 11080. Foot sherd, La Graufesenque: R42/LGF SA. *c* AD 70-100

[11082. Grave 11080. Dr 36, La Graufesenque: R42/LGF SA. Twelve sherds, giving complete profile. *c* AD 70-100]

[11103. Grave 11098. Sherd, possibly East Gaulish: R46. *c* AD 130-180]

11156. Grave 11070. Foot sherd, La Graufesenque: R42/LGF SA. *c* AD 70-100

11212. Platter, Drag 15/17, La Graufesenque: R42/LGF SA. Rim fragment. *c* AD 50-80

11212. Platter, Drag 18, La Graufesenque: R42/LGF SA. Five sherds, rim, body and base, probably one pot. Slip worn. D. rim approx. 190 mm. *c* AD 60-90

11212. Four La Graufesenque platter sherds (Drag 18 or 15/17), possibly one pot: R42/LGF SA. Slip worn. *c* AD 50-90

11222. <4133> Grave 11190. Platter, Drag 18, La Graufesenque: R42/LGF SA. Approx one-sixth of wall/rim is missing, and a large hole 57 mm across has been knocked out of the base, removing the stamp. Slip mostly present but flaking, especially on rim and over the potter's fingermarks. D. rim 175 mm, foot 89; height 38. *c* AD 60-85

11225. Platter, Drag 18R, La Graufesenque: R42/LGF SA. Rim sherd. Good slip. *c* AD 50-80

11225. Platter base, Drag 15/17 or 18, La Graufesenque: R42/LGF SA. Slip badly worn. *c* AD 50-90

11227. Grave 11229. Platter, Drag 18, La Graufesenque: R42/LGF SA. Body sherd. *c* AD 50-80

11227. Grave 11229. Platter sherd, Drag 15/17 or 18, La Graufesenque: R42/LGF SA. Slip gone. *c* AD 50-90

11240. <269> Grave 11239. Bowl, probably Drag 30, La Graufesenque: R42/LGF SA. Small sherd with traces of decoration, not identifiable. Slip largely gone. *c* AD60-90

11307. Dish, Drag 18/31, Les Martres-de-Veyre: R43/LMV SA. Three sherds, almost half the pot but less of the rim; complete profile. Slip pitted on interior, flaked on rim and carination. Stamp partly present but indecipherable. D. rim approx 170 mm; height 44. *c* AD 100-130

11411. <4161> Grave 11409. Dish, Drag 18/31, Lezoux: R43/LEZ SA2. Three sherds, missing approx one-half the wall/rim; complete profile. Slip very flaked, especially on wall and interior and over the potter's fingermarks, where it is largely gone. Traces of the stamp, but indecipherable. D. rim 186 mm, foot 96; height 46. *c* AD 140-170

11426. Boundary ditch 11330. Platter, Drag 15/17, La Graufesenque: R42/LGF SA. Rim fragment. Good slip. *c* AD 50-80

11426. Boundary ditch 11330. Two La Graufesenque sherds, platters (Drag 18 or 15/17): R42/LGF SA. *c* AD50-90

11463. <4250> Grave 11383. Dish, Drag 36, probably Lezoux: R43/probably LEZ SA2, but with unusually brownish slip. Two sherds, complete except for small piece from rim. Six barbotine leaves. Slip worn on barbotine, rim and foot. D. rim 178 mm, foot 78; height 44. *c* AD 125-170

11532. <4187> Grave 11530. Platter, Drag 18, La Graufesenque: R42/LGF SA. Eight sherds, complete except for small piece from rim. Slip largely gone from interior, less so on exterior. Stamp present but indecipherable. D. rim 168 mm, foot 79; height from 40 to 44. *c* AD 60-90

11554. Grave 11550. La Graufesenque sherd: R42/LGF SA. *c* AD 60-90

11556. <4188> Grave 11550. Platter, Drag 18, La Graufesenque: R42/LGF SA. Nine sherds, complete except for small sherd from rim/body. Slip flaked on interior, especially floor, worn on exterior. Stamped by Frontinus (B. Dickinson report, no. 6). D. rim 162 mm, foot 89; height 40. *c* AD 75-100

11572. Grave 11571. Bowl, Drag 37 probably, La Graufesenque: R42/LGF SA. Fragment of decoration, part of a panel with a gladiator and a corded bud on a tendril. Slip largely gone. *c* AD 75-95

11572. Grave 11571. Sherd, La Graufesenque: R42/LGF SA. *c* AD 50-90

11575. Platter, Drag 15/17, La Graufesenque: R42/LGF SA. Four rim/body sherds. Good slip. D. rim approx 165 mm. *c* AD 50-80

11612. Grave 11611. Cup, Drag 27, La Graufesenque: R42/LGF SA. Rim sherd. Slip largely gone. Rim distorted. *c* AD 60-90

11672. <4251> Grave 11379. Dish, Drag 36, Lezoux: R43/LEZ SA2. Twelve sherds, approx three-quarters of the pot and complete profile. Probably eight barbotine leaves originally. Slip largely gone on interior and much of exterior. D. rim approx 170 mm, foot 77; height approx 41. *c* AD 125-170

11678. <4208> Grave 11682. Bowl, Drag 31, Lezoux: R43/LEZ SA2. Complete except for a chip from rim. Slip almost completely lost from interior, and from much of exterior. Stamp present but indecipherable. D. rim 182 mm, foot 85; height 62. *c* AD 150-190

[11690. Grave 11689. Dish sherd, La Graufesenque: R42/LGF SA. *c* AD 70-100]

11760. <4228> Grave 11742. Platter, Drag 15/17, La Graufesenque: R42/LGF SA. Complete except for approx one-seventh of the rim/wall. Slip badly flaked on interior, less so on exterior. Traces of the stamp but not decipherable. D. rim 167 mm, foot 85; height 37. *c* AD 55-80

11764. Boundary ditch 11330. Two platter sherds (Drag 15/17 or 18), probably same pot, La Graufesenque: R42/LGF SA. Slip gone. *c* AD 60-90

11861. <4252> Grave 11863. Platter, Drag 15/17, La Graufesenque: R42/LGF SA. Rim/body sherd. Slip flaked, especially on interior. D. rim approx 170 mm. *c* AD 50-80

11901. <4233> Grave 11998. Dish, Drag 36, La Graufesenque: R42/LGF SA. Complete apart from approx one-fifth rim and a small chip from rim. Slip badly worn and flaked, especially at one side of exterior. Probably nine leaves originally. D. rim 164 mm, foot 63; height 37. *c* AD 75-100

11967. <4230> Grave 11961. Cup, Drag 27, La Graufesenque: R42/LGF SA. Complete. Slip badly worn and flaked, especially on lower interior and one side of exterior; good under base. Stamp present but indecipherable. D. rim 98 mm, foot 34; height 41. Slightly distorted at the rim. *c* AD 70-90

12024. <434> Ditch 11819. Cup, Drag 27, La Graufesenque: R42/LGF SA. Two joining rim sherds. Slip flaked. D. rim approx 120 mm. *c* AD 70-100

12033. <4210> Grave 11883. Platter, Drag 18, La Graufesenque: R42/LGF SA. Complete apart from tiny rim fragment. Slip pitted on interior, worn on rim and foot and over potter's

fingermarks. Stamped by Sacironos (B. Dickinson report, no. 13). D. rim 160 mm, foot 79; height 42. *c* AD 55-75?

Table 33: Forms and sources of complete or near-complete (ie approximately 70% or more) samian pots from the burials

Form	**SG**	**CGLZ**	**EG**	**EGRH**	**Total**
C 11		1			1
C 15			1		1
DR 15/17	1				1
DR 18	6*				6
DR 18/31		3	4		7
DR 27	1	1			2
DR 31		3			3
DR 32				1	1
DR 36	1	1			2
DR 42H	1			1	
DR 45		1			1
DR 46			3		3
W 79		1			1
L Te/Tl				1**	1
L Tg		1			1
Total	10	12	8	2	32

SG = South Gaul (La Graufesenque); CGLZ = Central Gaul, Lezoux; EG = 2nd-century East Gaulish potteries (La Madeleine, Heiligenberg, Blickweiler); EGRH = East Gaul, Rheinzabern; *includes stamped pot from Le Rozier; **divided between two burials

Table 34: Forms and sources of other samian pots from the burials, including disturbed burials Sub-group 293

Form	**SG**	**CGMV**	**CGLZ**	**EG**	**EGRH**	**Total**
C 15			1**		1	2
DR 15/17	1					1
DR 15/17 or 18	1					1
DR 18	5					5
DR 18/31*		1	2			3
DR 27	2					2
DR 30	1					1
DR 31			5**	1		6
DR 31 or 31R			1			1
DR 31R		1			1	
DR 33		1	6**	1		8
DR 36	2					2
DR 37	2					2
DR 38					1	1
Total	14	2	16	2	2	36

SG = South Gaul (La Graufesenque); CGMV = Central Gaul, Les Martres-de-Veyre; CGLZ = Central Gaul, Lezoux; EG = 2nd-century East Gaulish potteries (La Madeleine, Heiligenberg, Blickweiler); EGRH = East Gaul, Rheinzabern; *a further two Dr 18/31 came from the pottery at Pulborough in Sussex; ** includes one pot divided between two burials

Table 35: Forms and sources of samian pots from other contexts

Form	SG	CGMV	CGLZ	EG	EGRH	Total
DR 15/17	6					6
DR 15/17 or 18	7					7
DR 18	8					8
DR 18R 1					1	
DR 18/31		2	2	1*		5
DR 18/31 or 31			1			1
DR 27	5					5
DR 29	1					1
DR 31			1			1
DR 31 or 31R			2			2
DR 31/L Sb					1	1
DR 33			2			2
DR 35	1					1
DR 36			1**			1
DR 37	1					1
DR 46	1					1
Total	31	2	9	1	1	44

SG = South Gaul (La Graufesenque); CGMV = Central Gaul, Les Martres-de-Veyre; CGLZ = Central Gaul, Lezoux; EG = 2nd-century East Gaulish potteries (La Madeleine, Heiligenberg, Blickweiler); EGRH = East Gaul, Rheinzabern; *possibly Pulborough rather than East Gaulish; **near-complete pot from Sub-group 11671

17.3 Discussion

The samian ware from the Pepper Hill sites came from 106 individually numbered contexts, of which 79 were associated directly with burials: 37 with cremations and 42 with inhumations. Other contexts included disturbed material from the burials, pit and ditch fills, a road and the overlying ploughsoil. The samian ranges in date from shortly after the middle of the 1st century AD to the middle of the 3rd, but the greater part dates between the later 1st century and the third quarter of the 2nd, with only a few vessels certainly dating from the late 2nd century and the first half of the 3rd. The scarcity of decorated ware - only five sherds, all of late Neronian to Flavian date - means that, apart from the fourteen identified potters' stamps, reported on separately by Brenda Dickinson, the dating is generally less precise than in a more representative samian assemblage. Around 80% of the 1st-century samian came from the central and northern parts of the site, and this probably reflects the development of the cemetery.

The sources of the samian cover all the main production sites apart from Trier and the Argonne, though these are represented elsewhere at Springhead (for example, Bird n.d. [1997]). Of a possible maximum of 114 identified vessels, 55 (48%) are from South Gaul, and, with the exception of a stamped Drag 18 from the small pottery at Le Rozier, are all likely to be products of La Graufesenque; they include five identified stamps, one of them illiterate. A further 41 pots (36%) are Central Gaulish; four of these, including one identified stamp, come from the early 2nd century potteries at Les Martres-de-Veyre and 37, including six identified stamps, from the Hadrianic-Antonine workshops at Lezoux. There are sixteen East Gaulish vessels (14%), of which eleven, including two identified stamps, come from Hadrianic-Antonine potteries at La Madeleine, Heiligenberg and Blickweiler. Although their products are well attested in Britain, the range of sources is perhaps surprising in such a relatively small assemblage, and may reflect Springhead's position as a religious centre, attracting both pilgrims and traders. There are only five vessels from the later centre at Rheinzabern, and given this small quantity the absence of Trier ware from the site is not particularly surprising. Vessels from the two were mainly imported to Britain over the same period and using the same routes, but, in southern Britain at least, Rheinzabern products normally outnumber Trier by a considerable margin (cf Bird 1986, 142-145; Bird 1999, 76). In addition, there are at least two dishes of form Drag 18/31 from the early 2nd-century samian pottery at Pulborough (Wiggonholt) in Sussex; another Drag 18/31 in this ware was noted from the small cemetery enclosure excavated at Springhead in 1993-4 (Bird n.d. [1997], 29).

The main interest of the samian from the site lies in its use as grave goods accompanying burials, and the complete and near-complete vessels from the burials are summarised on Table 33; more fragmentary pots from the burials are shown on Table 34, and the samian from other contexts on Table 35. Unfortunately no overall study of the samian ware from British cemeteries is at present available, but comparison with some of the more important ones in the south-east, and with the recently studied cemetery at Brougham in Cumbria, shows both features in common and differences, which may have regional, cultural or chronological significance. Even the presence of samian varies between different cemeteries: the East London cemetery has no samian grave accessories at all, though there is a considerable amount of more fragmentary samian from the sites (Barber and Bowsher 2000, 123-124), while the Butt Road cemetery at Colchester has only two samian pots (Crummy and Crossan 1993, 23, 44). At Pepper Hill, as noted above, there were 79 burials which included samian; only two contained more than one complete or near-complete pot and both of these had two [254, 451], though a small number of other burials had sherds of two or three pots and [254] had sherds of four or five more. This is comparable with the cemetery at

Ospringe, where, apart from eight burials with two samian vessels, only single samian pots were found (Whiting et al. 1931).

The complete and near-complete pots are all plain, a feature which has been noted at a number of other cemeteries and which does not seem necessarily to reflect the wealth or status of the deceased (Dickinson et al. 2004, 347; Evans 2004, 352). Of the 32 complete or near-complete vessels recovered, 25 are platter/dish forms, a much higher proportion overall than is found on occupation sites but one which has also been noted at Brougham, where there were only four cups (all Drag 33) in an assemblage of 61 pots (Dickinson et al. 2004, 347). At Ospringe, on the other hand, Drag 33 was well represented and made up 32% of the samian (Whiting et al. 1931). It is possible that at Pepper Hill the samian was deliberately selected to represent the pottery that the deceased used at the table, and this would certainly account for the high numbers of platter/dish forms. The commonest of these are Drag 18 and its later versions Drag 18/31 and 31, which make up half the total; apart from Drag 36, discussed further below, other platter/dish forms (Drag 15/17, Drag 32, Drag 42, Ludowici Tg, Curle 15, Walters 79 and a hybrid Drag 36/Walters 79) occur only as single pots. The relatively low proportion of cups, particularly of such common forms as Drag 27 (two) and 33 (none on Table 33), may indicate that they were not, or at least not invariably, used as drinking vessels but were perhaps used to serve such foods as olives and condiments, or the sauces that were such an important part of Roman cuisine. Drag 27 would not in fact be an easy pot to drink from, and an Augustan silver version is attached to a tall ivy-wreathed handle for use as a ladle (Strong 1966, pl. 39A). A Drag 27 from [291] has rings worn into the base, marks that would be best explained as the result of stirring with a metal spoon.

Some cemeteries have a relatively high proportion of the dish forms Drag 35 and 36, and it is possible that these were deliberately chosen for their barbotine decoration of a ring of leaves, recalling the wreath that might be placed on the head of the deceased (Toynbee 1971, 44-45). There are twenty-one examples of form 35 and 36 at Chichester, an extraordinary 38% of the total samian, and five burials contain both (Down and Rule 1971, 89-122). These forms are, however, rare in the Brougham cemetery (Dickinson *et al* 2004, Table 8.14). At Pepper Hill there are only two complete or near-complete examples [11383, 11998], but the same decoration is also present on the Curle 11 bowl [451], and a more elaborate barbotine wreath of leaves, scrolls and bars decorates the apparently unique late hybrid of forms Drag 36/Ludowici Te and Walters 79/Ludowici Tl [10965 and 11070]. A more unusual presence at Pepper Hill is the Drag 45 mortarium with lion-head spout [787]; this is a form which is not commonly found with burials, but there were six examples in the Brougham cemetery (Dickinson et al. 2004, Tables 8.14, 8.15). Lions were associated with death and the afterlife, and images of lions are regularly found in funerary contexts, both on statuary and sarcophagi

(Toynbee 1973, 65-67) and on smaller objects such as the copper alloy box mounts from burials 26 and 31 at Chichester (Down and Rule 1971, 92-3).

Also present at Pepper Hill are two relatively uncommon forms, the handled version of the dish Drag 42 in South Gaulish ware [911] and three examples of the cup Drag 46, two probably products of La Madeleine and one probably of Heiligenberg [48, 1438, 451]. The authors of the report on the samian from Brougham note that these forms sometimes seem to have been favoured as grave goods (Dickinson et al. 2004, 347). The samian from Burial 3 at Neatham in Hampshire, for example, consists of six vessels from Les Martres-de-Veyre, a Déch 67 with a ring of barbotine leaves round the shoulder and five Drag 42 dishes in three sizes, with three stamps of Donnaucus and two of Billicedo (Millett and Graham 1986, 56-57); and there are three examples of Drag 46 from Ospringe (Whiting et al. 1931) and two of Drag 42 and three of Drag 46 from Chichester (Down and Rule 1971, 89-122). The same forms may also have been selected for other ritual uses: the fill of a building in the Springhead temple complex, identified by the excavator as a 'sacred pool', contained single examples of Drag 42 and 46 among an assemblage that also included coarse ware incense tazze and part of a lamp chimney (Penn 1960, fig. 8 and table 8).

The condition of the samian was poor, and it had all been badly affected by the acidity of the local soil. Many of the vessels from the burials had lost their slip, particularly on the interior, presumably the result of ground water leaching on to pots that had been left upright in the graves. The two Drag 18/31 dishes from [253] which had been inverted over a coarse ware pot were noticeably better preserved inside. Some stamps had gone completely, or could only be very faintly discerned, and even the rouletted circles on the floors of some dishes had been removed. The exteriors were generally rather better preserved, with most of the damage occurring on the rim, carination and foot, and on the marks left by the potters' fingers when they dipped the pot in the slip. The result of this damage was to make the degree of use or wear almost impossible to assess. Only one pot, the Drag 27 with rings worn in the base by stirring [291], showed unmistakeable signs of use, while the Drag 45 mortarium still had grits or impressions of them inside, suggesting that the damage was due to the soil conditions rather than to wear [787].

Ritual 'killing' of pots to make them fit accessories for burials is usually recognised by such features as a hole broken into the base or wall, or the removal of a handle. Only one of the Pepper Hill pots fits these criteria, a Drag 18 with a hole in the base which has removed the stamp, and which at 57 mm diameter is probably too large to make the vessel suitable for reuse as a funnel [11190]. However, it is possible that pots that are complete apart from pieces missing from the rim or footring may also have been damaged in order to dedicate them, and several pots are whole except for between one and four pieces, usually only chips or small sherds. Other pots were complete but in pieces, some of them with sherds missing, and these

may have been deliberately broken before being placed in the grave, or have been treated like the whole pots and then broken when the grave fill collapsed. None of the samian had been repaired, though some vessels were clearly residual in their grave groups. Ten further pots are, by the usual standards of samian, 'seconds', which again might have been perceived as appropriate for burial accessories. Of the cups, two Drag 27s have distorted rims [11611, 11961] and a third has an uneven footring [291], while a Drag 46 is poorly turned on the exterior [48]. Of the dishes, a Dr 18/31 has a sagging floor [1018] and a Dr 18 [11530] and a Ludowici Tg [780] are both taller on one side than the other, while a bowl of form Curle 11 has unevenly spaced barbotine leaves [451]. There is also a Drag 18/31 which has had its footring deliberately removed, presumably for use as a lid [1095].

One further feature of the pots which might have some personal connection with the deceased is the presence of graffiti, observed on six pots. A Drag 46 has X on the exterior and a second X inside the footring [48]; a Drag 18/31 stamped by Albinus iv has X under the base [254]; a second Drag 18/31 from [254], stamped by Gatus ii, has a rough star under the base; a Drag 31 has one diagonal and two straight lines cut across the footring [653]; a Drag 33 stamped by Gabrillus i has three straight lines across the footring [651/652]; and a South Gaulish platter fragment has at least three letters under the base (context 10614). Three of the burials from the small cemetery enclosure excavated at Springhead in 1993-4 had a samian pot with a graffito, identified by the author but not included in the published report: a Drag. 18 from Burial 1, stamped by Peregrinus i, had X and M on the exterior; a Drag. 35 from Burial 2 was inscribed VIIC; and a Drag. 18 from Burial 3, stamped by Calvus i, had LVD or LVA incised under the base (Philp and Chenery n.d. [1997], 8-12). Graffiti were also present on at least eight of the samian vessels from Ospringe (Whiting et al. 1931, esp. pl. 54), while at Brougham the presence of graffiti on other wares but not on samian was noted as unusual (Evans 2004, 359).

18 BIBLIOGRAPHY

Barber, B and Bowsher, D, 2000 *The eastern cemetery of Roman London*, MoLAS Monograph **4**, London

Barber, B, and Hall, J, 2000 Digging up the people of Roman London: interpreting evidence from Roman London's cemeteries, in *London under ground: the archaeology of a city* (eds I Haynes, H Sheldon and L Hannigan), Oxford, 102-120

Biddulph, E, 2002 One for the road? Providing food and drink for the final journey, *Archaeol Cantiana* **122**, 101-111

Biddulph, E, 2005 Last Orders: Choosing pottery for funerals in Roman Essex, *Oxford J Archaeol* **24 (1)**, 23-45

Bird, J, 1986 Samian wares, in Miller, L, Schofield, J, and Rhodes, M, *The Roman quay at St Magnus House, London: excavations at New Fresh Wharf, Lower Thames Street, London 1974-78*, London and Middlesex Archaeological Society Special Paper **8**, London, 139-185

Bird, J, n.d. [1997] The samian ware from Springhead, in Philp, B, and Chenery, M, *A Roman site at Springhead (Vagniacae) near Gravesend*, Kent Special Subject Series **9**, Dover, 27-31

Bird, J, 1998 A decorated samian dish from the London waterfront, in *Form and fabric: studies in Rome's material past in honour of B. R. Hartley* (ed J Bird), Oxbow Monograph **80**, Oxford, 151-156

Bird, J, 1999 Decorated Central and East Gaulish samian, in Symonds, R P, and Wade, S, *Roman pottery from excavations in Colchester, 1971-86*, Colchester Archaeological Report **10**, Colchester, 75-119

Booth, P, 1998 The pottery, in Boyle, A, and Early, R, *Excavations at Springhead Roman town, Southfleet, Kent*, OAU Occ Paper **1**, Oxford

Booth, P, 2001 The Roman shrine at Westhawk Farm, Ashford: a preliminary account, *Archaeol Cantiana* **121**, 1-23.

Booth, P, Bingham, A, and Lawrence, S, forthcoming *The Roman Roadside settlement at Westhawk Farm, Ashford, Kent: excavations 1998-9,* Oxford Archaeol.

Brooks, H and Bedwin, O, 1989 *Archaeology at the airport: the Stansted archaeological project*, Essex County Council, Chelmsford

Brulet, R, 1972 *La Nécropole Gallo-Romaine de la Thure à Solre-sur-Sambre*, Répertoires archéologiques série B, VII, Centre National de Recherches Archéologiques en Belgique, Bruxelles

Cool, H E M, 2004 *The Roman cemetery at Brougham, Cumbria: excavations 1966-67*, Britannia Monograph series **21**, London

Crummy, N and Crossan, C, 1993 Excavation at Butt Road Roman cemetery, 1976-9, 1986 and 1989, in Crummy *et al* 1993, 4-163

Crummy, N, Crummy, P and Crossan, C, 1993 *Excavations of Roman and later cemeteries, churches and monastic sites in Colchester, 1971-88*, Colchester Archaeological Report **9**, Colchester

Davey, N, 1935 The Romano-British cemetery at St Stephen's, near Verulamium, *Trans St Albans and Herts Archaeol Soc* **4**, 243-75

Davies, B, Richardson, B and Tomber, R 1994 *A dated corpus of early Roman pottery from the City of London*, CBA Res Rep **98**, London

Davies, M, 2001 Death and social division at Roman Springhead, *Archaeol Cantiana* **121**, 157-170

Dickinson, B, Hartley, B R, and Pengelly, H W, 2004 Fabric supply: Class S, samian wares, in Cool 2004, 345-350

Down, A, 1971 The Roman cemetery at St Pancras, in A Down and M Rule, *Chichester excavations I*, Chichester, Phillimore, 53-127

Eckardt, H, 2002 *Illuminating Roman Britain,* Monographies Instrumentum **23**, Montagnac

Evans, J, 2004 The pottery vessels, in Cool 2004, 333-364

Fitzpatrick, A P, 2000 Ritual, sequence and structure in late Iron Age mortuary practices in North-West Europe, in Pearce *et al* 2000, 16-29

Going, C J, 1988 The ceramics, in Wickenden 1988, 22

Going, C J, 1992 Economic 'long waves' in the Roman period? A reconnaissance of the Romano-British ceramic evidence. *Oxford J Archaeol* **11.1**, 93-115

Going, C J, 1993 Pottery vessels, in Crummy and Crossan 1993, 44-50

Hartley, B R, 1970 The dating evidence for the end of the Saalburg Erdkastell, in Schönberger, H, Die Namenstempel auf glatter Sigillata aus dem Erdkastell der Saalburg, *Saalburg Jahrbuch* **27**, 28-30.

Havis, R and Brooks, H,2004 *Excavations at Stansted Airport 1985-91*, East Anglian Archaeology Report, Chelmsford

Hicks, A J, 1998 Excavations at Each End, Ash, 1992, *Archaeologia Cantiana* **118**, 91-172

Jessup, R F, 1928 A Romano-British settlement at Springhead, Kent, *Antiq J* **8**, 337-348

Jones, A (ed.), 2003 *Settlement, burial and industry in Roman Godmanchester*, Brit Archaeol Rep Brit Ser **346**, Oxford

Lindsay, H, 1998 Eating with the dead, in *Meals in a social context- aspects of the communal meal in the Hellenistic and Roman World* (eds I Nielsen and H S Nielsen), Aarhus University Press, 67-80

Ludowici, W, 1927 *Stempel-Namen und Bilder römischer Töpfer, Legions-Ziegel-Stempel, Formen von Sigillata und anderen Gefässen aus meinen Ausgrabungen in Rheinzabern 1901-1914*, München

Lyne, M, 2000 Pottery, in Parfitt, K, A Roman occupation site at Dickson's Corner, Worth, *Archaeologia Cantiana* **123**, 127-138

Lyne, M, 2003 Pottery, in Parfitt, K, A Belgic-early Roman site at Great Mongeham, near Deal, *Archaeologia Cantiana* **123**, 138-148

Lyne, M, forthcoming The pottery, in Booth, P, Bingham, A, and Lawrence, S, *The Roman Roadside settlement at Westhawk Farm, Ashford, Kent: excavations 1998-9,* Oxford Archaeol.

Mackinder, A, 2000 *A Romano-British cemetery on Watling Street: Excavations at 165 Great Dover Street, Southwark, London*, MoLAS Archaeology Study Series **4**, London

Macpherson-Grant, N, Savage, A, Cotter, J, Davey, M, and Riddler, I, 1995 *Canterbury Ceramics 2. The Processing and Study of Excavated Pottery,* Canterbury Archaeol Trust

Marsh, G and Tyers, P, 1978 The Roman pottery from Southwark, *Southwark excavations 1972-1974*, Joint Pub No **1**, London and Middlesex Archaeol Soc, Surrey Archaeol Soc, 533-582

May, T, 1930 *Catalogue of the Roman pottery in the Colchester and Essex Museum*, Cambridge University Press, Cambridge

Millett, M, 1986 An early Roman cemetery at Alton, Hampshire, *Proc Hampshire Fld Club Archaeol Soc* **42**, 43-88

Millett, M, and Graham, D, 1986 *Excavations on the Romano-British small town at Neatham, Hampshire 1969-1979*, Hampshire Field Club Monograph **3**, Gloucester

Monaghan, J, 1987 *Upchurch and Thameside Roman Pottery: a ceramic typology for northern Kent, first to third centuries AD*, Brit Archaeol Rep Brit Ser **173**, Oxford

Oswald, F, and Pryce, T D, 1920 *An introduction to the study of terra sigillata, treated from a chronological standpoint*, London

Partridge, C, 1981 *Skeleton Green: a late Iron Age and Romano-British site*, Britannia Monogr Ser **2**

Pearce, J, 1998 From death to deposition: the sequence of ritual in cremation burials of the Roman period, in *TRAC 97 Proceedings of the seventh annual Theoretical Roman Archaeology Conference, Nottingham, 1997* (eds C Forcey, J Hawthorne and R Witcher), Oxbow Books, Oxford, 99-111

Pearce, J, Millett, M and Struck, M (eds), 2000 *Burial, Society and Context in the Roman World*, Oxbow, Oxford

Penn, W S, 1960 Springhead: Temples III and IV, *Archaeol Cantiana* **74**, 113-140

Perkins, D R J, 1985 The Monkton gas pipeline: Phases III and IV, 1983-84, *Archaeol Cantiana* **102**, 43-70

Philp, B, 1973 A Romano-British site at Leafy Grove, Keston, Kent, in Philp, B. *Excavations in West Kent 1960-1970*, Kent Archaeol Rescue Unit, Dover, 94-98

Polak, M., 2000 *South Gaulish Terra Sigillata with potters' stamps from Vechten*, Rei Cretariae Romanae Fautorum Acta Supplementum **9**, Nijmegen

Pollard, R J, 1987 The other pottery, in Meates, G W, *The Roman villa at Lullingstone, Kent: Volume II The wall paintings and finds*, Kent Archaeol Soc Monog Ser **III**, Maidstone, 164-283

Pollard, R J, 1988 *The Roman pottery of Kent*, Kent Archaeol Soc Monograph Series **V**, Maidstone

Rodwell, K A, 1988 *The prehistoric and Roman settlement at Kelvedon, Essex*, CBA Res Rep **63**

Romeuf, A–M, 2001 *Le quartier artisanal gallo-romain des Martres-de-Veyre (Puy-de-Dôme)* (2 vols), Les Cahiers du Centre Archéologique de Lezoux **2**

Savage, A, 1998 The Roman pottery, in Hicks 1998, 132-150

Shennan, S, 1997 *Quantifying archaeology*, University of Iowa Press, Iowa City

Strong, D E, 1966 *Greek and Roman gold and silver plate*, London

Thompson, I, 1978 The 'Belgic' cemetery at Allington, *Archaeologia Cantiana* **94**, 127-138

Tomber, R, and Dore, J, 1998 *The National Roman Fabric Reference Collection: a handbook*, Museum of London Archaeology Service Monograph **2**, London

Topál, J, 1981 *The southern cemetery of Matrica (Százhalombatta-Dunafűred)*, Akadèmiai Kiadò, Budapest

Toynbee, J M C, 1971 *Death and burial in the Roman world*, London

Toynbee, J M C, 1973 *Animals in Roman life and art*, London

Tyers, P, 1996 *Roman pottery in Britain*, London

Ulbert, G, 1959 *Die römischen Donau-Kastelle Aislingen und Burghöfe*, Limesforschungen **1**, Berlin.

VCH, 1963 *The Victoria History of the county of Essex* **3**

Whiting, W, 1926 The Roman cemeteries at Ospringe. Description of finds concluded, *Archaeol Cantiana* **38**, 123-151

Whiting, W, Hawley, W and May, T, 1931 *Report on the excavation of the Roman cemetery at Ospringe, Kent*, Rep Res Comm Soc Antiq London **8**, Oxford

Wickenden, N P, 1988 *Excavations at Great Dunmow, Essex: a Romano-British small town in the Trinovantian civitas*, E Anglian Archaeol **41**

Williams, H, 2004 Potted histories - cremation, ceramics and social memory in early Roman Britain, *Oxford J Archaeol* **23.4**, 417-427