Channel Tunnel Rail Link

London and Continental Railways

Oxford Wessex Archaeology Joint Venture

The Small Finds from Cuxton Anglo-Saxon Cemetery, Kent (ARC CXT98)

by Lynn Blackmore

CTRL Specialist Report Series

2006

TABLE OF CONTENTS

LIST OF TABLES

1 INTRODUCTION

A total of 199 small finds were recovered from Anglo-Saxon graves during excavations at Cuxton. Detailed catalogue descriptions of all the small finds can be found in the cemetery catalogue. The following table gives a summary of small finds identification and grave number.

Table 1: Quantification of small finds

SF Number	Context	Grave Number	Object Identification	Material	Object Min Date	Object Max Date
1	305	306	Pendant	Gold	575	700
2	372	373	Buckle	Copper alloy	590	725
3	178	179	Buckle	Copper alloy	590	725
4	190	191	Buckle	Copper alloy	590	725
5	293	294	Buckle	Copper alloy	590	725
6	290	291	Buckle	Copper alloy	640	700
7	164	165	Buckle	Copper alloy	590	725
8	246	247	Buckle	Copper Alloy	600	725
9	305	306	Ring	Silver	600	725
10	305	306	Ring	Silver	600	725
11	214	215	Ring	Silver	600	725
12	261	262	Lace tag	Copper alloy	600	700
13	246	247	Shield Fitting	Copper alloy	625	700
14	193	194	Lace tag	Copper alloy	600	700
15	261	262	Buckle-Plate	Copper alloy	590	650
16	261	262	Buckle-Plate	Copper alloy	590	700
17	282	283	Mount	Copper alloy	600	700
18	261	262	Buckle	Copper alloy	590	700
19	305	306	Bracelet	Copper alloy	575	725
20	282	283	Purse frame	Copper alloy	600	700
21	305	306	Workbox	Copper alloy	650	725
22	305	306	Needle case	Copper alloy	600	700
23	193	194	Mount	Copper alloy	500	725
24	363	364	Buckle	Iron	590	725
25	214	215	Buckle	Iron	590	725
26	186	187	Bead	Amber	500	700
27	214	215	Bead	Stone	590	725
28	210	212	Bead	Glass	600	725
29	296	297	Bead	Glass	500	700
30	193	194	Bead	Glass	500	700
31	193	194	Bead	Glass	500	700
32	302	303	Bead	Glass	500	700
33	305	306	Mount	Glass	500	725
34	305	306	Bead	Glass	500	700
35	168	169	Bead	Glass	500	725
36	168	169	Bead	Glass	500	700
37	357	358	Bead	Glass	500	700
38	214	215	Bead	Glass	500	700
39	305	306	Pendant	Gold	600	700

SF Number	Context	Grave Number	Object Identification	Material	Object Min Date	Object Max Date
40	214	215	Pendant	Animal bone	600	700
41	214	215	Pendant	Glass	650	725
42	214	215	Comb	Animal bone	600	700
43	214	215	Shears	Iron	575	700
44	214	215	Pendant	Animal bone	600	700
45	276	277	Knife	Iron	450	700
46	246	247	Spear	Iron	450	700
47	276	277	Spear	Iron	500	600
48	246	247	Buckle	Iron	590	725
49	246	247	Shield Grip	Iron	625	700
50	214	215	Ring	Iron	575	725
51	240	382	Unidentified	Wood	500	725
52	246	247	Knife	Iron	450	725
53	240	382	Pin	Iron	500	725
54	214	215	Ring	Iron	575	725
55	214	215	Bead	Glass	500	700
56	240	382	Unidentified	Iron	500	725
57	261	262	Knife	Iron	450	725
58	214	215	Spatulate tool	Iron	600	725
59	240	382	Knife	Iron	625	725
60	214	215	Chatelaine	Iron	575	725
61	372	373	Shield boss	Iron	575	650
62	299	300	Spear	Iron	575	700
63	293	294	Spear	Iron	450	700
64	246	247	Shield boss	Iron	625	700
65	164	165	Shield boss	Iron	590	700
66	293	294	Knife	Iron	450	700
67	290	291	Knife	Iron	575	750
68	285	286	Knife	Iron	450	725
69	282	283	Strip	Iron	500	725
70	290	291	Spear	Iron	550	700
71	293	294	Spear	Iron	450	700
72	299	300	Buckle	Iron	600	700
73	293	294	Buckle	Iron	590	725
74	293	294	Pin	Iron	450	725
75	282	283	Awl/piercer	Iron	500	700
76	282	283	Knife	Iron	450	700
77	296	297	Chatelaine	Iron	575	725
78	296	297	Chatelaine	Iron	575	725
79	296	297	Knife	Iron	450	700
80	296	297	Shears	Iron	575	700
81	299	300	Knife	Iron	625	725
82	299	300	Knife	Iron	450	700
83	372	373	Spear	Iron	575	700
84	315	316	Spear	Iron	550	700
85	372	373	Spear	Iron	575	700
86	315	316	Spear	Iron	550	700
87	305	306	Chatelaine	Iron	575	725
88	305	306	Knife	Iron	575	750

SF Number	Context	Grave Number	Object Identification	Material	Object Min Date	Object Max Date
89	305	306	Buckle	Iron	500	700
90	305	306	Shears	Iron	500	725
91	305	306	Knife	Iron	450	725
92	305	306	Knife	Iron	450	725
93	305	306	Pendant	Bone	600	700
94	312	313	Knife	Iron	525	750
95	312	313	Knife	Iron	450	725
96	312	313	Buckle	Iron	600	700
97	363	364	Buckle	Iron	590	725
98	315	316	Buckle	Iron	590	725
99	315	316	Shield boss	Iron	575	650
100	315	316	Shield boss	Iron	575	650
101	315	316	Shield Fitting	Iron	575	650
102	363	364	Knife	Iron	575	750
103	363	364	Knife	Iron	575	750
104	315	316	Knife	Iron	450	700
105	372	373	Knife	Iron	450	700
106	367	368	Knife	Iron	450	725
107	367	368	Ring	Iron	575	725
108	372	373	Shield Fitting	Iron	575	650
109	149	297	Tool	Iron	500	725
110	164	165	Hook	Iron	500	725
111	166	174	Buckle	Iron	590	725
112	190	191	Mount	Iron	500	725
113	190	191	Mount	Iron	500	725
114	190	191	Unidentified	Iron	500	725
115	178	179	Fitting	Iron	500	725
116	172	176	Knife	Iron	450	725
117	164	165	Knife	Iron	450	700
118	166	174	Knife	Iron	450	725
119	193	194	Knife	Iron	625	725
120	190	191	Knife	Iron	625	725
121	164	165	Spear	Iron	500	700
122	296	297	Buckle	Iron	500	700
123	178	179	Knife	Iron	575	750
124	323	324	Knife	Iron	450	725
125	282	283	Knife	Iron	575	750
126	285	286	Pin	Copper alloy	-200	50
127	261	262	Disc	Copper alloy	500	725
128	261	262	Coin	Copper alloy	300	350
129	261	262	Mount	Iron	590	650
130	261	262	Awl	Iron	575	725
131	261	262	Knife	Iron	525	750
132	261	262	Strip	Iron	500	725
133	261	262	Buckle	Copper alloy	640	700
134	190	191	Buckle-Plate	Copper alloy	500	725
135	305	306	Purse frame	Iron	600	725
136	214	215	Bead	Glass	500	725
137	282	283	Buckle	Copper alloy	590	650

SF Number	Context	Grave Number	Object Identification	Material	Object Min Date	Object Max Date
138	312	313	Spear	Iron	450	700
139	318	319	Knife	Iron	450	725
140	261	262	Mount	Copper alloy	590	650
141	305	306	Workbox	Copper alloy	650	725
142	214	215	Bead	Shell	600	700
143	214	215	Key	Iron	575	725
144	214	215	Key	Iron	575	700
145	214	215	Knife	Iron	450	700
146	246	247	Shield Stud	Iron	625	700
147	261	262	Mount	Copper alloy	600	700
148	261	262	Mount	Copper alloy	590	650
149	190	191	Void	Void	500	725
150	290	291	Void	Void	500	725
151	305	306	Ring	Silver	575	725
152	41		Bead	Stone	500	700
153	357	358	Bead	Glass	500	700
154	357	358	Bead	Glass	500	700
155	210	212	Bead	Glass	600	750
156	210	212	Bead	Glass	500	750
157	214	215	Bead	Glass	500	725
158	214	215	Bead	Glass	500	750
159	214	215	Bead	Glass	500	725
160	214	215	Bead	Glass	500	725
161	214	215	Bead	Glass	500	725
162	214	215	Bead	Glass	500	725
163	214	215	Bead	Glass	500	725
164	214	215	Bead	Glass	600	700
165	214	215	Bead	Glass	500	700
166	214	215	Bead	Glass	500	700
167	214	215	Bead	Glass	500	700
168	214	215	Bead	Glass	500	700
169	214	215	Bead	Glass	500	700
170	214	215	Bead	Glass	500	700
171	214	215	Bead	Glass	500	700
172	214	215	Bead	Glass	500	700
173	214	215	Bead	Glass	500	700
174	214	215	Bead	Glass	500	700
175	214	215	Bead	Glass	500	700
176	214	215	Bead	Glass	500	700
177	214	215	Bead	Glass	500	700
178	214	215	Bead	Glass	500	700
179	214	215	Bead	Glass	500	700
180	214	215	Bead	Glass	500	700
181	214	215	Bead	Glass	500	725
182	214	215	Bead	Glass	500	725
183	305	306	Ring	Silver	600	725
184	305	306	Ring	Silver	600	725
185	305	306	Pendant	Silver	650	720
186	305	306	Mount	Copper alloy	575	725

SF Number	Context	Grave Number	Object Identification	Material	Object Min Date	Object Max Date
187	305	306	Mount	Stone	500	700
188	282	283	Buckle	Copper alloy	590	725
189	282	283	Buckle	Copper alloy	590	725
190	282	283	Mount	Copper alloy	590	725
191	214	215	Bead	Stone	590	725
192	372	373	Shield Grip	Iron	575	650
193	164	165	Shield Grip	Iron	590	700
194	261	262	Pin	Iron	450	725
195	282	283	Tweezers	Iron	600	725
196	282	283	Tool	Iron	600	700
197	315	316	Shield Grip	Iron	575	650
198	315	316	Shield Fitting	Iron	575	650
199	214	215	Bead	Glass	500	725

2 THE DRESS ACCESSORIES

2.1 Buckles and belt fittings

Buckles are the second most common artefact at Cuxton after knives, with 25 definite examples (including two loose buckle plates) from 18 burials; two other finds may also be buckles: SF 134 (Cxt 190) and SF 54 (Cxt 214); the latter is discussed under chatelaines and rings (see personal items). In addition, two buckles recorded on context sheets (Cxt 282 , Cxt 372) do not seem to have left the site. Unlike Portway, Andover, and Castledyke, where iron buckles were dominant (Drinkall and Foreman 1988, 272), the reverse is the case here. Fourteen examples are of copper alloy (including three tinned), but only seven or eight are of iron alone; one is of silver and copper alloy. A further four examples are iron with copper alloy rivets, while one is of composite metals and garnets. The latter, and another find may be associated with shields.

No organic remains were observed on the copper alloy buckles, but they are present on almost all the buckles of iron, or iron with copper alloy. These mainly comprise textile fragments, but in some cases leather was also visible. The buckles concerned are: Cxt 214 SF 25 (leather between plates, textile underneath), Cxt 246 SF 48 (fibres, ?textile), Cxt 282 SF 137 (textile), Cxt 293 SF 73 (leather?), Cxt 296 SF 122 (leather?), Cxt 299 SF 72 (?leather; good textile), Cxt 305 SF 89 (organics?), Cxt 312 SF 96 (leather, textile), Cxt 315 SF 98 (leather, textile), Cxt 363 SF 24 (textile on both sides of loop) and Cxt 363 SF 97 (leather, textile).

The description of the buckles is based on MacGregor and Bolick (1993) and on the typology developed for medieval buckles (Egan and Pritchard 1991, Fig. 32), and uses those terms with some additions. The term pin is used rather than tongue, and frame, rather than

loop, was used for the catalogue, although the reverse is the case below. For the buckle plates the terms 'front' or 'outer' are generally used for the end of the buckle pate adjacent to the loop, with 'inner' or 'rear' end for that overlapping the strap. The mounts on the triangular continental-style buckles (see below) are variously described in the literature as domed rivets (MacGregor and Bolick 1993; Marzinzik 2003); domed discoid studs (flat) and domed bosses (rounded; MacGregor 1997). Here the term domed rivet mount is preferred for pieces that were clearly added separately to cover the rivet pin. The typology developed by Marzinzik (2003) specifically for the Anglo-Saxon period has also been considered and is quoted where relevant. This comprises two main categories, Group I: round/oval loop, no plate, and Group II, a range of loops with buckle plate. Both have a range of sub-types, but Group II is extremely varied, and includes rounded, squared and triangular forms. These are all represented at Cuxton, but there are no openwork buckles. Most of the group comprises small simple buckles, but there are also some possible imports and high class pieces. There are several parallels with the Polhill material (Hawkes 1973, 194), but virtually no similarities with the Mill Hill collection, which is both earlier in date and from East Kent.

2.1.1 Buckles with triangular plates

Continental-style buckles (graves 262, 283)

One cast copper alloy shield-on-tongue buckle (Cxt 282 SF 137) and one copper alloy counter plate/strapend, Cxt 261 SF 15 (see below), have triangular plates in the continental fashion, Marzinzik Type II.23b-i (Marzinzik 2003, 50) and are of Frankish-Alamannic type. Both are discussed here, but SF 15 is also considered together with the other finds from grave 283 (see below).

This style of buckle probably evolved from late Roman buckles in the late 5th century and was used by the Franks in the 6th century; the buckles became larger over time and on later examples the frame of the loop is bevelled. The fashion for belt suites consisting of a loop and buckle plate with matching counter plate and a back-plate fixed to the belt in the small of the back (MacGregor 1997, 153) was popular over a wide area of Europe, from the Carpathians to the Channel. It persisted until at least *c* 700, although chronological variations have been noted (Marzinzik 2003, 50). Triangular buckles of Frankish-Alamannic type like SF 137 mainly date to the earlier 7th century, both in England (ibid; Hawkes 1973, 194) and on the continent, although beginning earlier and possibly continuing later (MacGregor 1997, 90); Geake, however, has queried the evidence for the continuation of the larger forms beyond 650 (Geake 1997, 76-7).

Such buckles were made in copper alloy, iron, silver and gold (very rare) or in a combination of materials, but the majority are of copper alloy. XRF analysis of SF 137 showed that it was in fact made of leaded gunmetal/brass. The most characteristic form has

curved expansions on either side and at the terminal to accommodate the domed rivet heads, as on SF 137 and SF 15 (see below), and a shield at the base of the tongue, as on SF 137. The counter plate SF 15 has three squared and perforated lugs on the underside which would have passed through corresponding holes in the back plate and been secured by pins. The lower plate on SF 137, by contrast, is the same shape as the upper plate, without any perforations, and was held in place by the three domed rivets. The heads of these rested on washers which when new probably had beaded rims for decorative effect (MacGregor 1997, 191). The usual size range for this type of buckle is 70-75 mm in length, but smaller and larger examples do occur (Geake 1997, 76). Buckle SF 137 is on the larger side, with a total length of 95 mm including the frame of the loop; the plate itself is 73 mm. The fan-shaped shield, by contrast, is extremely small, even vestigial. The tongue of SF 137 is solid, but the underside of the loop is hollow. Many such buckles were decorated in some way, but SF 137 is quite plain.

There is usually little further detail for the construction of such triangular buckles, but it should be noted that SF 137 is hollow; it has filled with chalk that preserves the ribbed texture of the belt it was worn on. The back plate is detached but was held in place by rivets that engaged with small washers on the back and larger ones on the front, as shown where one of the domed rivet mounts is missing from the front.

Buckle SF 137 and the buckle plate Cxt 261 SF 15 (see also below) are similar to two imported finds from graves 2297 and 3871 at Ipswich Buttermarket, which are C14-dated to the first half of the 7th century (*c* 610-640: Scull and Bayliss 1999, 41, Tab 1; Marzinzik 2003, 50, 217). However, although the Cuxton finds could be imports, this buckle form is well represented in Kent, and it is likely that Kentish jewellers were producing copies of Continental forms by the early 7th century if not earlier (Evison 1987, 87; Geake 1997, 76). A belt suite from Barfriston may be an import. Many of the triangular buckles found in England, including SF 137, however, seem to have more closely fitting hinges than those on the Continent (cf Marzinzik 2003, 50; pl 128, nos 3-4), and so may be of insular manufacture. Buckle SF 137 is similar to finds from Sibertswold (Faussett 1856, pl VIII, no.9, pl IX, no.2), Faversham (MacGregor and Bolick 1993, 194-6, nos 34.5, 34.8), and may well be a Kentish copy of the type. Of the four triangular buckles found at Dover Buckland, only one is like SF 137; this is from grave 56 (phase 3) and was dated to 575-625 (Evison 1987, 87, text Fig. 16). There is also one example from Mill Hill Deal (grave 93j); this must be one of the later finds from that site but receives little comment. The find from Polhill would appear to be missing its plate (Hawkes 1973, 194, Fig. 54, no.493).

Table 2: The distribution and classification of the buckles

Key to sex. A: unsexed adult; AF: adult female; AM: adult male; J: juvenile

Key to material. L: Leather; O: general organics; T: textile/fibre
Key to rectangular shapes. PP: plain plate; DP: decorated plate; 1R: 1 rivet; 2R: 2 rivets; 3R: 3 rivets; MR: 3 or more rivets
Key to other forms. O loop : oval loop
Key to location. C: central; L: left; R: right

Grave fill	Sex	SF	Material	Triang	Rectang	Other	Location	Mounts
164.5	A	7	Copper	Variant			L hip	
166	A	111	Iron			O loop	R, by skull	
178	AM?	3	Copper		PP3R		R waist	
190.1	A	4	Copper		PP2R		R waist	
190.2	A	134	Copper			Frags		
190	A	112	Iron					1 frag
190	A	113	1ron					1 frag
214.9	AF	25	Iron/ Copper +LT		PP2R		C waist	
246-G	A	8	Copper, Silver, Gilding, Garnet		DP2R, shield strap?		R hip?	
246 B	A	48	Iron +T?			O loop; shield strap?	L chest?	
261	AM	15	Copper	Plate			R hip, in purse?	
261	AM	16	Copper (tinned)			Loop		
261	AM	18	Copper (tinned)			Plate	R hip? in purse?	1 ?from purse?
261	AM	133	Copper		DP2R, serrated		Pelvis	
261	AM	140	Copper	Mount			R hip? in purse	
261	AM	148	Copper	Mount			R hip? in purse	
282	A	137	Brass +T	Whole			C Waist	
282	A	188	Copper		PP2R (purse)		C Waist (purse)	
282	A	189	Copper		PP2R (purse)		C Waist (purse)	
282	A	17						1 tri-angular
290-C	J	6	Copper		DP2R, serrated		L waist	
293	J	5	Copper		PP2R		C pelvis	
293	J	73	Iron +L?			O loop	R thigh	
296 D	AF	122	Iron +L			Round	L waist	
299 C	AM	72	Iron/ Copper +LT		DPMR? 2 buckles?		L hip	
305-C	AF	89	Iron +O	1 variant			C chest	
312	J	96	Iron/ Copper +T		DPMR?		L waist	
315-D	A	98	Iron			O loop	C Pelvis	
363-A	AM?	24	Iron/ Copper +T		PP2R		L hip	
363-A	AM?	97	Iron +LT		PP1R		R hip	
372	A	2	Copper (tinned)		PP3R		R waist	
Totals				**4+2**	**14 or 15**	**8**		**3**

In addition to the above finds, there are two loose domed rivet mounts that were found in a group of finds thought to have been buried in a bag in grave 262 (SF 140, SF 148; see personal items). As XRF analysis shows these to be of copper alloy with traces of soft tin-lead solder but no tin coating it is unlikely that they were derived from the composite belt set noted

below. Also in Cxt 282 was an iron washer with traces of copper on one side (SF 129) that is probably also from a buckle rivet mount.

Other forms (graves 165 and 306)

The small copper alloy buckle from grave 165 (SF 7) is in this group as it has a triangular plate. From the loop and technology, however, this should probably belong with the buckles with rectangular plates, a point also made by Geake with regard to a find from Finglesham (Geake 1997, 76; 79). The fact that SF 7 was found by the hip, rather than at the waist, suggests it was not a standard belt buckle but had another function. It may have been associated with the shield, but as that appears to have been on edge this is uncertain.

The narrow, elongated triangular buckle from Cxt 305 (SF 89) is quite different from the above in material, form, and use. In keeping with the other buckles in Marzinzik's Type II.18a, it is of iron, with a small oval loop and a folded plate (Marzinzik 2003, 45). The inner ends are broken, but were probably pointed. No rivets survive, and no rivet holes are visible on the X-ray, but these could be obscured, as the object is encased in mineralised organic matter. This buckle was worn more or less vertically (the loop at the head end) of the wealthy female in grave 306. Buckles of this shape are not common; only nine examples were listed by Marzinzik, all considered to be for narrow belts (ibid). None was from Kent and none is a direct parallel for SF 89; the closest is a find from Beckford, grave 16 (ibid, pl 92, no.3). Other possible parallels, not listed by Marzinzik, include Bergh Apton (Green and Rogerson 1978, 25 and Fig. 81) and Portway, Andover. The former was dated to the 6th century, and differs from SF 89 in having a plate that is shorter on the underside than on the upper, which possibly had a straight inner edge. The find from Portway, which has an iron loop and copper alloy buckle plate, was dated by the associated spear (group K) to the late 5th or first half of the 6th century. Of the finds in Marzinzik's corpus, only one could be closely dated, and this was from a late 6th- or 7th-century context; the others were all broadly dated to the 5th to 7th centuries (ibid, 45; 232, table 8). The Cuxton find would appear to be not only the latest datable example of its type, but the first from Kent and the first to be found on the chest.

2.1.2 Continental-style composite belt fittings

The belt fittings from grave 262 are a most intriguing find. From its shape, it would be expected that the triangular strap end/counter-plate SF 15 (see above) would be paired with a shield-on-tongue buckle with triangular buckle plate. It was, however, found with a loose buckle loop and a rounded buckle plate, both of tinned copper alloy (SF 16 and SF 18). The background to these forms of belt fittings has been summarised above.

The cast loop SF 18 has an oval bow with bevelled profile and hollow underside; it is damaged, as the lugs that would have engaged with the pin attaching it to the buckle plate are

incomplete. It is of tinned copper alloy, but is uncertain whether it was made for the plate SF 16 or not, as XRF analysis shows only weak positive for tin (negative for silver).

Like SF 15, the rounded buckle plate SF 16 with three rounded lugs on the back is of tinned copper alloy, but here XRF shows a strong positive for tin (negative for silver). This piece is damaged. The three bossed rivet mounts are missing, and the iron tongue, which has to be a replacement, is extremely crude; although it expands at the base in shield-like fashion it is quite lop-sided and may be a repair. A similar case of repairs to triangular buckles is known from graves 2297 and 3871 at the Buttermarket, Ipswich (Marzinzik 2003, 50). This form is not exactly paralleled in the corpus assembled by Marzinzik, but it belongs to her Type II.9, which includes only four examples (Marzinzik 2003, 39; pl 81). None of these have the straight outer edge and off-set shoulder of SF 16, which appears to be a Frankish trait, and in form SF 16 compares well with a series of decorated shield-on-tongue buckles from a number of sites in northern France (MacGregor 1997, 173-5). In England the same general shape is seen, for example, on three decorated Frankish-type buckles with incised decoration from Sarre (Avent 1973, 225-7), Faversham and Ipswich. That from Faversham is slightly smaller than SF 137, and of tinned copper alloy buckle with iron tongue (MacGregor and Bolick 1993, 193, 34.1). The Ipswich find is of copper alloy buckle (West 1998, 55, Fig. 67.7). Rounded buckle plates are a long-lived form, lasting from the 5th to the 7th centuries on the continent, but it would appear that those with beaded collars to the bossed rivets are of 7th-century date (Marzinzik 2003, 39). As the bosses from SF 16 are missing its precise date is uncertain, but it is of note for the fact that, unlike most examples of the type, it is quite plain. Kentish manufacture of the type is suggested by finds from Faversham (Avent 1973, 127-8).

The copper alloy buckle plate SF 15 has already been discussed above with the triangular shield-on-tongue buckle. It is uncertain whether the bossed mounts were originally beaded, but there is little room on the outer sides for this. The find is similar to a slightly more elongated example with decorated bosses from Cologne (with flat discoid rivet mounts: MacGregor 1997, 91, no.46.5) and also very like a find from Waben, Pas-de-Calais (ibid, 171, 77.49), which is identical in size but with beaded collars for the domed rivet mounts. Both of these continental examples have a rectangular notch to accommodate the tongue, but that from grave 3871 at Ipswich Buttermarket has the same straight outer edge.

It is extremely unlikely that these three items originally went together, as the forms and materials are mismatched. Furthermore, as noted above, XRF shows that the studs that were first thought to have come off SF 16 (SF 140, SF 148) are of copper alloy only, with no tin coating; they also have beaded collars, whereas those on SF 15 have plain collars. This conundrum is explained by the fact that the fittings seem to have been not worn but buried in a bag together with an assortment of other objects. They may represent curiosities that were

collected by the deceased, or donated by members of the family (see also purses, satchels and bags, in personal items).

2.1.3 Small oval buckles

This category, with or without rectangular plates, is generally accepted as the most common for the 7th and 8th centuries (Hyslop 1963, 191; Meaney and Hawkes 1970, 42-3; Geake 1997, 13), and oval loops form by far the largest group in Marzinzik's corpus of buckles without plates (Marzinzik 12003, 32). At Cuxton plateless buckles are in the minority (four examples), but in keeping with the general pattern they are all of iron. The smallest is Cxt 246 SF 48, the shape of which is virtually identical to Cxt 214 SF 25 (listed below; both 20 mm across). It is possible that SF 48 originally had a buckle plate, but the other three frames in this group (Cxt 166 SF 111, Cxt 315 SF 98, Cxt 293 SF 73), are generally the same size, or greater than, the larger buckles described below, and were probably used without plates.

Small oval buckles with articulated rectangular plates and rivets

The use of rectangular buckle plates was a late Roman tradition that continued in the Anglian and Saxon regions, was more popular in Kent than on the continent, and more typical of Merovingian France than Germany (MacGregor 1997, 00). The Cuxton buckles are quite different from, and stylistically later than, those found at Mill Hill Deal. As shown in Table 2, most of the Cuxton finds are of copper alloy; four are of iron with copper alloy rivet, but only one (Cxt 363 SF 97) is of iron alone.

As a whole, these buckles belong to Marzinzik Type II.24, which has four different types (Marzinzik 2003, 51). Most of the Cuxton buckles fall into Type II.24b-ii, Geake's category of 'small simple buckle', which is undecorated and has a strap width 20 mm or less. They comprise Cxt 178 SF 3, Cxt 190 SF 4, Cxt 214 SF 25, Cxt 293 SF 5, Cxt 363 SF 24 and SF 97, Cxt 372 SF 2 and the two buckles from the purse in grave 283 (SF 188, SF 189, see also personal items). In addition there are three small decorated examples (Cxt 261 SF 133, Cxt 290 SF 6) and one highly decorated one (Cxt 246 SF 8). These all have rectangular plates. The seven smallest examples in the group (SF 4, SF 5, SF 6, SF 24, SF 133, SF 188, 189) seem to have a fairly uniform width of 8-10 mm at the inner end, and most are 10-13 mm in length.

Four buckles probably belong to Marzinzik Type II.24a, buckles with square to rectangular or high rectangular plates; these range from 10-30 mm in width, but no lengths are stated (Marzinzik 2003, 51). The highly decorated example Cxt 246 SF 8, which has an offset plate, measures 17 x 19 mm. Buckle Cxt 372 SF 2, by contrast, is 23 mm wide, but only *c* 15 mm long; it has three rivets across the rear end, a feature typical of this buckle type (ibid). The largest buckles are both of iron with decorative copper alloy rivets (Cxt 312 SF 96, Cxt

299 SF 72), which would have held straps of *c* 22-23 mm wide (SF 96 is 29 mm long; SF 72 is incomplete). Buckle Cxt 363 SF 97 differs from the above in that it has a longer plate that is *c* 18 mm wide and *c* 25 mm in length; the fact that it has only one rivet places it in Marzinzik Type II.19a, which appears to have been long-lived (Marzinzik 2003, 46).

From Geake's survey the small simple buckles appear to be most common in iron (Geake 1997, 79). Marzinzik, however found that copper alloy was the more frequent (Marzinzik 2003, 52) and this is the case at Cuxton. Hawkes (1973, 194) was of the opinion that such small buckles are atypical of 6th- or early 7th-century graves, when larger belts were worn, but more common in later burials. Working from a larger sample, Geake found them to be a feature of 7th-century dress (Geake 1997, 79). Marzinzik found that her Type II.24 can occur in early graves, but that most contexts date to the late 6th to 7th century, and indicates a continuation into the 8th century and later for some types (Marzinzik 2003, 51-2). Her typology, however, is based primarily on shape, rather than decoration, and it should be possible to date specific features such as serrated plates more closely in the future.

The following summarises the buckles according to the number of rivets and presence or absence of decoration, noting features of significance. The buckle loops vary in size, but all are rounded or oval in section, although one has a flat base; none are bevelled like those at Mill Hill, Deal. The plates are all flat; none are raised as on some examples from Mill Hill; grave 71(d)); most are square or rectangular, but Cxt 363 SF 24 tapers in slightly to the loop. The presence of textile remains has been noted above, and is discussed in more detail elsewhere (Walton Rogers to report?).

Plain buckle plate with one rivet

Only one buckle falls into this group, and this is of iron (Cxt 363 SF 97). The buckle plate is rather longer than usual and the rivet (diameter *c* 3 m) is centrally placed.

Plain buckle plate with two rivets

This is the most common group, with six examples, four of copper alloy (Cxt 190 SF 4, Cxt 282 SF 188, SF 189, Cxt 293 SF 5), one with an iron loop and copper alloy buckle plate (Cxt 363 SF 24) and one of iron with copper alloy rivets (Cxt 214 SF 25). The loops are mainly rounded ovals; some appear slightly more D-shaped, but this may simply be the result of corrosion products. As noted above, the plates have a width of *c* 8-10 mm and length of *c* 10-13 mm. They are mainly of uniform width throughout, but on Cxt 190 SF 4 the back is distinctly narrower and also shorter than the front, the outer edge of which is generously cut away in order to pass over the loop. Parallels for this form may be seen at Polhill (Hawkes 1973, Fig. 54, nos 496, 499, 503).

Plain buckle plates with three rivets

Two copper alloy buckles have thicker oval loops and buckle plates that are wider than they are long. Buckle Cxt 178 SF 3 is tinned; the loop is flattened on the underside and recessed in order to accommodate the plate, the outer edge of which is offset on the back in order to pass over the loop. The rivets on Cxt 372 SF 2 are large and plain (diameter 3.5 mm); on SF 3 they are proportionately smaller but nonetheless decorative. Two buckles with three rivets were found at Polhill, one small, the other a double-tongued example with a large square plate (Hawkes 1973, Fig. 54, nos 491, 495). Three small buckles and one slightly larger one with three rivets were found at Castledyke (Drinkall and Foreman 1998, 272) and the type is apparently well-represented in Suffolk (West 1985, 141).

Decorated buckles with two rivets and serrated plates

Two buckles have decorated loops and one at least has serrated plates. On buckle Cxt 290 SF 6 the loop is decorated with two groups of incised radial lines on each side of the pin. Those adjacent to the pin are angled in to it (three on the left, four on the right), while the outer groups (three lines) are angled away it. The pin itself is profiled and has two transverse lines at the base. The inner edge is serrated, and the plate is unusual in that the decoration extends to two pairs of V-shaped notches on each side of the plate.

On buckle Cxt 261 SF 133 the loop is decorated with two groups of three incised radial lines on each side of the pin, which also has three transverse lines at the base. The pin is unusual in that it expands slightly at the tip, but the apparent bifurcation at the terminal may be due to damage rather than intentional. X-ray shows that the inner edge of the plate was serrated, although it is very hard to see on the object itself.

The tradition of incised radial lines on the loop is presumably derived from Frankish forms; it is broadly dated to the 7th century, but continued into the 8th century (ref). It can also occur without serrated plates, and with or without other decoration. The example from Polhill has incised and punched decoration on the plate (Hawkes 1973, 203; Fig. 53, no.484). A buckle with similarly decorated loop has also been found in grave 18 at Holborough, another site on the Medway (Evison 1956, 123; Marzinzik 2003, pl 134.2, 134.3).

Notched and serrated plates are dated to the second half of the 7th century, although possibly starting a little earlier than this (Geake 1997, 14, 78). They appear to be clustered in Kent, and it has been suggested that they may be part of a regional costume (Geake 1997, 78-9, map 43), although at present few sites are involved. In West Kent there is one example from Polhill (Hawkes 1973, Fig. 53, no.485); two others Polhill have decoratively notched edges, but were shoe buckles, not belt buckles (ibid, 194; Fig. 54, nos 492, 494). It has been said that serrated buckles seem to be found with adults only, and where found with women the associated jewellery, if any, is of the simpler type (Geake 1997, 78). Buckle SF 133 is

from an unsexed adult (Cxt 290 , but buckle SF 6 is of some interest as it is possibly the first to be found with a child (presumed male from the presence of the spear).

Decorated buckle with two rivets with garnets

Buckle Cxt 246 SF 8 is by far the most important buckle from the site. XRF analysis shows it to be of copper with a silver coating, gilded pin, gilded details on the loop and plate and an amalgam gilding on the mounts around the garnets. The oval loop has gilded bands of transverse lines on either side of the pin (four to the left, three to the right). The pin has a raised, slightly pointed section, has a moulded terminal (possibly zoomorphic) and triple incised lines across the squared base. The outer edge of the plate is offset slightly at the fold in order to pass over the loop. The plate is divided into three fields by paired or triple incised lines picked out in gold. The wider field, across the outer end, follows the contours of the slot and offset sides. The inner end is bisected by three closely spaced lines, each half originally containing a garnet-headed rivet in a gilded setting that includes three rings of beaded wire (one with larger beads between two with smaller beads). The polychrome effect of this piece is remarkable, and has to be of continental inspiration. It is by far the most prestigious of the non-triangular buckles, and it is of interest that it is associated with a type 7 shield boss and one of the few ceramic vessels from the site.

Incised, or engraved decoration is by no means unknown on Anglo-Saxon buckles, but rarely includes borders. Examples include two small buckles from Shudy Campls, the plates of which have incised borders and are also divided into three fields by diagonal lines (Lethbridge 1936, Fig. 1D; 1E.1). A simpler border is seen on an unstratified buckle from Caistor by Norwich, where the edges of the plate and the pin slot are outlined. This bukle has a row of rivets across the serrated rear end (Marzinzik 2003, pl 132, type II.24a). The incised lines on the tongue and around the loop of SF 8 are in the tradition noted above; the fact that they are gilded relates them more closely to the Frankish tradition, and may be imitating niello work.

The use of garnets on buckle plates is uncommon (see below, finds from Lakenheath and Tostock in Suffolk), and garnet-headed rivets or bosses are rarer still. One of the best examples is the high quality triangular buckle plate from Taplow, dated to the earlier 7th century which also has cloisonné and filigree work (Jessup 1950, 137, pl XXVIII.1). A simpler example is an iron buckle from the burial of an adult warrior in the primary barrow at Ford, near Laverstock, dated by its double tongue to *c* 650-700. The rectangular buckle plate is plain, but has a row of three cabochon garnets with gold filigree collars that conceal the rivets across the rear end (Musty 1969, 106-7; Fig. 5d; pl XXVIIb; Swanton 1973, 163; Fig. 62d; Geake 1997, 186). A smaller iron buckle, also with three similar rivets, is known from Harford Farm, Norfolk (Marzinzik 2003, 51).

The use of cabochon garnets is a feature of continental belt fittings, that probably gained in popularity in the 7th and 8th centuries as Indian stones became less readily available and the Bohemian garnet were less suited to being cut into flat plates (Marzinzik 2003, 49; Quast and Schussler 2000, 84-91). The settings on SF 8 also recall the use of garnets in Kentish disc brooches and pendants and on the heads of single pins and linked pins, the latter another fashion that is typical of the 7th century (Meaney and Hawkes 1970, 36-7). Examples of the brooches include Sarre (Jessup 1950, pl XXVII), while numerous pendants with one or more cabochon garnets can be cited, taking that from Faversham as an example (Hawkes 1990, pl 4, L21; cf also Aberg 1926, 132-8; Leeds 1936, pls XXX, XXXII). Pins with garnet settings and ribbed 'collars' include finds from Sibertswold, grave 180 (Faussett 1856, pl xii, 18, 20), Chamberlains Barn, Leighton Buzzard (Hyslop 1963, 198-9, Fig. 13). Others include Cow Down, Derbyshire (flat settings; Ozanne 1962-3, 28 and 31-2) and Roundway Down (cabochon settings; Meaney and Hawkes 1970, Pl V).

Further buckles that combine garnets of other forms and rivets with beaded collars include the spectacular buckle from Tostock, Suffolk (Leeds 1936, pl XXX; MacGregor and Bolick 1993, 199, 34.27; West 1998, Fig. 128, no.10), and a buckle from West Knoyle Farm, Wilts (Evison 1956, Fig. 18c). The latter is stylistically related to a buckle from grave 74 at Kingston Down (Faussett 1856, 55, Fig. 1) and another from Breach Down (Evison 1963,43).

2.1.4 Buckle plate and three or more decorative rivets

One of the larger buckles in this group (Cxt 312 SF 96) is incomplete (original length uncertain) but has three surviving rivets out a probable five decorated with ring and dot motifs. This buckle is covered in corrosion products, and cleaning was hindered by its poor preservation and the presence of textile remains, but it would seem that the upper side of the buckle plate was coated with copper alloy. Also in this group but of unknown size is a very fragmented iron buckle from grave 300 (SF 72), which had two types of decorative copper alloy rivet, one plain, the other with a domed head and beaded collar. Rivets of this type are seen on an openwork buckle from Bury St Edmunds, which has six rivets (West 1998, Fig. 13.6) and two buckles with rectangular/rhomboidal garnets set into the plate. One is from Lakenheath, and has three beaded rivets across the inner end (ibid, 78; Fig. 111.8); the other is from Tostock, and has four rivets at the rounded inner end (ibid, Fig. 128.10). Both the Cuxton buckles should be of 7th-century date.

2.1.5 Circular buckles/brooches

Only one buckle is circular (Cxt 296 SF 122); this is of iron and falls into Marzinzik's typegroup I.12ai. X-ray suggests that there was a decorative cross bar, but this is probably due to the fact that the pin is wrapped around the loop and extends further than usual on the

underside and/or the pin is broken and corroded in situ. Round buckles are long-lived (Marzinzik 2002, 34), and are found in both 6th- and 7th-century burials. From the other finds (glass bead, shears) this example should date to the 7th century.

Another find (Cxt 214 SF 54) is listed below under chatelaine fittings and rings; it is not impossible that it was a buckle, but the scarf joint and that fact that it was dangling from the pelvis make this unlikely.

2.1.6 Belt fittings

Triangular mounts like Cxt 282 SF 17 are usually identified as belt fittings (MacGregor and Bolick 1993, 214), although they could have been chapes or strap protectors; SF 17 was found in association with the purse frame SF 20 (see personal items) and may be associated with it. It would appear that they are the descendants of a form of triangular mount used in the 5th century (cf an example from Alfriston; Marzinzik 2003, pl 79,3), but the composite construction of some at least of the later examples suggests that one arm may have originally swivelled; they could, therefore, have been used to suspend items such as key rings. This is supported by the direct association of such a mount with knife and keys at the waist of a female in grave 113 at Dover (Evison 1987, 113; Fig. 50, no.2). Another was present in grave 3 at Portway, Andover; this is not listed in the inventory of the grave goods and so the material is unknown; it would, however, appear to be of iron (Marzinzik 2003, 204; pl 95.3). Other findspots include Faversham and Haslingfield, Cambs (MacGregor and Bolick 1993, 214, 36.17, 36.18). A slightly different form, made of two one-piece plates, was found at Alton, Hants (Marzinzik 2003, 50; pl 129.3).

Other probable belt fittings include two small mount fragments (SF 112, SF 113) that were found by the waist with buckle SF 134 in grave 191. Each is roughly square, with one apparently broken end, and they may be from a larger rectangular mount or buckle plate (perhaps the two sides of as folded plate). Both have mineralised leather on the back, and SF 112 has a triangular arrangement of rivet holes (two at the corners and one at the centre); the other is too corroded to be sure if it also has any.

2.1.7 Use of buckles

As shown in Table 2, approximately half the buckles were found singly, but in eight cases two or more buckles were found. Sexing of the human remains is problematic, but eight buckles are from four adult inhumations that were definitely, probably or possibly male; four are from adult inhumations that were definitely, probably or possibly female, three are from three child grave, while the remainder were found with adults of uncertain sex. Most buckles were found by the waist, but a range of other locations was recorded (Table 2). Two at least derive from a purse, and add to the evidence for plain small buckles being multi-functional. Buckles Cxt 246 SF 48 was probably associated with the shield in that grave, and Cxt 246 SF 8 may also

have been. A probable shield buckle was also noted in grave 373 but was lost on site. Others could be from other belts, scabbards (cf. Lethbridge 1936, 13-4; Fig. 7; Swanton 1973, Fig. 64), or from garters, although there is no definite evidence for this.

The sex distribution of the buckles is of some interest. In the 7th-century cemetery at Polhill, fourteen out of 21 buckles were definitely found with men, and none were found with identifiable females (Hawkes 1973, 193). At Cuxton three female burials contained three, possibly four buckles (Cxt 214, Cxt 296, Cxt 305), but all were or iron, or iron with copper alloy and of slightly variant form (round, elongated triangular). The human remains in grave 247 could not be sexed, but the grave goods all indicate that the deceased was male. This suggests that all the copper alloy buckles and most of the rectangular buckles were buried with men or adults who were probably male. As noted above, the serrated buckle from Cxt 290 is of some interest as it is possibly the first to be found with a child.

Triangular buckles were worn at the waist, mainly by adult men, sometimes of high status, and often occur in association with spears (Geake 1997, 77). Grave 262 is a male burial, while grave 283 was probably so (see below); neither contained a spear. Buckle Cxt 282 SF 137 seems to have been at the waist, but may have slipped as it was found over the purse frame SF 20 (see personal items) with the loop facing downwards to the left. Buckle plate SF 15 and the finds from Cxt 261 are discussed below.

It has been noted above that there was a decrease in buckle size during the 7th century, and it this led to the suggestion that narrower straps can be used as a dating indicator (Drinkall and Foreman 1998, 273). Hawkes (1973, 194) was of the opinion that such small buckles are atypical of 6th- or early 7th-century graves, when larger belts were worn, but more common in later burials. Working from a larger sample, Geake found them to be a feature of 7th-century dress (Geake 1997, 79), while Marzinzik indicates a continuation into the 8th century and later for some types (Marzinzik 2003, 51). On this basis, most of the Cuxton burials are of 7th-century date, but size must also equate with function and, as at Castledyke, some of the larger buckles should also be of 7th-, rather than 6th-century date.

As a group these finds show a Kentish ‘cultural identity’ for the site. Most of the buckles are quite homogenous, but the three continental-type buckles that are represented, and the ornate buckle Cxt 246 SF 8 are of interest. Whether imported or not, they demonstrate some influence of foreign dress on the local population, and also some degree of wealth.

2.1.8 Lace chapes

The use of metal shoe fittings such as lace tags and buckles is considered to be a 6th-century Frankish fashion that did not reach England until the 7th century (Geake 1997, 14; Meaney and Hawkes 1970, 39; Hawkes 1973, 194). They are mainly found by the lower leg or feet in graves of women and children, but also occur with men (Geake 1997, 65; Drinkall and

Foreman 1998, 271). Two main types are found, the first of small tongue-shaped form (two plates or with a split end); the second is a rolled cylinder/cone made of sheet metal (Meaney and Hawkes 1970, 39; Geake 1997, 64-5). The latter also fall into two groups, depending on the nature of the upper end; both types are present at Cuxton (Cxt 193 SF 14, Cxt 261 SF 12). The first has a continuous rim, and can occur with or without rivets; Cxt 261 SF 12 as a single rivet. This type was found at Cuddesdon and in mid- to later 7th-century burials at Finglesham, and the form has been discussed by Dickinson (1974, 7-8). On the second type the opening is split to form two flat tabs that were secured by a rivet, in the manner of middle Saxon strap ends; Cxt 193 SF 14 has a single rivet. This form was found at in grave 83 at Burwell (Lethbridge 1931, 65) and at Winnall II (Meaney and Hawkes 1970, 39; Fig. 9, 10.4). Although such items probably bound the ends of shoe thongs, they could also have served as dress fasteners (MacGregor and Bolick 1993, 190-1; Geake 1997, 64-5). The Cuxton finds support the view that these were multi-functional objects, as SF 12, possibly from a girdle or narrow strap, was found by the left hip of a male; SF 14 was found by the ankle of an adult skeleton which could not be sexed. The fact that both were found singly is intriguing, although the same has been noted on a number of other sites (Geake 1997, 65).

It has been suggested that the tongue-shaped form of lace tag/strapend continued until after 650; it may have overlapped with, or been replaced by, the rolled cone form, which tends to occur in late 7th-century or later contexts (Geake 1997, 64). Lace chapes are mainly concentrated in Kent (Drinkall and Foreman 1998, 271), where, other than the sites noted above, finds include a decorated lace chape from grave 30 at Polhill (Hawkes 1973, 194; Fig. 54, 507) and one from female grave 129 at Dover Buckland (Evison 1987, Fig. 53, no.4). Other Kentish examples, from Kingston Down and Finglesham, are cited by Hawkes (1973, 195).

2.2 Pins and hooks

A great variety of single pins have been found in numerous 7th-century graves dating to the Conversion period, and there seems to be little pattern to their form or distribution other than a concentration in Kent (Geake 1997, 66-7).

2.2.1 Ring-headed pin

The only definite pin from the site is the unusual ring-headed pin of the adult in grave 286 (SF 126), the plain ring of which is offset from the shank; there is no collar (length 80 mm). As the only other find was an incomplete knife the finds give no clue to the sex of the deceased, and the grave cannot be closely dated. The pin was, however, clearly used as a

dress accessory, perhaps a cloak fastener, as it was found vertically placed at the centre of the chest (the ring at the top).

In some respects this pin resembles the larger and more ornate of the 6th- to 7th-century handpins with offset heads that have been described as Celtic, a style most prevalent in Ireland and Scotland, which was spread by missionaries and incorporated Frankish and Anglo-Saxon traditions (Youngs 1989, 25-9). Loop-headed pins that are in a single plane are common in 7th-century contexts, but no Saxon parallel has been found for this unusual form, either in a cemetery context or in the larger settlements such as Mucking or West Stow. The form could, therefore, be considerably older (S Ross pers comm). This is supported by the XRF analysis, which shows that it SF 126 is of tin bronze; the absence of zinc and presence of small amounts of arsenic in the metal suggest that it was made in the pre-Roman period, probably in the Iron Age (Dungworth 2004). Reuse of Roman and Celtic objects in the Saxon period is not unknown; five Celtic pins were noted by White, of which two are from Kent (Dover and Faversham); four of these have coiled heads, while one is squared (White 1988, 106-7; Fig. 53).

2.2.2 Hooked pin

A long heavy hooked 'pin' was found on the right shoulder of the adult in grave 165 (SF 110, length 75 mm); as the grave contained a spear the deceased was probably a male. In this case the pin was diagonally placed, with the hooked end at the top right and the thicker, straight end on the chest (lower left). This find is unusual in that the shank tapers to the hooked end, unlike the hooked pins from Mill Hill Deal, where the shank is either uniform or expands towards the hooked end. Furthermore, SF 110 does not seem to have had a proper terminal of any kind, but the weight of the expanded lower end would presumably have held it in place.

2.2.3 Other pins

Three pins are of iron; of these, SF 74 from grave 294 is represented by the point and *c* 28 mm of the shaft; the head is missing. This pin is quite straight; it is not from a buckle, and given the absence of brooches, unlikely to be a brooch pin. As it was found on the left shoulder and is encased in textile (a separate fragment comprises mineralised textile fragments only), it is likely that it was used to fasten a cloak or shroud.

The slender iron pin SF 53 from the female buried in grave 382 was worn at the neck and is encased in mineralised textile. It has a small knob head and is near complete, but in two pieces and missing the tip (length 47 mm+). It has been suggested that some pins found at the head or neck may have fastened veils, but here the cloth is too heavy and SF 53 must have been a dress or shroud pin.

Pin SF 194 from grave 262 survives as the head and part of the shaft. The head is of simple knob form, rounded on one side but more biconical on the other. The shaft is also

irregular diameter, apparently tapering in slightly to the head. The lower end and point are missing. The position of this find in the grave is unknown, but if it is from the 'purse' area the lower part may be present among the finds listed as tools.

2.3 Other possible dress fittings

A few items cannot be assigned a specific function, but their position on the body and/or associated organics suggests that they were in some way associated with dress. They include a part of a small object of folded copper alloy sheet metal that was found between the chest and the left upper arm of an adult male in grave 194 SF 23). Leather is sandwiched between the metal, while textile adheres to the outer surface. Despite the unusual position, this may, therefore, be part of a strap end or from the business end of a buckle plate, the plates of which are missing.

3 PERSONAL ITEMS AND TOOLS

The following sections include some objects that might be considered dress accessories, such as chatelaines, others that are technically tools, such as shears, and some objects buried in bags. As these are closely inter-related within the burial context, mostly in 'female' object groups, and as the category of tools (other than knives) is very small, it seemed appropriate to discuss them together. Knives are discussed separately, although noted below where they occur with other objects.

3.1 Amulets

Many objects could have been used as amulets, but most have an obvious practical function too. Among the stranger objects from the site is a thick, irregular disc of iron that was found between the legs and near the knees of the female in grave 382 (SF 56). This cannot have served any real purpose, other than, perhaps, as a weight, and from its position and uniqueness it is assumed to have had some amuletic function. A possible parallel is a decorated bronze ring that was found to the left of the pelvis in grave 12 at Winnall II (Meaney and Hawkes 1970, 38).

3.2 Chatelaines, keys and associated objects (graves 215, 262, 297, 306)

Chatelaines were a typical part of female dress throughout the Saxon period. The earlier examples, which have been described as girdle groups (Dickinson 1973, 25), tend to be shorter and simpler, and include pairs of girdle hangers/symbolic keys. During the 6th century there was a trend towards more arrangements that were both more complex and more functional. The typical 7th-century chatelaines are characterised by iron chains made up of rods with wrap-around terminals connected by small links, with purely functional keys (Geake 1997, Fig. 4.16). For the Cuxton finds it is very difficult to disentangle the various

rod-like chatelaine fragments from the rings and equipment that were suspended from them, and in some cases the location of the finds is also unclear. The iron finds are, therefore, summarised by grave unless clear functions can be distinguished. Other items associated with chatelaines, such as pendants, rings and containers, are discussed under their different headings.

3.2.1 Grave descriptions

Grave 215

A complex of iron fragments was found in the pelvic area of the female in grave 215 (plan Cxt 214.7), extending from the left hip to between the legs. These include two rings (SF 50, SF 54, see below), keys and other objects attached to smaller rings. The most diagnostic key fragments comprise the 'T', or more appropriately, 'E'-shaped bit ends of two slide keys, one straight edged (SF 143), the other more rounded (SF 144). There is no obvious shank for SF 143 but SF 144 is probably from the same key as a long shank with integral suspension loop (SF 60; extant length 175 mm). Accession SF 60 includes at least five other objects, including part of another possible key with roughly L-shaped end, possibly similar to a find from grave 76 at Shudy Camps (cf Lethbridge 1936, Fig. 11, no.1). The others comprise a rod-like fragment, the head apparently hooked and attached to a small ring; a rod-like fragment attached to a larger ring *c* 40-60 mm in diameter, and a tanged tool with flattened section and possibly a pointed terminal. No joins were found between any of these objects. At the waist in the same grave were a spatulate tool, knife and shears (see below and knives).

Grave 262

The objects from grave 262 are intriguing; they appear to be keys, but were buried with an older male. No keys were found in any of the male graves at Dover Buckland (Evison 1987, 116) and at Castledyke only one male was buried with keys (Drinkall and Foreman 1998, 284). The finds from Cxt 261 may, therefore, be tools; they are discussed below under purses and bags.

Grave 297

The finds from the female grave 297 include a strap loop attached to a ring, with the remains of a leather strap between the plates (SF 77). The strap loop has numerous parallels in Anglo-Saxon burial contexts, for example at Burwell and Shudy Camps (Lethbridge 1931; 1936), Dover (Evison 1987) and in graves 44, 51 at Portway. There is also a smaller suspension loop from which is suspended a rod-like object, probably a key; two other rods and the bit end of a hooked key/latchlifter like those in grave 306 are also present (SF 78). Unfortunately it is not clear from the sketch plan or finds labels exactly where these were found, but they appear to have been between the knees.

Grave 306

The numerous chatelaine/key fragments found outside the left thigh/knee in grave 306 (SF 87, plan Cxt 305F) are similar to those from Cxt 296 but much more complex, comprising numerous slender rods, some with looped ends, that were fixed together with twisted wires and wire loops. They include the bit ends of at least three, possibly four keys, one probably with a 'T'-shaped end, the others with hooked ends, probably latch-lifters. In addition there are two small rings with the remains of a probable toilet set, the other with a single pin-like object attached to it (cf Faussett 1856, pl XII, no.10. The purse-mount/strike-a-light discussed below is also from the same area of the grave. It is not possible now to reconstruct the many different pieces, some of which have well-preserved mineralised textile attached to them.

Grave 368

The remains of a large ring (see below) and some small rod-like fragments.

3.2.2 Use of chatelaines

Chatelaines were, usually buried on the body, but have also been found by the head or in boxes (Lethbridge 1931, Fig. 76; Dickinson 1973, 254-5). Cuxton conforms to the standard fashion for wearing chatelaines on the left side, and that in grave 306 extended to the knee or below it. At Dover Buckland it was found that until *c* 575 only two keys were worn together on the chatelaine; after this they seem to have been carried in tiers with up to four keys on a ring (Evison 1987, 117). The peak of the fashion for long chatelaines seems to have been in the late 7th century and possibly the early 8th century, and several are from burials that also contained 'workboxes' (Geake 1997, 58), as seen in grave 306. This grave also demonstrates the fashion for incorporating a range of tools, purses/purse-mounts and other objects in various combinations that may have been detachable and interchangeable (Geake 1997, 57). Some of these items may have been amuletic, and it is possible that the whole ensemble had a symbolic function (Meaney 1981, 148-158; Geake 1997, 58).

The key and chatelaine fragments from the female burials at Cuxton are all of iron and typical of the 7th century; although in poor condition they include straight handled slide keys and in the case of Cxt 305 a toilet set. The keys include large examples with L- or T-shaped terminals that were probably similar to those from grave 3 at Burwell (Lethbridge 1931, Fig. 22, no.10) and others from Dover Buckland (Evison 1987, 116, Fig. 9, no.9; cf also Faussett 1856, pl XV, nos 21, 27). The smaller examples are probably latch-lifters (cf Evison 1987, 116, Fig. 17, no.11). At Polhill keys were found in four female graves, none of which contained any jewellery. This led to the suggestion that there was a distinction between high status women and housekeepers, the latter of importance but lesser rank. At Cuxton, however,

graves 215 and 306 were the two richest female graves, including a certain amount of jewellery, albeit not of the highest quality. At Dover Buckland groups of keys occurred in both richer and simpler graves (Evison 1987, 117), while a national survey shows that several have been found with children (Geake 1997, 58). It can, therefore, be dangerous to draw too many conclusions from a small sample.

3.3 Bone pendants/chatelaine components (graves 215, 306)

Fragments of three bone pendants with iron mounts were found, two in grave 215 (SF 40 SF 44, plan location 7) and one in grave 306 (SF 93). The largest piece (SF 40) is a pear-shaped slice of antler pedicle decorated with concentric ring and dot motifs on the upper face and similar, but simpler, decoration on the back; both surfaces are very worn, but the back is more so, suggesting that the piece was well used in life. There are clear perforations around the edge, one with the remains of an iron ring in situ. The iron attachment loop at the top is incomplete but was probably the same as that on SF 44, on which mineralised textile is clearly visible; it is also very like the strap loop SF 77 from grave 297. Pendants SF 44 and SF 93 were almost certainly of the same form as SF 40.

These finds fall into a well-known category of Anglo-Saxon accessory made of thin slices of antler that probably served as amulets as well as functional objects (Roes 1963, 71-4; Meaney 1981, 139-42, Fig. IVdd-hh; MacGregor 1985, 107-8). They occur as solid plates and (more usually) as annular discs, invariably with ring-and-dot decoration and perforations at intervals around the edge (ibid). In some cases these may be natural features of the bone (ibid, 108), but in others they are clearly man-made. Of the annular discs, that from Swallowcliffe is thought to have formed the centrepiece of a satchel lid, the perforations being for rivets (Speake 1989, 72; Figs 51, 53, 55, 64). A bone disc from grave 76 at Burwell was found by the head of the deceased, and may also have been in/on a bag (Lethbridge 62, Fig. 32; Geake 1997, 57). The location of other such rings within chatelaine complexes, however, leaves no doubt as to their function. These include the find from grave 83 at Burwell, which still had a copper alloy ring looped through one of the perforations (Lethbridge 1931, 65; Fig. 33). The find from Polhill has iron staining around the perforations, and was also thought to have formed part of a chatelaine (Hawkes 1973, 196; Fig. 53, no 490). Other examples include finds from Standlake grave 8, Marina Drive, Dunstable and Yelford, Oxon (Morris 1962, Fig. 4, no.5; Meaney 1981, 28, 139-40, Fig. Im, Fig. Ivdd; Speake 1989, Fig. 6).

Solid discs are much less common than the above, but examples with ring-and-dot decoration have been found at Barrington (MacGregor 1985, Fig. 61g) and in grave 183 at Castledyke. The latter is decorated on both faces and has perforations for iron rivets; it was considered to be both an amulet and a chatelaine component (Drinkall and Foreman 1998, 90,

284; Fig. 113, no.9). Both types of 'stag's antler' amulet are also known on the Continent (Meaney 1981, 140-1; Fig. IVee).

In many cases no evidence for mounts survives on these finds, but those from graves 76 and 83 at Burwell have iron clasps that were attached to an iron ring and a copper alloy mount respectively. It is not clear from the illustration or catalogue how the Castledyke find was suspended, but it is stated elsewhere in the text that it was attached to a chain from which was also suspended a workbox (Drinkall and Foreman 1998, 90, 284). It is likely that these bone accessories were not attached to the chatelaine itself, but hung separately, perhaps from leather cords, with small objects dangling from them in a 7th-century take on the 6th-century fashion for openwork metal rings (Lethbridge 1931, 62, 65; Hawkes 1973, 196; Speake 1989, 72-3). The Cuxton finds were undeniably pendants of this type, and their location at the waist leaves little doubt that they could have functioned as a form of girdle hanger. The lack of associated objects, however, suggests that they may have been old and no longer fully functional when buried.

Although found in earlier contexts on the Continent (MacGregor 1985, 107), the English examples are all from 7th-century burials. The Swallowcliffe find was dated to the second half of the 7th century (Speake 1989, 80), while that from Polhill was associated with a 'workbox' and should be of the same date. This fits well with the overall character of the finds from graves 215 and 306, where the latter also contained a 'workbox'. For Castledyke it was been noted that the ring-and-dot decoration is typical of Frisian finds, but it is also one of the simplest motifs to use on bone; the above finds, from sites across the country, demonstrate that it is equally typical of the English workmanship.

3.4 Comb and possible comb case (grave 215)

The bone comb from Cuxton was found in the rich female burial Cxt 214 (SF 42). Of double-sided form, it was probably complete when buried but is now extremely fragmentary and the surfaces are worn and pitted; it is of antler, but it is impossible to ascertain its original length or width. The comb was placed diagonally in the groin area; the context sheet notes that it was contained in a case and shows a rectangular bone plate away from the main comb across the right hip. The latter has not been located, and it is not clear whether the bone pendants discussed above were confused with a comb case. However, some of the side-plate fragments are wider than others (15 mm) and lack the sawing marks for the teeth that are present on the narrower ribs. The iron rivets on them are also widely spaced (at least 80 mm). These may, therefore, be the remains of a case. It is just possible to see paired lines down each side of these fragments, and it is possible that there was also an interlace pattern on them. Elaborately decorated comb cases have been found at Dover Buckland (Evison 1987, 119; Fig. 49) and in graves 179 and 180 at Sibertswold (Fausett 1856, pl XIII, nos 5, 6). Two of the six small

fragments of toothplate are from near the ends of the comb and have graduated teeth; one still has the connecting plates attached to it, with three rivets 15-20mm apart. The piece is intriguing in that the connecting plate seems to expand, rather than taper, to the outer edge, which is 11 mm across; the remains of a cross-hatched pattern are visible on the rib over the tooth plate. This might place it West's type 1B but the edges and corners are missing, and it is impossible to know if these were squared or rounded (West 1985, 127).

Combs, invariably of small size, were included in 5th, 6th and 7th-century burials, but changes in shape and size can be detected over time, and some 7th-century examples can be quite large (MacGregor 1985, 92-4; West 1985, 126-8; Evison 1987, 120). Two main types were used in the late 6th and 7th centuries: double-sided (the most common type) and hump-backed single-sided (Geake 1997, 63-4; table 6.1; Fig. 4.21). The former is a long-lived type that is hard to date precisely but is well documented in 7th- to 9th-century domestic contexts in Lundenwic. The hump-backed form, dated to the mid-7th century and later, is barely represented in the Greater London area, but has been found at Polhill (Hawkes 1973, 198; Fig. 53, no.487). Combs are usually found with women, but are common to both sexes; their inclusion in the burial rite may have had a symbolic function, perhaps reflecting status, a cult associated with the head, or group identity (MacGregor 1985, 73; Geake 1997, 63-4). They were not always complete when buried and it is also possible that their location in the grave is significant. Two of the Castledyke combs were also found near the waist/thigh and were possibly held in place by a belt. Two others may have been placed inside the sleeve as they were found on/near the arm (Drinkall and Foreman 1998, 287).

3.5 Purses, satchels and bags

3.5.1 Purse/satchel frame, fittings and contents (grave 283)

The male in grave 283 was buried with/wearing a large purse (SF 20, hereafter referred to as a satchel) at the centre of the waist, the frame for the flap of which seemed to lie beneath the large triangular shield-on-tongue buckle SF 137 (see dress accessories, buckles). The frame measures 225 mm across and is quite plain apart from minimal decoration at the terminals; there are small holes at intervals of 30-40 mm for attachment. As found in the ground, it was associated with two tiny buckles (SF 188, SF 189, see dress accessories, buckles). It is unclear which buckle is which, although they are virtually identical. One was located at the centre of the frame, pointing inwards. Opposed to this the context sketch plan shows a small fitting, probably a folded strip of copper alloy 6mm wide and with perforations at intervals (SF 190). The other buckle was *c* 100-120 mm from the first, above the frame and pointing away from it. It is, therefore, unclear how the two were related, but as the second buckle is aligned with the small triangular belt mount SF 17 (see dress accessories, belt fittings), it is possible that it helped to secure the satchel to the belt.

Although purse-mounts are well known (see below), frames are extremely rare, especially with associated fittings and possible contents. A small squared example is known from Chessel Down, Isle of Wight, while three parallels exist for the kidney-shaped frame of SF 20 . The first is the smaller and much more elaborate purse from Sutton Hoo. The second is from grave 1356 on the Buttermarket site, Ipswich (Scull and Bayliss 1991, 41; C Scull pers comm), where an almost identical undecorated kidney-shaped frame was found. A small buckle was located at the centre of the frame, pointing in towards it, opposed to a tab-shaped mount like SF 147 from grave 262 (see below).

More ornate frame was found in the rich female burial at Swallowcliffe Down, Wilts (Speake 1989, 59-80). This also has a roughly kidney-shaped frame that is almost the same width (200 mm) as the Cuxton find, but it is less deep and has a completely different profile. The Cuxton and Buttermarket frames are completely flat, and are obviously from flaps, although possibly stiffeners inside or under the cloth. That from Swallowcliffe, by contrast, seems to have formed a more-or-less vertical face to a contoured, flat-topped lid. It is made up of eight short reinforcement strips rather than a single long one; these are tinned with punched decoration and were clearly intended to be seen.

The Swallowcliffe frame was attached to the fabric of the satchel by long nails (up to 12 mm in length). Rivets also survive in situ in the Buttermarket frame, showing that it too was attached to something solid, probably wood or leather. For Cuxton the evidence is inconclusive, but as no rivets were found it would appear that the frame was sewn to the cloth. The Swallowcliffe satchel was placed beside the body, not worn on it, but from the double-tongued buckle and associated rectangular mounts it was suggested that it would have been attached to a belt and worn around the waist. The Cuxton find was certainly worn in this position (although given its size it would surely have been somewhat uncomfortable in life). The single buckle SF 17 would be insufficient to attach it to a belt, and unless it was held in place by the shield-on-tongue buckle SF 137, it must have been attached in some other way, perhaps by running the belt between the bag and the flap of the lid.

The purse from Chessel Down is probably of later 6th-century date, but the Swallowcliffe find was dated by the decorative fittings to the second half of the 7th century (Speake 1989, 80). The Buttermarket find is associated with coins and a continental-type buckle with a garnet on the tongue, and the grave has been dated to 660-680/699 (Scull and Bayliss 1999, 41; Marzinzik 2003, 217; see dress accessories, buckles). The Cuxton purse, therefore, probably dates to 650-700.

Contents of the satchel

The context sheet shows that there were three iron objects in the satchel and three elsewhere in the grave. Only one of these can be securely associated with the bag (Cxt 282-D). If the

others were identified on site, not all this information has not come through to the different accession labels, and there were in any case originally only four accessions (two have since been sub-divided). Some fragments are marked (Cxt 282-B/C), but the location of the different objects in the grave is no longer clear. However, given that mineralised textiles are present on some objects from the grave, but not all, and from the sketch plan, it is likely that the satchel contained a set of tools. These include a punch with square section (SF 75, original length *c* 98 mm) and a flat strip of iron, possibly a firesteel (SF 69, length 85 mm, width 18 mm). Of these, SF 69 has a patch of closely packed parallel threads (not woven) on one side. Other finds that may be from the purse (or possibly from another bag near the side of the grave by the right knee) comprise a knife (SF 76), possible tweezers SF 195 and an awl-like tool (SF 196), the latter with the remains of a wooden handle and also with closely packed threads adhering to it.

3.6 Other purses/bags and their contents (graves 215, 262)

Grave 215

Other possible bags include one, perhaps two from grave 215 (Cxt 214), one for the shears, knife and spatulate tool (see below), and another one for the amethysts and pendant made from a glass bead fragment (see personal ornament) and possibly the comb. The various curiosities contained within bags from other sites have been discussed by Meaney (1981, passim) amongst others. Those from grave 19 at Portway comprised a Roman coin and a limpet shell (ibid).

Grave 262

The small tab-shaped mount with long rivets SF 147 from grave 262 (Cxt 261) seems to have been found with a complex of objects that were contained in one or more bags/pouches placed on the right hip. It is almost identical to a long-rivetted triangular mount from the purse found in grave 1356 on the Buttermarket site in Ipswich (Scull in prep). It is also very similar to two larger mounts from Polhill that were associated with a purse-mount/firesteel (see below) and thought to be from a pouch (Hawkes 1973, 195). Pouches with copper alloy mounts have also been found in grave 36 at Shudy Camps (Lethbridge 1936, 14) and in grave 154 at Finglesham, the latter associated with two tiny buckles (Hawkes 1973, 195). At Marina Drive, Dunstable, however, a similar triangular mount with long rivets appears to have been associated with a scabbard for a scramasax (Morris 1962, Fig. 2).

The finds from Cxt 261 were in two layers; it is not possible to correlate all the items with the sketch plan made on site, but they are summarised as far as possible below. The significance of these finds is uncertain. They may simply be a collection of personal treasures, but when considered together they suggest that the person concerned may have been a

craftsman, repairing objects, if not making them. Copper is, however, believed to have curative powers, and it is possible that the objects discussed here had an amuletic or prophylactic function, as the deceased had a dislocated right elbow, and also trauma to the right hip.

3.7 Dress accessories and Roman coin

The lower layer of finds comprise dress accessories and a coin, were thought to be in a bag. These finds are of some interest, being a collection of broken belt fittings and coins or pseudo-coins. The former comprise three components from at least two continental-style belt sets (SF 15, SF 16, SF 18, see dress accessories, continental buckles), with two domed rivet mounts (SF 140 and SF 148) and an iron disc with traces of copper (SF 129) from similar buckles or buckle plates. It is possible that SF 129 and a blank copper alloy disc (SF 127) served as symbolic coins alongside the Roman one (SF 128) that was buried in the bag. The latter dates to the early/mid-4th century but cannot be identified more precisely as it is a copy and not very clear (J Hall pers comm). Roman coins usually occur in female Saxon burials, and it is generally accepted that they had an amuletic function (Meaney 1981, 213-22; White 1982, 101; Drinkall and Foreman 1998, 290). They were often pierced for suspension, although this practice seems less common in Kent than in other parts of the country (Geake 1997, 32) and SF 128 was not modified in any way. Coins could also be used as weights, a function perhaps more suited to male burials. Either could apply to grave 262. Possibly also from this area is a small pin (SF 194; see below).

3.8 Tools

It is possible that the upper layer of objects were also in a bag, as mineralised textiles are preserved on some of them. The most readily identifiable piece is a skewer-like implement, possibly a key or tool with looped handle at one end; the other end was sketched on site as curving, but has now disintegrated. Also present are two rod-like pieces with the remains of wood at one end. These could be woolcomb teeth, but in this context they are more likely to be awls or similar tools. Two shaft fragments join, while two pointed ends are fused together. These finds are also considered below (see tools) Also present is a L-shaped object made of a tapering strip of iron that is bent to an L-shape (SF 132); it resembles a hinge but has no perforations. This is not an obvious tool, unless designed for scraping, and its function is unclear; it may simply be a piece of scrap.

3.9 Purse-mounts /strike-a-lights (firesteels)

These objects are found with and without buckles, decorated and plain, and in elongated and shorter, more triangular forms; there has, therefore, been some debate as to which can qualify as purse-mounts (summarised in Brown 1977). On the continent the elongated forms are quite

elaborate, often decorated with cloisonné work, niello or punched designs (ibid). They are mainly found male graves, and only very rarely occur with women. In England these items are generally much plainer and smaller, and they seem to have been used by both sexes (Hawkes 1973, 195; Geake 1997, 80). The iron example from the rich female grave 306 (SF 135) is quite different from the elongated narrow 6th-century examples found at Mill Hill, Deal, being of the short triangular type with high rounded terminals. This form is typical of the 7th century, but continued into the early 8th century, both on the continent and in England (Hawkes 1973, 195; Geake 1997, 79-80). This late dating is corroborated by the other finds in grave 306, such as the 'workbox'. The form of SF 135 has parallels in graves 139 and 157 at Dover (Evison 1987, Fig. 57, no.1; Fig. 62, no.7). It is also very similar to finds from grave 34 at Shudy Camps (Lethbridge 1936, 13, Fig. 1B.2; Geake 1997, Fig. 4.27) and grave 42 at Burwell (Lethbridge 1931, Figs 26, 27). Four triangular examples, three with thinner and more elongated terminals were found in graves 66, 68, 84 and 85 at Polhill (Hawkes 1973, 195; Fig. 56, nos 550, 551, 555, 556). No flint was found that might have been used with SF 135, but this absence seems to be the norm (Geake 1997, 80).

Brown argued that all these 'purse-mounts', whether plain or decorated, were used as firesteels, and presented two possible reconstructions for the way in which they were attached to the purse. Find SF 135 has extensive mineralised organics, both leather and textile, along one face which could be derived from the clothing, or represent a bag of some form. However, as in graves 42 and 83 at Burwell (Lethbridge 1931, 55; Figs 26 and 31) and in grave 157 at Dover Buckland (Evison 1997, 111), SF 135 was found together with chatelaine fragments near the left knee. This might argue against it being from an actual purse, or in a bag, and suggests that the perforation at the centre may have been for suspension rather than a missing buckle.

A second item, from the fill (Cxt 296) of the female grave 297 and listed in the catalogue as a possible tool, is placed here for want of a better alternative (Cxt 149 SF 109). It is roughly triangular in outline, with one very short side (*c* 21 mm) and two irregular longer ones (*c* 60 mm); from one of these projects a crude loop that would have allowed the object to be suspended. No parallels have been found for this object, which may simply have been a curiosity kept as an amulet. A flat strip of iron found in grave 283, possibly in the purse/satchel, may also have been a firesteel (SF 69; see above, purses, satchels and bags).

3.10 Rings

Rings were mainly used to suspend other objects from the belt or chatelaine (Evison 1987, 119), but another possible function, suggested for Portway, Andover, is that they formed the bases of bags that were closed with purse-mount. The former is more likely for Cuxton, where two rings were associated with the chatelaine fittings in grave 306. The larger (SF 50)

originally measured 70 mm in diameter, and was probably the main one from which the keys/tools discussed above were suspended. The smaller ring is now bent into an oval shape (maximum dimensions 32 x 23 mm), and has the end of a rod-like object looped round it (SF 54); it presumably had some subsidiary function on the chatelaine, although it is not impossible that it was a buckle (see dress accessories). In addition a large ring, now completely disintegrated, but originally *c* 80 mm in diameter, was found in grave fill 367 .

3.11 Shears (graves 215, 297, 306)

Two complete pairs of shears were found in Cxt 214 (SF 43) and Cxt 296 (SF 80), while what appears to be a single blade from a pair of shears was found in grave 306 (Cxt 305-D SF 90); the latter falls between the other two in size. All are from female graves and of a practical size rather than miniatures, which are more typical of the 6th century (Geake 1997, 96). Although a few earlier examples are known, including at Mill Hill, Deal, the inclusion of full-size shears in inhumation burials is a predominantly 7th-century trend (Dickinson 1973, 255; Hawkes 1973, 198; Evison 1987, 113). Most occur in graves dated to 650-*c* 725, and are often associated with 'workboxes' (Lethbridge 1931, 53-5; Figs 26-7; Evison 1987, 113; Geake 1997, 96-7).

Of the Cuxton finds, SF 80 is in reasonable condition, and measures 180 mm in length; SF 43 is in extremely poor condition, but was at least 195 mm. In each case the bow is rectangular in cross-section, but that of SF 43 is 'U'-shaped, whereas SF 80 has an expanded, almost circular bow. The former type is characteristic of early Saxon shears (Geake 1997, 96), but is also found in mid- to later 7th-century contexts, for example at Burwell and Shudy Camps (Lethbridge 1931, Fig. 22, no.8, Fig. 27, no.3; 1936, 23, Fig. 11.4). The second type is apparently more efficient and is considered typical of later shears (Geake 1997, 96); the one pair from Polhill is rather smaller than that from Cuxton (length *c* 140mm; Hawkes 1973, 198; Fig. 56, no.542). Another pair, from Kingston Down, is illustrated by Faussett (1856, pl.XV, no.20).

The shears in grave 215 were not suspended, but placed horizontally at the waist, under the left arm and apparently behind the ribs, with the loop facing outwards. It is possible that they were buried in a bag with knife SF 145 and the spatulate tool SF 58 (see below). The position and orientation (up, down?) of the shears in grave 297 is uncertain, but they appear to have been at laid on or beside the left wrist or on the left hip. These shears have good textile remains preserved on them, and textiles were also noted on the context sheet across the area of the thighs.

On the Continent shears are uncommon but occur in both male and female Frankish graves; in England they are more common but are normally found with women and girls, especially in the 7th century (Geake 1997, 96). They are conventionally associated with

weaving/cloth cutting (Evison 1987, 113), although as pointed out by Geake, other weaving equipment is fairly rare in graves of this date (not least at Cuxton), and they were probably multi-functional tools (Geake 1997, 96-7). The unusual placing of shears on the lower pelvis of a female with an unborn child in grave 110 at Dover led to the suggestion that they may sometimes have been used in midwifery (Evison 1987, 113). Those from grave 42 at Burwell were found in a box together with a cowrie shell (fertility amulet?), which may reinforce such an interpretation. Of the 29 examples considered by Geake, only six were associated with a comb; grave 215 adds another example to this list (see above), although there was not necessarily any connection between the two finds.

3.12 Tools

3.12.1 Spatulate tool/tanged implement (grave 215)

A tanged 'spatulate' implement with flat section (SF 58) was found together with knife SF 145 and very close to the shears SF 43 (see below) in the female grave 215. The blade part is complete, of uniform thickness, with parallel sides and a rounded end (length 72 mm, thickness 3 mm). It is possible that there was a wooden handle, although no trace remains.

Spatulate tools are usually between 90-155 mm in length. They have been found on a number of Saxon sites, and do not appear to be gender-specific They mainly occur in simpler grave assemblages, although a few are known from richer female burials (Geake 1997, 92-3). With one doubtful exception from an earlier context, they would appear to have been in use throughout the 7th century (possibly into the early 8th century), and some have been found with 'workboxes' (ibid). Among the Kentish parallels for SF 58 are finds from grave 148 at Dover (Evison 1987, 110; Fig. 59, no.2), graves 38, 56 and 102 at Polhill (Hawkes 1973, 199, Fig. 57, nos 573, 578; Fig. 58, no.599) and grave 8 at Kingston Down (Faussett 1856, 44, pl XV, no.24). Further examples are quoted by Evison (1987, 110) and Geake (1997, 92-3).

As summarised by Geake (1997, 92-3), the function of these objects has been the subject of some debate. It was first thought that they were used for sharpening knives, but scientific analysis suggests the metal would be too soft for this purpose. Another possibility is that they were a form of firesteel. Alternatively, as Geake suggests, that they may have been double-ended tools, as with very few exceptions there is no evidence for a handle. They are often found beside and parallel to a knife, but they can sometimes be associated with shears, as at Harford Farm, Norfolk (Geake 1997, 92); in some cases organic remains or other evidence indicate that they were probably buried together with a knife in a bag (ibid; Drinkall and Foreman 1998, 283); this may apply to grave 36 at Shudy Camps (Lethbridge 1936, 14). At Cuxton it is not impossible that all three tools were in a bag, as they were closely grouped and on the same alignment. This would argue for a craft-related function, which does not rule

out the need to maintain blades, rather than a rudimentary knife and fork set. Another possible interpretation is that they served as nail files.

3.12.2 Other tools

Apart from knives and the spatulate object discussed above there are few definite tools. The most obvious are the punch (SF 75), iron tweezers (SF 195) and a possible awl (SF 196) from Cxt 282 and a set of possible awls from Cxt 261 (SF 130); see above, purses, satchel, and bags). The skewer-like key/tool from Cxt 282 is paralleled by three similar examples in grave 65 at Dover Buckland, which were tentatively identified as awls. Such items are rare in England but more common in male graves in northern France and Belgium; they are usually pointed and can sometimes be twisted (Evison 1987, 110; Fig. 36, nos.7, 8; Geake 1997, 94). The smaller tools belong to a group of 'pointed iron tools' discussed by Geake, which can have either a square or rounded section. These tools are from contexts that date to the early 7th century or later; they invariably occur in male graves (ibid, 93-4).

3.13 Workboxes /containers (grave 306)

The two containers from grave 306, the most overtly Christian items from the cemetery, are first described and discussed individually, and then considered together in terms of their function.

3.13.1 High cylindrical workbox (needle case?)/reliquary

The high cylindrical container found by the left thigh of the female in grave 306 (SF 22) is of great importance, not only for its rarity, but for its secondary decoration. This is only the third such find from England, the others being from grave 222 at Kingston Down (Faussett 1856, 81, pl XIII, no.7), which is the closest parallel for SF 22, and from the princely chamber grave Prittlewell, Essex (Blackmore in prep). The superior quality of the metalwork suggests that, like a small number of continental finds, SF 22 is an import from the eastern Mediterranean (Wamers 1995, 146-8, 152, 154, 163). The Prittlewell container is in very poor condition and could be of English manufacture. The find from Kingston Down has not been seen by the present writer; Hawkes (1973, 197) felt that it was a European import, but Evison (1987, 110) considered it to be Anglo-Saxon. Whatever its source, SF 22 was subsequently embellished by or for its Christian owner.

In order to give a better impression of the find, some details from the catalogue are repeated and enlarged on here. The object is 67 mm high, of tapering cylindrical form (base diameter 25 mm, diameter at top 18 mm). It is made of sheet metal with a neat seam that was possibly soldered as the only rivet is at the base. The primary decoration (four bands of grouped of lines) was made by turning after the container had been assembled, as the rivet head is also incised. Three chains lead from the body to a ring, which has a fourth chain to the

lid. The lack of a fifth chain suggests that the container was suspended from this ring by a thong or girdle.

The incised subsidiary decoration is complex and carefully thought out. Rising from the band that passes under the three attachment loops for the chains, and placed between them, are three mounds on which stand crosses. Each is slightly different. Starting from the seam and working from left to right, the first is a rounded arch defined by two parallel lines. It has three crosses on it and three smaller ones under the arch; adjacent to the base on the right side is a small fish, from which extends another cross. The central mound is triangular and cross-hatched; it has only one cross at the centre. The third mound is sub-triangular, defined by two parallel lines with cross-hatching between them; again it only has one cross. The placing of the tops of the crosses was aided by a rough guide-line scratched around the container on the line of the attachment loops.

Care was also taken to ensure that these Christian symbols were visible to the wearer when sitting (or praying), as there is an inverted second row of smaller and more triangular mounds between the lowest two bands of lines. All three mounds are cross-hatched, and two have a single cross at the centre, although on that closest to the seam on the left has two pairs of arms. The third has an arrow pointing toward the base of the container.

This object belongs to a rare class of container that appears in various forms across northern Europe, mainly in Switzerland and Germany, and very occasionally in France. The following is by no means an exhaustive survey of these finds, but gives an impression of their range and date. Most are of copper alloy, but some are of sheet iron or of bone or ivory. The latter include finds from Dover Buckland and Liège, Belgium (Evison 1987, text Fig..21b, 108-110).

Two main types of container can be defined (Wamers 1995, 150-1). The first is cast, with a conical lid and ornately decorated body; finds include the bone example from Liège and metal examples from Arçon, Burgundy and St-Aubin, Switzerland (Rollier 1911; pl.XXV, 1), and another very similar find, unprovenanced but allegedly from a Merovingian grave in the Niederrhein (Wamers 1995; 1996, 1000-1001); the type was dated by Wamers to the later 7th century (Wamers 1995, 148; 1996, 1001). The second type is made of sheet metal and has a flat-topped lid. In addition to Cuxton, findspots include Vermand, France, and Frankfurt and Krefeld Gellep in Germany. Most of these containers were suspended by only one chain, but that from grave 222 at Kingston Down was attached by two chains; the same may apply to the finds from Liège and Krefeld Gellep. The Cuxton find, however, is the only one found in the literature with a lid that fits inside the cylinder rather than over the top, and which has three suspension chains. It is also stands out from most of the other finds in that it is not completely cylindrical but tapers in to the top.

These Merovingian and Anglo-Saxon containers are descended from late Roman and Byzantine pectoral amulets, and, more specifically, containers for medical or toilet instruments, for which numerous parallels are quoted by Wamers (1995, 151-4, Fig. 5; 1996, 1001). The earliest of the flat-topped containers noted above is that from Vermand, which is from a context dated to the late Roman period (S Burnell pers comm; Eck 1891, 208, pl XIV, 5). The engraving is drawn in 3-dimensional form, and so it is hard to be certain of the exact dimensions, but the diameter is 30 mm and the height is *c* 45 mm. There are three pairs of horizontal lines incised at intervals around the body and four concentric rings on the lid, which has a chain attached to a loop at the centre. There is no sign of any further decoration, nor of a loop on the body to which the chain was attached.

The find from at Krefeld Gellep (grave 1962F) was associated with a group of 'female' grave goods that were dated to *c* 600 (Pirling 1974, 89; Taf 74, 13; Taf 114, 2). The container, which was associated with three iron ?keys, is of sheet iron (Eisenblech), with a height of 65 mm and diameter of 25 mm. It has a horizontal loop placed just below the rim of the lid, which holds the remains of a hinge or part of the chain(s) that attached it to a chatelaine. The lid has a bronze loop for a chain, but none remains in situ. A smaller example made of iron was found in grave 29 at Sissach, Switzerland (height 42mm); there was no trace of any contents.

In profile, the closest continental parallel for the Cuxton find was found beneath the head of a young girl in the earliest church under Frankfurt cathedral, a very rich burial that was dated to *c* 690 (Hampel 1994, 167; Abb 71, 119, 120; Wamers 1995, 150; 1996, 1000-1001, no 7). Like the Cuxton find, this is a tapering cylinder with base diameter of 33 mm, rim diameter of 27 mm, and height of 73 mm. It was made of bronze sheet with a coating of tin that seems to have been badly cut, so that although the two sides join at the base, there is a gap towards the rim. The lid sits over the rim, and has a loop at the centre from which a chain secures it to a horizontal loop in the wall.

3.13.2 Squat cylindrical workbox/reliquary

In addition to the container described above, a larger, squatter one, was found by the left knee of the female in grave 306 (SF 21/SF 141); this too is remarkable for its decoration. Containers of this form, made of sheet metal with pull-off lids that are usually on a chain, are generally described as 'workboxes' and for convenience the accepted term is retained here. Several surveys have been made of the distribution and use of these workboxes (Leeds 1936, 99-102; Morris 1962, 39; Hawkes 1973; Meaney 1981, 181-189; Evison 1987; Geake 1997, 34). They are much more common than the tall cylindrical containers and have been found on over 50 English sites, notably in Yorkshire and Kent. The latter include Polhill (Hawkes 1973, 196-8; Fig..53, no.489), Finglesham and Dover Buckland (Evison 1987, 106-8, 269;

text Fig. 20; Figs 48, 117); the Cuxton find would seem to be only the second from West Kent. Continental examples are also known, although less common and mainly different in form (Hawkes 1973, 197; Evison 1987, 107; Wamers 1995). Hawkes (1973, 197) suggested that the tradton was brought to England in the 7th century as a result of 'trade and the Roman Mission from Italy'.

The English finds are generally much the same in terms of their basic construction and dimensions. All are of copper alloy with a cylindrical body, a separate disc soldered on to form the base and a lid made of a second disc, with means of attaching the lid to the body and the whole thing to the belt. The Cuxton example is 57-59 mm in diameter and 47 mm in height excluding the lid and base; these are both convex and bring the total height to 64 mm. The container thus conforms exactly to the standard dimensions of 40-70 mm in diameter (usually 50-60 m) with a height of 40-72 mm (usually 60-70 mm; Geake 1997, 34). The main differences in the form of the English workboxes are in the nature of the lid and the attachment plate. Some, including that from Dover (Evison 1987, text Fig. 20a), comprise two halves that overlap at the centre of the body. The majority have more conventional proportions, but vary in the means by which the lid was closed: push/pull, or hinged (sometimes with a locking mechanism), like that from Sibertswold grave 60 (Evison 1987, text Fig. 20c). Some boxes also have a projecting plate for the suspension chain, for example those from Sibertswold grave 60 (ibid), grave 42 at Burwell (Lethbridge 1931, 55-7, pl.III) and North Leigh, Oxon (MacGregor and Bolick 1993, 232. The different examples vary greatly in their detail and decoration. The latter can be repoussé (eg Polhill and Burwell), incised, or punched; SF 21 has a combination of the latter two techniques. A number of examples have decorative designs that suggest Christian connections (Hawkes 1973, 197; Meaney 1981, 186-189; Evison 1987, 108), and although this symbolism has been debated (Geake 1997, 34), this is undeniably the case for SF 21/SF 141 in its present form; the original container may, however, have been customised. Due to the importance of the find, the details of the catalogue are repeated and expanded here.

The Cuxton workbox is compressed to an oval shape, but was originally cylindrical; it has five main components. The wall is made of a single piece of sheet metal with single rivets at the top and bottom of the overlapping seam. There is a third rivet hole at the top which was unused (or removed during a repair) because it would have got in the way of the hinge for the lid. The decoration, carried out before the sheet was rolled into shape, comprises four rows of closely spaced punched dots at intervals of *c* 10mm around the body. Attached to the body by two rivets on either side is a folded rectangular sheet with allover ring-and-dot decoration. This formed the hinge for the attachment plate, which was held in place by an iron axis pin; the same technique is seen on an incomplete find from Sibertswold grave 60 (Faussett 1865, 112; pl XIII, 8; Evison 1987, text Fig. 20c). Above this is the hinge for the lid, made in the

same way and fastened by two rivets. This may be a repair, as it is slightly skewed and undecorated. Opposing this is a small catch for the lid, made in same way with a central cut-out for the equivalent fitting on the lid (now missing). This catch is decorated along the lower edge with four ring-and-dot motifs, and is held in place by two rivets with ring-and-dot motifs on the heads. Adjacent to the catch is a small ring, which would have held the pin to secure the catch, again as at Sibertswold. The lid and base both have a small, slightly raised boss at the centre, around which is a crude cross/quatrefoil encircled by four concentric rings of punched, repoussé dots. The rim of the lid, which fitted outside, not inside the container, also has two rows of punched dots so as not to break the design, which is similar to that on the 'workbox ' from grave 121 at Burwell (Lethbridge 1931, 67-70, Fig. 36).

In these details the Cuxton find is similar to numerous others, including that from grave II at Castledyke (Drinkall and Foreman 1998, 285; Fig. 121, no.2). It differs, however, in the nature and quality of the hinged attachment plate, which is far superior to that on the workbox from Sibertswold grave 60. The plate is hinged at the base, and has zoomorphic decoration of profiled animal heads with ring-and-dot eyes on either side. This can be compared with the zoomorphic decoration found on the end plates of 6th- and 7th-century combs (cf MacGregor 1985, 92; Figs 49g, 49h; Figs 51b, 51c) and on contemporary buckles. At the centre, on one side only, is a centrally placed triangular arrangement of ring-and-dot motifs, below which and lower down are single ring-and-dot motifs. The same decoration occurs on the terminal of the suspension loop. The most striking aspect of this piece is the fact that it has secondarily incised decoration. This is extremely faint (needs a very good photo), and is mainly confined to one side. On both faces the animal heads are segregated by curvilinear borders with cross-hatched decoration, and it would appear that they have been converted to fish and/or prophets/saints by the addition of tails/necks and beards and mouths. Within the newly defined central field is a Latin cross with expanded arms (cf the silver cross from grave 9 at Chartham (Faussett 1856, pl IX, no.17), standing on a mound. On either side of this, the single ring-and-dot motifs have been used as the centres of two small crosses that are set diagonally to follow the contour of the hill. Theses crosses are the most explicitly Christian of all those noted on workboxes, yet, as on SF 22, it is so faint that it may have been known only to the owner. In this respect the Cuxton finds appear to be unique and they are of considerable importance, although microscopic examination of other finds might reveal further examples. Modification of the Dover workbox was also noted, but this was confined to functional repairs (Evison 1987, 106).

3.13.3 Dating and use of 'workboxes'

Containers such as those described above are generally associated with women and juveniles; the possible cylindrical example from Prittlewell is exceptional in being from a male grave. It

is clear that the use of cylindrical containers in graves, especially the tall variety, is long-lived on the Continent, and examples are known from the late 6th/early 7th-century contexts. In addition to the tall example from Krefeld Gellep (see above), a squatter example from Lauffen, on the Neckar (Kr Heilbronn, Germany) is from a female grave that can be dated by a gold coin(?) to the period 580-650. Most, however, date to the 7th century, if not the second half of the 7th century, and those with a lid at the rim seem to be later in date than those which fasten at the centre (Wamers 1995, 148; 1996, 1000-1) and they are generally associated with Christianity, especially when they bear crosses. The English 'workboxes' seem to be both larger and later than their continental counterparts and presumably represent the transfer of the tradition through increased traffic following the growth of the church (Wamers 1995, 149); they are considered to be a type fossil for the period *c* 650/675-725 (Hawkes 1973, 196-8; Geake 1997, 14, 35). This fits well with the dating of grave 306 and there is no reason to suppose that the two containers discussed above were old when buried. Although probably a status symbol (Evison 1987, 108), it has been noted that such containers are generally found in graves that lack non-functional objects such as jewellery, and that they never occur with cabochon pendants, although the latter do continue to appear until *c* 690 (Geake 1997, 35). Grave 306 is of interest, therefore, in that it contained not only a small cabochon pendant (albeit of glass), but also other items of contemporary jewellery.

It is generally thought that such containers were suspended from the waist, but some were worn around the neck (Wamers 1995, 148, 150-1; 1996, 1000). In England, the debate regarding their function has tended to class all containers together, regardless of their shape, and has mainly centred on the contents (where these survive) and whether the container was designed to be frequently opened or not. Hawkes suggested that the former could be considered domestic, functional objects, used for storing personal possessions or for sewing equipment, while the latter, mainly found on the Continent, could have contained pagan amulets or 'Christian' relics (Hawkes 1973, 197; Geake 1997, 35). Meaney (1981, 181) questioned Hawkes' interpretation, and it is clear that some of the English finds, such as those from Sibertswold and Cuxton, were provided with locking mechanisms, while that from Dover started out as a workbox that could be easily opened, but was rivetted shut at the time of burial (Evison 1987, 106). The taller, continental-style container SF 22, by contrast, could open quite easily. The continental finds have been discussed by Wamers, who proposed different functions depending on the basic shape (Wamers 1995, 155-66).

Both of the Cuxton containers were empty, but several other squat cylindrical workboxes contained threads, scraps of cloth and in some cases pins or needles (Hawkes 1973, 196-7; Meaney 1981, 184-188; Evison 1987, 106). The workbox from Polhill contained a splinter of wood wrapped in fibrous matter and plant matter, probably a moss, while that from Sibertswold contained woollen thread, fragments of braid and seed-like objects that may

be tubers (Faussett 1856, 112, pl XIII, no.8; Meaney 1981, 61-2; 148). That from Kingston Down was filled with an odourless 'rotten dark-coloured substance' (Faussett 1856, 57-8; pl XIII, no.11). Other boxes have contained seeds, garnet, calcite and other items (ibid, 148). A 'workbox' from Lussy (canton Vaud, Switzerland), was found to contain a mass of fine threads tied in bundles (Moosbrugger-Leu 1971, 232).

Of the tall cylindrical containers, that from grave 222 at Kingston Down was empty (Faussett 1856, pl XIII, no.7), but the same grave also contained a cylinder in which were two needles (ibid, 81). The Frankfurt container was empty, but was initially interpreted as an amulet capsule (Hampel 1994, 167). The find from Arçon, which was suspended on a chain of 1.2 m, was interpreted as a perfume bottle (Rollier 1911, 158-9), and Evison also suggested that the bone examples may have been used for personal requisites, as small flasks were used in the Roman period (Evison 1987, 109). Some continental containers have been found to contain glass, metal or organic matter (Hampel 1994, 167). Another was filled with a piece of sponge from the Mediterranean that was thought to have been soaked in an aromatic tincture, or with smelling salts (Wamers 1995, 159-163; 1996, 1000).

To sum up, a range of possible functions has been put forward for these items. The scraps of cloth and thread found in the squat 'workboxes' may have been for sewing and mending, but may have demonstrate the weaving and housewifely skills of the owner; the container itself might also have been symbolic of womanhood, though the act of weaving has been considered a magical craft (Meaney 1981, 184-5). Meaney's favoured interpretation was that the containers were symbolic 'first aid boxes' that held relics, charms or amulets associated with the Christian faith and believed to have curative powers (ibid, 186-188). Wamers felt that this form of container is related to the amuletic/reliquary capsules of the 6th and 7th centuries, which tend to be smaller in size, and further distinguished between primary and secondary relics (1995, 154-6, 164). He suggested that the containers were used as Christian objects, but that they also represent a new type of amulet that continued the former pagan traditions of the new converts (Wamers 1995, 156). The high cylindrical containers however, do not relate easily to the category of amuletic containers, and they are more likely to have had a secular function such as containers for cosmetic or medical instruments, or for other feminine requisites such as perfume or substances connected with healing

Whether these distinctions apply to the two containers from Cuxton is unclear. Whatever their function, however, both the objects themselves and their contents were considered precious, and these luxury items suggest both devotion to the Christian faith and connections with the world beyond Kent.

4 ITEMS OF PERSONAL ORNAMENT

A total of 61 items were classified as potential items of personal ornament or fragments thereof (60 from the 1998 excavation, and one from 1997). These were found in ten features, eight of which are grave cuts; of these two are definitely female and one is definitely male; as shown in Table 3, most finds were concentrated in graves 215 and 306. Beads are the most common category, and of these the majority are of glass (see Table 4); pendants and silver rings are less frequent, and only one bracelet is present. Other items such as the bone chatelaine fittings could be classed as ornamental, but are considered together with personal items and tools. The jewellery is discussed below by category, and then briefly considered together.

Table 3: The distribution of the jewellery and possible fragments of jewellery

Key to sex. I: infant; A: adult; AF: adult female; AM: adult male; U: unknown
Key to pendants. Comp: composite

Grave	Sex	Age	Beads	Pend-ants	Silver rings	Brace-let	Other	Location
Cxt 41	--		1					Top of an Iron Age pit (1997)
Cxt 168	I	4-6	2					Just to south of bones
Cxt 186	I		1					NW end at base of cut Cxt 188
Cxt 193	AM	33-45	2					Beneath head; L chest
Cxt 210	A	25-35	3					Neck
Cxt 214.2	AF	17-30	31					R shoulder
Cxt 214.2	AF	17-30			1			R shoulder
Cxt 214.2	AF	17-30	2					Left hip
Cxt 214.2	AF	17-30		1 comp				Behind L pelvis
Cxt 296	AF	25-40	1					Neck
Cxt 302	A	46	1					Right ear?
Cxt 305	AF	17-25	1					Neck??
Cxt 305	AF	17-25		1 gold 1 comp				Neck??
Cxt 305-A	AF	17-25		1 bulla				Neck
Cxt 305-A	AF	17-25			4			Neck
Cxt 305-A	AF	17-25					1 loose garnet	Neck
Cxt 305		17-25					1 mount	Unknown
Cxt 305-B	AF	17-25				1		L upper arm
Cxt 305	AF	17-25					1 mount/ counter	Neck/hip??
Cxt 357	U		3					SW corner
Total			**48**	**4**	**5**	**1**	**3**	

4.1 Beads

4.1.1 Amber bead (grave 187)

Amber beads are most typical of the mid to late 6th century, when they often occur in long strings (Huggett 1988, 64; Geake 1997, 47). They are more common in the Saxon and Anglian parts of the country, but nonetheless occur in some quantity at specific sites in East

Kent (Huggett 1988, 64, 76; Fig. 1), such as Mill Hill, Deal, Dover Buckland (Evison 1987, 57-60) and Saltwood (Hirst 2006). The amber was probably imported from the Baltic, but English amber could also have been used (Huggett 1988, 64, 78). Amber beads are generally rare in 7th-century burials, when they usually occur singly and in children's graves, and at Dover Buckland none were found in association with amethyst beads. This probably reflects the decline in supplies from the Baltic, but also suggests that their significance may have shifted from being indicators of status to amulets valued for other properties (Dickinson 1973, 252; Meaney 1981, 67-71; Geake 1997, 12, 47). Among the latest examples is a bead from a late 7th-century grave at Dunstable, which also contained a workbox (Morris 1962; Geake 1997, 47). The one amber bead from Cuxton is from a sieved sample from an infant burial (Cxt 188 SF 26); of annular form and average size (*c* 20 mm in diameter), it is complete, but irregular and/worn, and the surface is now dull and opaque. As there were no other finds in the feature its date cannot be ascertained.

Amethyst beads (grave 215)

Two large amethyst beads were found at the left hip in the female grave 215 (SF 27, SF 191) together with a broken pendant containing a decorated glass mount (SF 41, see below), and it is likely that they were buried in a bag that has not survived (see also personal finds, purses). Like most other examples from England, the beads are drop-shaped, with skilfully drilled longitudinal perforations; they are lentoid, rather than rounded in section, with sharp ridges down each side (lengths 23 mm and 28 mm, maximum width 12-13 mm). In size they fall between the larger and smaller examples from Breach Down, which seem to be more rounded in form (Akerman 1855, pl V), and are similar to the larger almond-shaped beads from grave 75 at Dover Buckland (Evison 1987, Fig. 78, 75.1b).

The source of the amethyst used for these beads is not known. In an early study, it was suggested that the 18 graduated beads from Breach Down could be from Germany or Transylvania (Akerman 1855, 10; Roach Smith 1856, xxvi). Now, however, it is held that the majority were imported from the eastern Mediterranean, or possibly from India via the Mediterranean; the main concentration in England is in Kent (Meaney 1981, 75-6; Huggett 1988, 66, 76, Fig. 2; Geake 1997, 12). The trade is thought to have started *c* 590, and probably ceased *c* 650 due to political problems in the East (Geake 1997, 12), and so amethyst beads are considered a type fossil of the 7th century (Welch 1999, 1). It has been suggested that they should not appear in burials after 675 (Geake 1997, 12). Evison, however, has demonstrated their use in late 7th- or even early 8th-century burials (Evison 1987, 60) and Geake also favours a generally late date for their use, ie after trade in amethysts ceased (Geake 1997, 41). The full date range, therefore, is *c* 590-*c* 720, with the main period of use in the later 7th century. Amethyst beads are found with both women and children and, like

amber, were probably used as amulets (Meaney 1981, 77). Although some longer strings occur, most amethyst beads from burial contexts occur singly or in pairs (Huggett 1988, 66-8), as here. Other pairs have been found at Dover Buckland (Evison 1987, 60; Table VIII), Saltwood (two beads in grave 156), and Watts Avenue, Rochester (Payne 1895, lv: two beads found in grave 2) amongst other Kentish sites. The half bead from Polhill (Hawkes 1973, 192, Fig. 55, no.518) is much larger and more rounded than those from Cuxton.

Chalk/paste bead (context Cxt 41)

A small oval bead was found at the top of an Iron Age pit during the 1997 evaluation of the site; it is thought to have washed in (Cxt 41 SF 152). It is not clear whether this is of natural chalk or a paste made of chalk-like material, but from visual inspection the latter seems likely, and was found to be the case at Dover (Evison 1987, 60) and Mill Hill, Deal. Either way, the bead was probably made in Kent.

Glass beads (see Tables 4 and 5 for contexts)

The glass finds form a small but important assemblage of 43 beads from seven graves and one other context (Cxt 357). As shown in Tables 1 and 2, most were found in grave 215, together with a silver ring. Graves 212 and 358 each contained three beads, while graves 169 and 372 had two beads; the others all had single beads. It is not known in what order the beads were found and if any colour sequences were originally present. Graves 215 and 306 are both identifiable by their finds assemblages as females of higher status than the others. Preservation is generally good; only two beads are incomplete (Cxt 193 SF 30 , Cxt 214 SF 171), while the two from Cxt 193 are burnt (SF 31). Almost all the beads are monochrome; most are small or very small, and a few are miniatures. There are no gold-in-glass beads, and only one is decorated (Cxt 302 SF 32), but part of a bead with fine twist decoration was reused in a pendant, while a loose mount is of blue and yellow marbled glass (see below, pendants). On the whole the beads would appear to be of 7th-century date (possibly 600-650). Within the context of West Kent, plain glass beads and a few polychrome beads were reported in Anglo-Saxon graves at Watts Hill, Rochester (Payne 1895, lv; 1897, lvi), while others are known from Polhill, in the Darenth valley (Hawkes 1973).

Table 4: The broad distribution of all the beads (to the nearest colour)

Key to grave/material: Suffix A: amber; AQ: amethyst quartz; C: chalk; G: glass; S: shell
Key to sex: I: infant; A: adult; AF: adult female; AM: adult male
Key to glass colours: R: red; B: blue; T: turquoise; G: green; P: polychrome; W: white; Y: yellow

Grave/ material	**Sex**	**Total**	**B**	**T**	**G**	**R**	**Y**	**W**	**P**	**Location**
Cxt 41 C	--	1								Top of an Iron Age

Grave/ material	Sex	Total	B	T	G	R	Y	W	P	Location
										pit (1997)
Cxt 168 G	I	2		1		1				Just to south of bones
Cxt 186/188 A	I	1								NW end at base of cut
Cxt 193 G	AM	2			2					Beneath head; L chest
Cxt 210 G	A	3					1	2		Neck
Cxt 214.5 AQ	AF	2								Left hip
Cxt 214.2 G	AF	30	10		4	10	4	1		R shoulder
Cxt 214.2 S	AF	1								R shoulder
Cxt 296 G	AF	1			1					Neck
Cxt 302 G	A	1							R/G	Right ear?
Cxt 305-A G	AF	1	1							Neck??
Cxt 357 G	??	3					3			SW corner
Total		**48**	**11**	**1**	**7**	**12**	**8**	**3**	**1**	

The beads were classified according to the typology defined for Dover Buckland (shapes only, not letter coding; see Evison 1987, 61 and text Fig. 11), and also broadly fits that used for Castledyke (Drinkall and Foreman 1998, Fig. 8); reference is also made to Guido's typology where relevant (Guido 1999, Fig. 1). The manufacture of beads by twisting the glass around a rod has been noted elsewhere (Dickinson 1973, 252-3), but there is some lack of clarity in the literature regarding the use of the terms coiled (Evison 1987, text Fig. 11, B63) and wound (Guido 1999, 49; Fig. 1). From Guido's illustration the former would appear to be even and the latter irregular, but in fact many of the beads with smooth surfaces were wound (ibid, 50). This was not consistently noted for the Cuxton catalogue, but the term wound is used here and in the catalogue for beads where the surface is irregular and the spun construction of the bead is evident; these beads were probably pinched off a long rod rather than cut. The dimensions noted below and recorded in the catalogue are generally the maximum ones; where a bead, or the perforation, is distinctly oval, the mean value of the two dimensions is listed. The beads are summarised below by translucency, colour, and shape (see Table 5).

Monochrome beads (overview)

Monochrome beads were used throughout the Saxon period, from the 5th to the 8th centuries, and in themselves are hard to date precisely. Those found in 7th-century cemeteries tend to be small and are mainly green or blue, followed by yellow and red (Geake 1997, 43). Here, as

shown in Tables 4 and 5, the numbers are fairly equal; brick/terracotta red and blue are the most common colours, followed by green and yellow; white and turquoise stand out as the most unusual on the site. The beads fall into two groups, translucent (20 examples) and opaque (23 examples). Almost all the beads appear opaque when viewed in natural light, viewed through a double thickness of glass, or when the inside of the perforation was encrusted with soil. Translucency, therefore, was gauged by holding a bead to a lamp and determining whether light showed through a single thickness.

Table 5: The distribution of the different bead forms (to the nearest colour)

Form	**B**	**G**	**R**	**Y**	**W**	**P**	**Total**
Annular (central hole wider than thickness)		2					2
Coiled annular	1			1			2
Barrel		1			1		2
Barrel, coiled/wound	1						1
Cylindrical, ???					1		1
Cylindrical, short straight-sided	3	1	4	2	1		11
Cylindrical, short, thick, straight-sided						1	1
Cylindrical, short rounded	1	3	6	1	1		12
Cylindrical, short wound	2			1			3
Cylindrical, pentagonal			1				1
Disc (central hole same as or narrower than thickness)				2			2
Disc, wound	2			1			3
Melon	1						1
Spiral	1						1
Total	**12**	**7**	**11**	**8**	**3**	**1**	**42**

The translucent beads comprise all those of green and blue glass (total 19 beads); these occur in both lighter and darker shades and several have streaks of red glass (eg Cxt 214 SF 173 green; SF 174- SF 177 blue). Also included with the blue beads is a spiral bead of turquoise glass from Cxt 168. Translucent beads have been discussed by Guido (1999, 11-16; 41), who notes that some could have been made of recycled Roman bottle glass.

The opaque beads comprise all the red (or terracotta-coloured), yellow, white and polychrome beads (total 23 examples). Those listed as yellow include two with black streaks (Cxt 214 SF 178, SF 180) and one that is closer to lime green (Cxt 214 SF 55); while those listed as white include one that is a very pale grey-blue (Cxt 210 SF 155), a trait also noted elsewhere (Guido 1999, 31). A few simple terracotta-coloured beads are known from 5th-century contexts; they are most common in the 6th century, but continue into the 8th century. They appear to be particularly common in Kent (Guido 1999, 60-1), and were among the most common at Dover Buckland, where they were dated to after 575 (Evison 1987, 61).

Yellow beads occur occasionally in England from the 4th century onwards; most are from later 5th- and 6th-century contexts, but they continued until the 7th century; the earlier finds are probably imports (Guido 1999, 36-8). This is the most common colour at Dover Buckland, again dated to after 575 (Evison 1987, 62). White beads appear to date to the 7th century (possibly a little earlier and/or later) and are thought to have been imported from the Low Countries (Guido 1999, 31). Wound beads, especially those classed as truncated bicones, are considered typical of the 7th century (Dickinson 1973, 252-3).

In terms of size, most of the beads are fairly uniform, but those in yellow and some of those in blue are considerably smaller. One (Cxt 357 SF 153, diameter 4 mm) could perhaps be classed as a miniature (Dickinson 1973, 253) and some of the larger beads are only 2-3 mm in length. Most of the blue beads and some of the yellow ones are obviously wound, and some of those in the dark blue-green glass are clearly made of a thread 1 mm across (see above). Similar beads of turquoise glass, described as truncated bicones, were found in grave 39 at Chamberlain's Barn, Beds (Hyslop 1963, 181; Fig. 13, c, g). At Standlake Dickinson (1973, 252-3) considered this form typical of the 7th century. Other beads have a smooth surface, but were clearly twisted during the manufacturing process. Drawn beads are known from Mill Hill and Dover (Evison 1987, 62), but the only possible example here is the spiralled rod-like bead from Cxt 168.

Annular beads

The two green annular beads are both from grave 192; one is complete 23 mm in diameter (Cxt 193 SF 31); while the other is burnt and fragmented (SF 30). The wound annular beads are much smaller, being *c* 6-7 mm in diameter (length 2-3 mm). The yellow example (Cxt 214 SF 178) is closely related to the disc-shaped beads, while the dark blue bead Cxt 214 SF 172, although squat, could just be classed as a truncated bicone.

Barrel-shaped beads

There are two barrel-shaped beads with smoothed surfaces, one of white (Cxt 210 SF 28), the other of green glass with red streaks (Cxt 214 SF 165); there is also a wound bead of dark blue-green glass (Cxt 214 SF 38); all three are of fairly equal size (diameter 10 mm, length 8 mm).

Short cylindrical beads

This is by far the most common type, with 29 beads in total, of which eleven are terracotta-coloured. Most are smooth-sided and quite homogenous, the exceptions being the short thick polychrome bead discussed below, and three wound beads. Of the remainder, beads with a slightly rounded profile are slightly more common than the straight-sided form. Six of these

are *c* 7 mm in diameter, while five are between 8-9 mm in diameter; most have a length of 5-6 mm. Of the straight-sided examples, the four smaller beads are 7 mm in diameter; three have length of 5 mm, while one white example is 7 mm (Cxt 214 SF 164). Five beads range between 8-9 mm in diameter and between 4-6 mm in length, while the largest, and squattest is 9 mm in diameter and 5 mm in length (Cxt 214 SF 163). This bead almost qualifies as a disc as there is little difference between the height and the diameter of the central perforation. Guido notes that green and red beads of this type are particularly common in Kent in the 6th and 7th centuries and suggests that some of the green ones may have been imported (Guido 1999, 44; 60-1). At Dover Buckland it was thought that the straight-sided type was dated to between 575-625, and that the more rounded form was in use between 675-750 (Evison 1987, 63). This would leave *c* 50 years without bead production or importation, which seems unlikely, and as the two occur together at Cuxton, they must have been available elsewhere at the same time. On Evison's dating, a date of *c* 650 seems likely for the beads buried in grave 215.

Cylindrical bead with polygonal section

A single terracotta-coloured pentagonal bead was found in grave 215 (SF 161). This form is much less common than the above, but of the same general 6th- to 7th-century date as the short cylinders; it mainly occurs in Kent (Guido 1999, 61).

Disc-shaped beads

These beads are all very small; they include two with smooth sides (diameter 5-6 mm, height *c* 3 mm, and three that are wound (diameter 6 mm, height 3-4 mm). Of the latter, Cxt 214 SF 175 could just be classed as a truncated bicone.

Melon bead

Melon beads have pre-Roman origins, and the tradition was long-lived, continuing into the late 7th century and possibly later (Guido 1999, 14, 44). Those made in the Roman period are generally blue, green or turquoise in colour and fairly large in size with pronounced ribs. Where such beads occur in Saxon burials they are probably reused Roman finds (Geake 1997, 48). The Germanic melon beads are usually yellow and translucent (ibid). The Saxon examples tend to be smaller, less regular and different in shape, and only blue or green examples are known from Conversion period graves in England (Geake 1997, 48). They are more common in East Anglia than in Kent, and insular production has been suggested (Guido 1999, 44). At Mill Hill, Deal, both yellow and blue melon beads were found; these were thought to be from the same manufacturing centre as the blue and yellow disc beads, although whether they were imports or English was not discussed.

Melon beads are found with women, or, in some cases, with children; most were worn, but some occur separately in bags or perhaps on chatelaines, and so could have had a secondary function as amulets (Geake 1997, 48). Geake's survey concentrates on distribution and date rather than the finer details of size and number of ribs/lobes, but Guido distinguishes between gadrooned, nicked and lobed forms (Guido 1999, 44). The Cuxton example (Cxt 305 SF 34), which is of translucent blue-green glass, is small and wider than it is tall with seven unequally sized lobes. It differs in size and form from the Germanic-style melon beads that were found at Bergh Apton (Green and Rogerson 1978), and is also smaller than those from Dover Buckland (Evison 1987, 62), but similar to those from Chamberlain's Barn, Leighton Buzzard (Hyslop 1963, Figs 23, 17). Bead SF 34 is also one of the latest of those from a burial context (both nationally and in the context of the site itself), being from the rich female burial Cxt 305, which is dated by the other finds (including a workbox; see personal items) to the later 7th century. The same association of a melon bead with a workbox and a bulla pendant has been noted at Garton cemetery II (Geake 1997, 48). The location of the bead in the grave is not known, but it is most likely to have been at the neck.

Spiral bead

There is one example of an evenly coiled, thin-walled rod-like spiral of turquoise blue glass (Cxt 168 SF 36); this is much neater in form than Evison's illustration of a coiled cylinder bead (Evison 1987, text Fig. 11: type B63). Possibly the only example of a drawn bead from the site, this is 4 mm in diameter; it now measures 10 mm, but was probably longer as both ends are broken. The form is not discussed by Guido in her chapters on blue and green glass, which suggests that the type is rare. A potential parallel is bead form A7 at West Heslerton, although that from grave 141 is in black glass and described as spirally wound (Haughton and Powlesland 1999, 241).

Polychrome beads

One large drum-shaped bead, the only find from grave 303 (SF 32), is of red and green/black glass, the two colours more or less in different halves, but slightly marbled. There is an incised (?combed) zig-zag pattern around the side; if this had an inlay it is now missing. Although found by the right ear, it is an unlikely candidate for an earring as it is the largest cylindrical bead from the site (diam 20 mm, length 12 mm). Out of 124 polychrome beads studied by Geake, only three fall into this group (Geake 1997, 43); they include one from Didcot Power Station and one from Dover Buckland (ibid, Fig. 4.8). The bead fragment in pendant Cxt 214 SF 41 has fine-twist decoration (see below).

Polychrome beads seem to be mainly of 6th-century date, and are rarer in 7th-century burials, but their use continued nonetheless until the late 7th or early 8th century. Cuxton fits

with this picture. Whether the bead from Cxt 302 can be used to date this grave to the 6th century, or whether it was an heirloom in a later burial must remain conjecture.

4.1.2 Shell bead (grave 215)

A small cowrie bead was found together with the glass beads in grave 215. Cowries are rare in settlement contexts, but not uncommon in Anglo-Saxon graves (Meaney 1981, 123-28; Huggett 1988, 72; Geake 1997, 62, Fig. 4.20). They can occur as complete shells or as small beads, the latter often in association with glass beads and pendants, and sometimes with silver rings, as at Marina Drive, Dunstable (Morris 1962, figs 4, 5). Cowrie beads were most popular in the 7th century, and are found in graves that are probably Christian rather than pagan (Meaney 1981, 123-4; Huggett 1988, 72). The main distribution is in Kent (including Finglesham and Dover Buckland) and in the East Midlands (Huggett 1988, 72), while two are known from Lundenwic. Most of the large cowries found on English sites are of *Cypraea pantherina* and imported from the Red Sea or India (Lethbridge 1936, 17; Meaney 1981, 125; Huggett 1988, 72; Hutchinson 1989, 96). Cowries are, however, found closer to England (*Cypraea europa*), and may have been used for the small beads (Huggett 1988, 720. The fact that the complete shells mainly occur with younger women and children, frequently buried in containers placed at the waist or feet, and sometimes together with other special objects (Meaney 1981, 28; 30; 32) has led to their interpretation as fertility amulets (Lethbridge 1936, 17; 24; 31; Meaney 1981, 272). The issue is, however, debated and their meaning may have varied for different ethnic groups (Meaney 1981, 123-8). It is possible, but by no means certain, that cowrie beads had the same symbolic meaning and were used by those who were unable to obtain a complete shell. The fact that the one cowrie bead found at Cuxton was in the rich female grave 215 lends additional significance to its presence and to the status of this woman. Small cowrie beads were found in eight graves at Dover Buckland (Evison 1987, 60; Table VIII), but none were found at Mill Hill, Deal.

4.2 Copper alloy bracelet (grave 306)

The copper alloy bracelet SF 19 from the rich female burial 306 is basically an elastic wire loop with slipknot fastening. It is large in size and was worn not at the wrist but on the upper arm (left side). It is very like the smaller examples found in graves 62, 73 and 78 at Mill Hill, Deal.

Bracelets are not common in Anglo-Saxon burials, but six were found at Dover Buckland (Evison 1987, 85) and nine examples of varying form were included in Geake's survey of 7th- to 8th-century burials (Geake 1997, 55-6, Fig. 4.14). At Dover they had a long date range, from 525-675 (Evison 1987, 85), and others have also pointed to a mainly 5th- and 6th-century date for their use. In Frankish and Alamannic regions, however, they seem to become more popular in the 7th century, probably due to increased contact with the

Mediterranean world, and the securely datable English examples are known from later 7th-century contexts (Geake 1997, 56). Grave 306 adds further weight to this dating, as it certainly makes more sense for the large bracelet SF 19 to be contemporary with the (smaller but otherwise identical) silver rings used in the necklace than to be an heirloom from the 6th century. The find also endorses Geake's view that bracelets tend to occur in the richer female graves (ibid).

4.3 Finger rings

No definite finger rings were found, although the smaller silver rings could have been used as such.

4.4 Pendants of gold, silver, copper alloy and glass (graves 215, 306)

Four pendants were found, of which three are from the rich female in grave 306, which is dated by the workbox to after 650. Of these a small silver bulla-type pendant, SF 185 was definitely found at the neck together with four silver rings. It is likely that the other two pendants were also at the neck, but their position in the grave is uncertain. The gold pendant Cxt 305 SF 1 has the suffix 'P'; this does not figure on the context sketch plan, and is likely to be a badly written A or D. The other pendant (SF 39) has no suffix at all.

4.4.1 Gold and silver pendants

The most ornate pendant is Cxt 305 SF 1, which is of gold; it is of discoid, or scutiform type, of single thickness, with a pseudo-jewel/shield boss at the centre. The applied decoration of pseudo-plaitwork comprises a quatrefoil within which is a cross (on the diagonal); the 'V'-shaped fields between the four lobes also include details that make up a second cross; it is probably of Kentish manufacture. Gold filigree pendants are generally from contexts dated to the later 7th-century date, and SF 1 adds another example to the list of those associated with workboxes (Geake 1997, 38). Pendants such as this continue the bracteate tradition of discoid pendants on a simple loop, but these scutiform types are, like the jewelled equivalents, related to the contemporary jewelled disc brooches (MacGregor and Bolick 1993, 154, 156, 162). Cruciform derivative designs are common on scutiform pendants (Evison 1987, 55), and gold examples with plaitwork similar to SF 1 (but also set with stones), have been found at Sibertswold and Kingston (Faussett 1856, pl IV, nos 11, 13; Geake 1997, Fig. 4.4), amongst other sites (Evison 1987, 55-6). Other pendants that are stylistically related to SF 1 include finds from Breach Down (quatrefoil with filigree and jewel; Akerman 1855, pl V), Faversham (foliate star with jewel; Leeds 1936, Pl.XXXc) and Risely, Horton Kirby (star with pseudo jewels; Tyler 1992, pl 1). The latter is on a necklace including four amethyst beads and four other pendants, one related to Cxt 305 SF 41 (see below). It has been argued that cruciform designs have a Christian significance (Evison 1987, 55). This does not necessarily apply to all

such finds, but given the presence of crosses on the workbox and needle case/reliquary container in grave 306, this may well be the case for SF 1.

The one silver pendant comprises the back of a small bulla *c* 9 mm in diameter with part of the suspension loop (Cxt 305 SF 185). It has been observed that these small bubble-shaped pendants rarely occur with cabochon pendants, and they were dated to 660-675/700 (Geake 1997, 36). Geake points out that they seem to be stylistically related to the small cabochon pendants, and could be slightly earlier and/or later than this date range (ibid), but the example from Cxt 305 fits well with the original dating.

4.4.2 Gold and copper alloy pendants with glass

The third pendant from Cxt 305 (SF 39) is even smaller than the bulla, being only 7.5 mm in diameter. It has a plain suspension loop and cabochon setting of amber-coloured glass, presumably in imitation of a genuine stone; if it had a beaded collar this is lost without trace. Cabochon pendants are generally early, but have been found in contexts as late as the 690s; that worn as an earring in grave 172 at Sibertswold can be coin-dated to *c* 650 (MacGregor and Bolick 1993, 157). The Cuxton find is small, but otherwise typical of the cabochon pendants found in 7th-century burials such as Roundway Down, near Devizes and Desborough (Akerman 1855, plate 1; Webster and Backhouse 1991, 28-9). Numerous examples are known from Kent, for example at Barfriston and Sibertswold, and it is likely that they were produced there (Faussett 1856, pl IV; Geake 1997, Fig. 4.7). The Cuxton find is possibly the first to be found in the same grave as a workbox (Geake 1997, 35).

The fourth pendant, Cxt 214 SF 41, is made from part of a large annular bead in a copper alloy setting. The bead is of translucent green glass with inlaid fine twist decoration of opaque white glass (broad) and the same green glass (narrow). No suspension loop or other means of attachment survives and it was probably broken at the time of burial.

Beads with inlaid fine twist decoration (also known as twist-inlay) are later than, and technically different from, reticella beads, having a thin reticella trail that is impressed, rather than a thick trail that is overlaid on the bead. All the measurable examples are annular and between *c* 20-25 mm in diameter, of translucent glass with an opaque twist in two contrasting colours, of which one, as here, can be the same as that of the bead itself (Guido 1999, 76-7).

Beads of this type are uncommon and although they have a wide distribution this is very much based in southern and eastern England. Since they were first discussed in the Swallocliffe report (Guido 1989, 51-2) further examples have been found and some 15-20 examples are now known (Guido 1999, 38-9; Geake 1997, 44). At least seven (including Cuxton), are from Kent, and it has been mooted that they were produced in the county, probably in a single workshop (ibid; 1999, 76; Geake 1997, 45). Evison felt that the millefiori and reticalla rods were made in a high class workshop and then exported to other glass-

making centres (Evison 1987, 65; Geake 1997, 45), but this strategy would preclude the use of the same glass in the twist as was used for the bead itself. It is possible that the type was inspired by Celtic annular beads and/or Roman 'cable' beads, although the decorative techniques are quite different (ibid). The finds from Kent listed by Guido (1999, 338; Pl.8) are from Gilton, Hartlip, Milton-next-Sittingbourne and Sibertswold or Barfriston. Of these, Hartlip, between Sittingbourne and Rochester, is the closest to Cuxton; this bead is also of translucent pale green glass but with a yellow trial. Another is known from the grave 3362 at the Buttermarket site in Ipswich (Scull in prep and pers comm). The most recent example of the type is a residual find from the Royal Opera House (Malcolm et al 2003, back cover; Stiff 2003, 250).

Fine-twist beads appear to date to the second half of the 7th century or early 8th century; they were clearly treasured and the fact that a broken one was reused as a pendant setting emphasises the value that was placed on them. They seem to occur in the graves of wealthy women (probably Christian), and some would appear to have been used as amulets (Meaney 1981, 200-5; Guido 1999, 76; 1997, Geake 1997, 44). Both the dating and interpretation fit well with SF 41, which was found by the left hip together with the two amethyst beads (see above) and may have been buried in a bag.

The use of such beads in pendants is, however, rare and the closest parallels for the setting were probably purposely made, as they have with an even lattice design of twisted threads, a design not matched on any genuine beads. They are found in two oval pendants from grave 172 at Sibertswold (Faussett 1856, 111; pl IV, nos 8, 9; Hawkes 1990, Pl.4) and in a circular pendant with flanged mount that forms the centrepiece of the necklace from Risely, Horton Kirby. The latter also includes four amethyst beads and four gold pendants and is thought to have been made in East Kent (Tyler 1992, 73, Pl 1).

4.5 Silver rings

Five silver rings with 'elastic' slipknot fastenings were found, one in grave 215 and four in grave 306, of which four are complete. Two are sizes present. The larger are *c* 26 mm in diameter (Cxt 305 SF 9, SF 10, complete, and SF 184, incomplete) and are the same as the largest in the Ashmolean Museum collections (MacGregor and Bolick 1993, 261). The smaller sizes are 16 mm (Cxt 305 SF 183) and 18 mm in diameter (Cxt 214 SF 11). The four rings from the rich female in grave 306 were found at the neck, together with at least one silver bulla (and possibly with two gold pendants and a melon bead), and thus derive from a necklace or part necklace. It is not known what order they were found, or how they were fastened, but they were not interlinked. They were perhaps originally tied with thread in a chain like those found at Chamberlain's Barn, Leighton Buzzard, where those from grave 39 were associated with monochrome glass beads very like those from Cuxton (Hyslop 1963,

198-9; Figs 8, 9, 13, 17). Some such rings were been held in place by brooches, but others were perhaps sewn to the dress (Lethbridge 1931, 76; Hyslop 1963, 199), although this would hardly have been practical for changing or cleaning. The small ring from grave 215 (SF 11) was found with the cluster of glass beads on the right shoulder.

The use of wire rings in necklaces is a predominantly 7th-century trend and is typical of the last phase of Conversion period burials (although not unknown before this and continuing later). At Floral Street, London, five rings were found together with three beads in a female burial date to *c* 660 by a Kentish disc brooch. Further examples associated with 7th-century objects are cited by Meaney and Hawkes (1970, 38). Other than grave 306 at Cuxton, there are several examples of silver rings that occur with workboxes or late finds such as coins, and they clearly continued in use until the late 7th or early 8th century. The fashion would appear to have replaced the 6th-century vogue for long strings of beads, and the new combination of silver rings with a few beads and pendants has been described as a festoon necklace (Morris 1962, 37; Hyslop 1963, 191). In most cases less than five rings are present (Hyslop 1963, 191; 198-9; Geake 1997, 48-50). The majority are of silver but some are of copper alloy or, very rarely, gold. Most are of elastic, or slipknot form, but some are solid and a few are decorated, although this was not the case with the Cuxton rings. It has been argued that, like the beads, the rings used in necklaces may have had an amuletic function (Meaney 1981, 172-174). It is possible that these rings and their associated finds were buried in a bag; see also below, use of jewellery.

4.6 Other finds

In addition to the conventional items of jewellery, there are three items from Cxt 305 that are listed as mounts and can be perhaps classed in the same group; at least two of these (SF 186 and SF 187) were found at the neck of the female in grave 306 together with the silver rings. A further object that may have been an amulet is considered under personal items (Cxt 240 B, SF 56).

Object SF 186 is a small copper alloy disc 8 mm in diameter with a central perforation; the iron on the back may or may not be associated with its original function. Object SF 187 is a small polygonal slice of garnet. It is hard to see what it could have come off apart from the bulla-type pendant SF 185 (no parallel is known for such a combination) or mount SF 186. It may, therefore, be derived from a piece of cloisonné work, and if so, it must either have been placed in the neck area after the body had been laid in the grave, or all the finds were in a bag.

The third find (SF 33) is a hemispherical disc of marbled blue/white and yellow glass (diameter 12 mm); the front is quite worn, while the back is matt and has striations across it. Although it could have been used as a counter, this seems unlikely. Most Saxon gaming pieces are of bone or antler; glass counters have only been reported on one other site (Oxton,

Northants, now lost; Geake 997, 100), while Roman examples are much larger. Gaming pieces also tend to occur in male graves, but the Cuxton find is clearly from a female grave. It is possible, therefore, that SF 33 is from a pendant, albeit a highly unusual one. Alternatively, it may have been kept simply as a keepsake or amulet (see personal items). The location of SF 33 in the grave is not known.

4.7 Use of jewellery

The objects described above include most of the main categories of 7th-century ornament, with the notable exception of brooches. The distribution of the finds, which is summarised in Tables 3 and 4, where it can be seen that most items are from adult burials, with only one child. There are two main concentrations in female graves, and one small one in a male grave.

It has been argued (Meaney 1981, 192-210) that all beads were amuletic, and although this is harder to prove for the definite necklaces, it is may well be true for the smaller clusters and loose beads buried in bags, whether by the neck or on other parts of the body, or (possibly in the case of Cxt 214) both (Evison 1987, 66-67). Pendants and beads are usually associated with women and children, although beads were also used, if not worn, by men. At Cuxton there are two definite occurrences with females, and one in a child burial (Cxt 168), although the latter could not be directly associated with the body. The presence of two beads in the male grave 194, for example, is of interest that these are the only annular beads from the site and could have some special significance. Furthermore, one of these was found under the skull, a position very similar to that in grave 34 at Mill Hill, Deal. The other was at the left side of the chest.

Although personal taste cannot be ruled out (Evison 1987, 65), the number and nature of the pendants and beads in adult female graves may be indicative of status. If so the female in grave 215 was one of the most important of her day, although her necklace lacked pendants. The woman in grave 306, possibly buried slightly later than Cxt 214, only had one bead, but this is probably a reflection of the date of the burial rather than her importance, which is clearly indicated by her gold and silver pendants and other accoutrements. Small monochrome beads often occur in conjunction with workboxes (Geake 1997, 45), melon beads less frequently so (*ibid*, 48). The choice of the bead in grave 306 may, therefore, have some significance. Melon beads tend to occur with other Roman objects, although nothing obviously older was noted in grave 306

Beads were usually worn at the throat or on chest at the front only (ie not continuing behind the neck; Evison 1987, 66). This is the case for two, probably three and possibly four of the Cuxton finds. Smaller beads could also be worn as earrings (Faussett 1856, pl VII), but although the bead in grave 303 was found by the head, there was no sign of a ring. As this is the largest and heaviest bead from the site it seems an unlikely candidate for an earring. It was

not possible to reconstruct the original sequences of beads, rings and pendants, but some degree of symmetry in the original arrangement of the rings and/pendants in the necklaces from Cxt 214 and Cxt 305 might be expected, even if the beads were in a random order (or the necklaces were broken when buried). As brooches and pins are lacking, the method of suspension is unclear. In some cases they may have been strung on a cord that continued behind the neck; in others they may simply have been placed on the body once it was in the grave. The beads in graves 212 and 297 were found at the neck, and the same may apply to the find from Cxt 305, which would thus be associated with the silver rings and the silver bulla, if not the two gold pendants. As there were four large rings and only one small one, it is tempting to suggest that the smallest was used for a pendant. The larger rings could have been centrally placed, perhaps tied with thread in a chain like those found in graves at Chamberlain's Barn, Leighton Buzzard (Hyslop 1963, Figs 8, 9, 13, 17). They could, however, have formed the terminals of the necklace, allowing it to be attached to the clothing (Geake 1997, 49).

Beads of all sizes were buried in bags or purses on other parts of the body. This was noted at Portway, Andover (graves 1, 69), and may also apply to grave 215, as the beads of glass and cowrie shell in Cxt 214 were found on the right shoulder only, with a single silver ring. The necklace may, therefore, have been broken (or have been already broken) at the time of burial and so buried in a bag. If the beads are from a complete necklace, it contained 30 beads of five different colours in eight different forms. Of these, ten are short rounded cylinders, nine are straight-sided cylinders, two are short wound cylinders, one is a polygonal cylinder, three are small wound discs, two are small wound annular, and two are of barrel form (one wound).

The location of the amethyst beads in Cxt 214 is unusual, as most of the examples studied by Geake were part of necklaces (34 out of 37 examples), but other locations such as at the feet and behind the skull were also noted (Geake 1997, 42). It is not impossible that they were used as toggles for a girdle (Drinkall and Foreman 1998, 285), but they could have been in a bag and/or had an amuletic function. It as been noted that amethysts do not usually occur with the grander assemblages of jewellery (ibid, 42), and this is the case at Cuxton; they are, however, from one the two richest female burials on the site. The glass and copper alloy pendant SF 41 was found behind the pelvis; the context sheet states that it was on a belt, but it could have been placed with the amethysts and slipped down as the body decomposed.

To conclude, the absence of very early types of jewellery, such as cruciform brooches and early cloisonné jewellery, suggests a date after 550 for this site. The lack of brooches at Winklebury, Hants and at Burwell, Cambs, was thought by Lethbridge to indicate and early Christian date for these sites (Lethbridge 1931, 70; Hyslop 1963, 190-1), although Boddington (1990, 189) considered that this equally reflects changes in dress during the 7th

century. Large strings of glass and amber beads are typical of the 6th century (Evison 1987, 66). After this glass beads are rarer and smaller, and this, together with the absence of polychrome beads and the small size of the monochrome beads suggests that the Cuxton finds are of 7th-century date. This is in keeping with the pendants, which are also most typical of the 7th century. The latest finds are the amethyst beads, which occur with the pendants in grave 215. In grave 306 the nature of the pendants and other finds indicate that the deceased was a Christian buried after 650, and possibly after 675. Although the means by which the finds reached the site must remain uncertain, the jewellery from Cuxton demonstrates that the community was party to exchange mechanisms, whether internal or external, and reflects the highly developed trade links between Kent and the continent in the late 6th and 7th centuries.

5 THE ANGLO-SAXON KNIVES AND MISCELLANEOUS OBJECTS

5.1 Knives

Knives are numerically the second most common finds after beads, and in terms of individual objects they are the dominant category on the site, with 32 accessions representing a total of 30 knives) from 25 out of 33 graves. The knives have been reported on separately as they are common to both sexes and all age groups; they can also have multiple functions, and could be classed as personal items, tools or weapons.

5.1.1 Typology and classification

Until the late 1980s the study of Anglo-Saxon knives was largely based on the typology of four basic blade forms that was devised by Böhner (1958; see Table 6) for the area of Trier. This was applied to finds from Polhill (Hawkes 1973, 199) and other sites in Kent (Härke 1989a; 1992, 90-1), although the latter further divided knives into three size groups based on the blade length and width (see Table 7). In 1987 the publication of Dover Buckland, which appeared too late for Härke's study, presented a new scheme that was linked to Böhner's but comprised six categories that were more suited to English finds (Evison 1987, 113). This in turn was developed by Drinkall and Foreman (1998, 279-84), who added the suffixes '1', '2', or '3' to the shape code so as to include the size ranges defined by Härke.

Table 6:. Comparative knife classifications

Key to typologies: B: Böhner 1958; D+F: Drinkall and Foreman 1998; E: Evison 1987; O: Ottaway 1992

B	E	D+F	O	Form	B dating	E dating
A	1	A	D	Curved back, curved cutting edge	450-700	5th-7th?
B	2	B	E	Straight back, curved cutting edge	450-600+	475+
C	3	C	A	Angled back, curved cutting edge	7th cent?	525-750
C	4	D	C	Curved back, straight cutting edge	7th cent?	625+

B	E	D+F	O	Form	B dating	E dating
C	5	E	A	Angled back, straight cutting edge	7th cent?	575+
D?	6	F	B	Straight back, incurved near tip	7th cent?	675+

Table 7: Knife size ranges (after Härke 1989, 1992; Drinkall and Foreman 1998, 279)

Group	Size	Blade length	Blade width	Total present
1	Small	40-99	8-22	13
2	Medium	100-129	14-23	5
3	Large	130-175	20-27	2

A different system was devised by Ottaway (1992, 558-572) for 8th-century and later finds from the north of England, which is primarily based on back form. Five main groups were defined. On knives of back forms A, B and C the rear part of the back is straight, but on back form A the front part is angled, on B it is concave and on C it is convex. Back form D is entirely convex, while back form E is wholly straight. Back forms A and C each have three sub-types based on the relationship of the rear part of the back to a line drawn between the tip of the blade and the mid-point of the tip of the tang. On sub-type 1 the rear part of the back is horizontal, sub-type 2 is angled upwards, while sub-type 3 is angled downwards (ibid, 559). It was, however, acknowledged that the system masks other variables such as dimensions and proportions, and whether the front part of the cutting edge is flat or curves up to meet the back. The different typologies summarised above, and the dating assigned to them, are correlated as far as possible in Table 6.

For the present study both the Ottaway and the Evison/Drinkall and Foreman systems of classification were used. Although the importance of blade length over total length has been stressed (Härke 1989a, 144; see below, dating and use of knives), the points from which measurements have been taken are rarely noted in the literature. For this report both the total length and the blade length were recorded (Table 8); blade length was taken as the distance between the tip and the start of the choil. It should, however, be noted that on many of the Cuxton knives the handle extended for *c* 5 mm over the rear part of the blade, so that the actual cutting edge is shorter than the length quoted. Thickness measurements are taken at the maximum point, and occasionally give the original width rather than that which survives.

5.1.2 Blade size, form and technology

In some cases, damage to the cutting edge, whether through sharpening and use, or in the ground, makes it hard to be sure whether it was straight or curving up to the point. Similarly, damage or corrosion on the back can obscure the original angle of the back (straight or sloping) and whether the front part was angled or curved down towards the tip. Despite these

problems, 17 of the Cuxton knives are complete or more or less complete, and 20 could be assigned to a form type.

The complete knife blades range between 52 mm and 163 mm in length and 13-24 mm in width, compared with ranges of 84 mm-312 mm (length), and 10-30 mm (width) at Dover Buckland (Evison 1987, 113-4). Based on the measurements in Table 7, 13 knives can be described as small, and of these five are between 75-80 mm in length. Most of these small blades are 15 mm wide (ie exactly at the mid-point of Härke's size range); perhaps surprisingly the widest is also the shortest blade (Cxt 312 SF 94), which is little more than a pen-knife (although its thickness suggests that it may have been worn down). Five blades are of medium size; these range between 110-118+ mm in length and 16-21 mm in width. Only two blades are large; of these Cxt 190 SF 120 is incomplete (length135 mm+), while the largest blade (Cxt 299 SF 82) could almost qualify as a weapon. At 163 mm in length, this knife is only marginally smaller than the short seax, which is generally considered to have a blade length over 180 mm in length and 24 mm in width (Härke 1989a, 144; see below). According to Gale (1989, 72), the blades of the later Saxon short seaxes have a wider range of 80-360 mm in length, but most are *c* 240 mm.

It is possible that the knives were locally made, but no analysis of the metal was carried to see if that used for the knives differed in any way from the spears or shields. No pattern welding was noted and no blades are definitely inlaid; although knives Cxt 296 SF 79 and Cxt 372 SF 105 appear from the X-ray to have a decorative band at the junction of the blade and the handle this is not visible on the objects themselves. No knives definitely have grooves on both sides of the back edge, but Cxt 164.3 SF 117 appears to have a groove along one side, as may Cxt 240 SF 59. This feature was also noted on a knife from Portway, Andover, while four knives from Dover Buckland, and possibly some from Polhill, have one or two grooves (Hawkes 1973, Fig. 57, nos 560, 576, and possibly 581; Evison 1987, 114-5). Several knives seem to have a strip of denser metal along the back; the most obvious examples are noted below under the different form groups. In the case of the long seax-type knife Cxt 299 SF 82 this denser metal is along the blade. The same feature was noted at Dover Buckland, where several knives were also made by welding a cutting edge of stronger metal onto the back (Evison 1987, 114).

As shown in Table 8, four of the six blade forms in the Evison/Drinkhall and Foreman typologies are present or possibly present at Cuxton, but only two of those defined by Ottaway (groups A and C, with a range of sub-types). These are summarised below.

Table 8: The classification and distribution of the knives

Key to sex. A: adult; F: female; I: infant; J: juvenile; M: male
Key to side. BL: between legs; C: chest; F: feet; L: left; H: hip; M: centre R: right; W: waist; -D: blade pointing down; -H: horizontal; -U: blade pointing straight or diagonally up; Unk: unknown

Key to size. BL: blade length; BW: blade width; TL: total length

Cxt	SF	Sex	Age	Side	E/D+F type	O Type	BL	BW	TL	Comment
164.3	117	A	25-35	LH-D	1/A?	C2	75	15	115	Complete; 5/E?
166	118	A	17-25	R-D	-	-	32+	9	81+	
172	116	I	12-13.5	MW-H	-	-	31+	15+	59+	
178	123	AM	-	MW-U	5/E	A2	115+	22	163+	95%+
190	120	A	20-40	MW-U	4/D	C3	135+	21	200+	95%
193	119	AM	33-45	LC-U	4/D	C3	90	15	125	Complete
214.4	145	AF	17-30	MW-H	1/A?	C3	72	15	109	Complete; 4/D?
240	59	AF	-	F?	4/D	C1	80	13	123+	95%; sheath
246-E	52	AF	17-35	RH	-	-	40+	18	68+	
261	57	AM	30-45	MW?	-	-	15+	-	55+	
261	131	AM	30-45	MW?	3/C	A3	115	16	115+	
276	45	I	4-5	Unk	1/A	C1	80	17	125	Complete
282	76	A	-	Unk?	1/A	C1	77+	17	142+	90%
282	125	A	-	Unk?	5/E	A2	118+	21	175+	Complete
285	68	A	-	MW	-	-	-	-	61+	
290-D	67	J	6-7	LW	5/E	A2	115	19	174+	90%+
293	66	J	6-7	LW-U	1/A?	C3	99	15	137	Complete; 5/E?; sheath
296-A	79	AF	25-40	L	1/A	C1	95+	15	144	99%
299	82	AM	40-70	LH-D	1/A	C3	163	24	271+	95%
299-B	81	AM	40-70	Unk	4/D	C1	70	15	123	Complete
305	91/92	AF	17-25	LW	-	-	75	14	86+	
305	88	AF	17-25	LW	5/E	A1	68	14	68+	90%
312	94	J	9-12	LC	3/C?	C1	52	20	94	Complete; 1/A or 4/D?
312	95	J	9-12	LC	-	-	80	16	83+	65%; 5/E?
315-B	104	A	25-44	LW	1/A	C1	80	13	95+	5/E or 6/F? sheath
318	139	A	25-44	LW?	-	-	91+	15+	91+	
323	124	AM	-	LH	-	-	-	-	-	Fragments
363-B	102/ 103	AM	40-70	LW	5/E?	A1	110	19	157	99%
367	106	Unk	-	Unk	-	-	61	13	61+	
372	105	A	25-44	RW	1/A	C1	73	15	115	Complete; sheath

Angle-backed knives

These knives are defined by a fairly sharp change in the line of the back at some point between the shoulder and the tip. Following the Evison/Drinkhall and Foreman typologies they have been classified as types 3/C (one example) and 5/E (four, possibly five examples); in Ottaway's system they belong to back form A (Ottaway 1992, 561-3). The type can in some cases be hard to distinguish from blades of type 1/A or 4/D blades (Ottaway back form

C), but the latter have a gentler change in angle. The Cuxton blades fall into three groups. In the first the change in angle is set relatively well back from the point; in the second it is closer to the point, and in the third it is very close to the point (the problematic Cxt 299 SF 81, which could belong to group C).

Type 3/C

This form has an angled back and curved cutting edge. The one knife that definitely belongs to this group is Cxt 261 SF 131, where the change in the angle of the back is both slight (only 6^{o}) and set well back from the tip. The tang is missing, and it is not clear if the tip is missing, but if it is this would be a rather elongated blade with the change in angle near the mid-point of the blade. The other knife, Cxt 312 SF 94, which is the smallest from the site, is problemati*c* The X-ray suggests that the back has a steeply rounded profile and a straight cutting edge (ie that it belongs to type 4/D or perhaps 1/A), but the object itself appears to be angle-backed.

Type 5/E

This form conventionally has an angled back and straight cutting edge, but in fact only one of the Cuxton knives definitely conforms to this description. This is blade Cxt 290 SF 67, where the change in angle is 22^{o} and set well back from the tip. The other three blades may have had straight cutting edges, but if so the tips are worn away and in their present condition it appears that they curve up to the tip. This makes it hard to be sure whether the back originally sloped up, down or was horizontal. Knives Cxt 178 SF 123, Cxt 290 SF 67 and Cxt 363-B SF 102 seem to have a strip of denser metal along the back.

On blade Cxt 282 SF 125 the back is almost horizontal but slopes up very slightly to the change in angle, which is 16^{o} and set well back from the tip. The cutting edge is straight for most of the length but seems to curve up at the tip. This is missing and there is damage to the edge; if it was completely straight the total blade length would have been *c* 138mm, with the change in angle would have been at the mid-point.

The broadest blade in this group is Cxt 178 SF 123. Here the cutting edge on blade is worn, but more complete than that on Cxt 282 SF 125 . It is not clear, either from the X-ray or the object, whether the tip is damaged or not, but if it is the blade length would be *c* 122 mm and the back would slope upwards more noticeably. The change in angle is 27^{o} and is 36 mm from the present tip (originally 42 mm?).

Blade Cxt 363 SF 102/103 is problemati*c* The X-ray suggests that it is angle-backed, but the back is very slightly convex and it is not impossible that the front part is curved, in which case it would be fall into type 4/D. The change in angle is 23^{o}, but is only 23 mm in from the tip and is imperceptible on the object itself. The cutting edge is straight but curves up slightly to the tip. The tang did appear to join the blade, but the latter has lost the rear part and so the two no longer fit.

Finally there is the incomplete blade Cxt 305 SF 88, which has a pronounced change in angle but is missing the tip and part of the tang. In addition there are a few rather ambiguous blades that could be angled or rounded. These include Cxt 164 SF 117, Cxt 296 SF 66, Cxt 312 SF 95, and perhaps Cxt 315 SF 104 (see also type 6/F).

Other forms

Type 1/A

On blades of this type both the back and the cutting edge curve to meet at the tip in the manner of the seax. As at Dover Buckland, where type 1/A knives occurred in all phases (Evison 1987, table XVII), and at Portway, Andover, this is the most common form of knife, with seven definite or probable examples, and two possibles. The complete blades include the largest found on the site (see above), but most are between 75-100 mm in length. The point is generally aligned with the centre of the blade, but on a few knives it lies below this; these include Cxt 164 SF 117, Cxt 214.4 SF 145, Cxt 296-A SF 79 and Cxt 372 SF 105, which are also similar to the type 4/D knives. The blade of Cxt 164 SF 117 appears from the X-ray to be almost angle-backed (as do a number of others), but after cleaning these blades appear to be gently curved.

The most impressive find is the large knife/short seax Cxt 299 SF 82, the total length of which is slightly shorter than the shortest seax found at Polhill (Hawkes 1973, 189). Seaxes are not common in England, and most seem to be insular copies rather than imports (Gale 1989, 71). Two main groups are present: the Frankish/Alamannic type, the back and cutting edges of which curve in to meet at the point, and the later, angle-backed type. Knife SF 82 falls into the first group, which forms Wheeler's type I (Wheeler 1935, 177, Fig. 42); the blade as a whole resembles a larger Frankish seax-type knife from Rittersdorf (Gale 1989, Fig. 6.2.1). X-ray suggests that the cutting edge of SF 82 is of a denser metal than the back, and also shows a slot in the tang, but this is not visible on the object itself (see below, handles). Of the smaller knives, Cxt 164 SF 117, Cxt 276 SF 45, and Cxt 312 SF 94 seem to have a strip of denser metal along the back.

Of the incomplete knives that may belong to this group, Cxt 305 (SF 91/92) is slender with the tang set in line with the cutting edge. The tip is missing and so it cannot be assigned to a form type. Another fragment from 305 (SF 90) may be part of a pair of shears (see personal items and tools).

Type 4/D

Blades of this type have a curved back and straight cutting edge. Two knives definitely belong to this group, of which Cxt 190 SF 120 was one of the largest knives from the site (now disintegrated. The other, Cxt 299 SF 81, is rather smaller. It is also possible that Cxt 312 SF 94 is of type 4/D, although it has been classed with the angled knives (see above, type 3/C).

Of these finds, Cxt 190 SF 120 and Cxt 193 SF 119 seem to have a strip of denser metal along the back. Two other knives (Cxt 193 SF 119 , Cxt 240 SF 59) probably belong to this group; although the blades appear to curve up slightly at the tip, this may be due to the wear they have suffered. A number of knives assigned to group 1/A also have predominantly straight cutting edges but curve up more noticeably to the tip; these include Cxt 214.4 SF 145 and Cxt 296 SF 79. It is possible that the problematic short knife Cxt 312 SF 94, recorded as type 3/C, also belongs to this group.

Type 6/F

Knives of this type have a back that is straight at the rear and concave at the front, with a convex cutting edge. The only possible candidate is Cxt 315 SF 104, which has been recorded as a type 1/A knife but has a rather ambiguous X-ray.

5.1.3 Handles and organic remains

With one exception, all the knives have a simple tapering tang (whittle tang) which is mainly set centrally, with angled or stepped junctions with the blade/back (eg Cxt 164.3 SF 117). In a few cases the tang is more or less in line with the cutting edge (eg Cxt 166 SF 118, Cxt 240 SF 59, Cxt 296-A SF 79). At Dover Buckland it was found that several knives had handles that were probably of horn rather than wood (Evison 1987, 114). At Cuxton, however, the organic matter that is present on 18 knives suggests that almost all the handles were made of wood. In most cases the handle extends for 5-10 mm over the rear end of the blade. The exception to the rule at Cuxton is the long knife/short seax Cxt 299-B SF 82, which has long, broad and straight-sided tang with a large copper alloy rivet at the end, and a slot at the midpoint. This knife must have had a scale handle, possibly of bone.

At least four knives seem to have been buried in a sheath (Cxt 240 SF 59, Cxt 293 SF 66, Cxt 315 SF 104, Cxt 372 SF 105), and on Cxt 315 SF 104 the profile of the blade is obscured by the remains of the sheath. Knife Cxt 246 SF 52 was possibly also in a sheath or bag.

5.1.4 Dating

Until the late 1980s it was generally thought that knives could be dated by blade form, and the chronologies proposed by Böhner and Evison are summarised in Table 6. Recently, this view has been questioned (Drinkall and Foreman 1998, 281). For example, angle-backed knives are considered typical of the 7th century and later, both on the Continent and in England (Gale 1989, 71). They do, however, occur earlier than this (ibid; Drinkall and Foreman 1998, 281) and at Dover Buckland type 3/C and 5/E angle-backed knives are jointly the second most common type. The type 3/C knives were thought to have been in use as early as period 2 (525-575), while type 5 probably appeared in period 3 (575-625; Evison 1987, 115). Knife types 4/D and 5/E are well represented at the 7th-century cemetery of Polhill, where Evison

lists five and seven examples respectively (Hawkes 1973, 199; Evison 1987, 115, fn 60, 62). The use of grooves along the back edge became popular in the 7th-century (ibid, 114-5), and this fits with the dating of the shield that was found together with Cxt 164 SF 117, which may have a groove along one side (see above).

Härke (1989a, 145) concluded that the size of the blade, rather than its outline, is a more valid and reliable chronological indicator. There is a peak in the number of small blades in the 6th century; after this the number of small blades reverts to the same as before, but there is in increase in medium and large knives in the 7th century; this does not seem to continue into the 8th century in the sites that were studied. It was also observed that this mirrors the rise of the seax, and that large knives are more common in Kent than in most parts of the country (Härke 1989a, 145, table 2). This method of dating, however, is difficult to apply consistently, and certainly does not follow for settlement sites such as Lundenwic. It could only be partly demonstrated at Castledyke (Drinkall and Foreman 1998, 281) and does not seem particularly valid for Cuxton, where most of the knives are small. It would, therefore, appear that while the inclusion of a knife in a grave became more common through time, its shape and size may not have been such important considerations (Drinkall and Foreman 1998, 281-2). Regional and local/social factors would also have influenced the choice of knife that was buried (see below). The spatial/chronological distribution of the knives has not been considered for this report as phasing of the graves has yet to be completed.

5.1.5 Use of knives

Knives are the most common single object type to be found in Anglo-Saxon burial contexts, being found in 45-50% of all 5th- to 7th-century graves (Geake 1997, 102; Härke 1989a, 144). The number of knives at Cuxton (76% of all graves) is proportionately rather higher than this. No hones were found at Cuxton, although two were present in graves at West Heslerton (Haughton and Powlesland 119-20). It is possible that the spatulate tool/tanged implement noted above (see personal items) was used for sharpening knives and shears, but this is uncertain.

As shown in Table 8 and in Table 6, and as found on many other late 6th-/7th-century sites, there is no specific correlation of the provision of a knife with sex or age except, perhaps, with children (see below). As far as can be determined from the human bone, two knives are from definitely from a male grave, while six other knives or knife fragments are from probable or possible males graves. Two knives are from definite female graves, while two are from Cxt 305, which has a typically female finds assemblage. Two other fragments are from possible female graves. Eight knives/knife fragments are from adult burials that could not be sexed from the skeletal remains. Of these graves 165, 283 and 316 contain

typically male assemblages. Six further knives are from five burials of juveniles, probably boys, while one was buried with an infant. There does not seem to be any particular association between the different blade forms and age or sex of the adult burials. For the children and juveniles, however, knife form 1/A was the dominant type, found in all burials except Cxt 290, which had an angle-backed knife. Knife form 1/A was also the most common type in the ten weapon burials, although these included one example each of types 4/D and 5/E.

Härke's research into Anglo-Saxon knives found that no child was buried with more than one knife, and that even with adults, the presence of more than one knife in a grave is rare (Härke 1989a, 146-7). It is, however, by no means unknown, and at Castledyke six 7th-century burials had two or more knives (Drinkall and Foreman 1998, 283). This suggests that the custom may be part of the same trend as the use of larger knives in later burials. At Cuxton most graves only contained one knife, and in graves 176, 319 and 324 these were unaccompanied. Three graves, however, definitely had two knives. Of these Cxt 299 had two complete knives, while Cxt 282 and Cxt 312 had one complete and one incomplete knife; of these, Cxt 312 is a juvenile, although at 12 years old possibly considered an adult as a spear was also present in the grave. No graves definitely contained more than two knives, but Cxt 305 is problematic as it may have had three knives, or two knives and part of a broken pair of shears. These were buried together, perhaps in a bag. In all, the distributional pattern at Cuxton seems to be typical of the period. At Portway, Andover, for example, four of the 34 knives were buried with children, and those buried with adults were found in both male and female graves. At West Heslerton the distribution between the sexes was more or less equal; here four graves contained two knives and two contained three knives (Haughton and Powlesland 1999, 119).

It has been suggested that there is a correlation between blade length and sex/age at death (Härke 1989a; Drinkall and Foreman 1998, 282). Study of the knives from 47 cemeteries showed that men were consistently buried with larger knives than women, who never had a knife with a blade longer than 128 mm (Härke 1989a, 146). This is true of Mill Hill, Deal and fits for the females at Cuxton, where the longest knife blade from a definite, probable or possible female burial is 95+ mm (Cxt 296 SF 79). Some of the knives buried with men were quite small (blade lengths only 75 mm, 80 mm and 90 mm in the weapon graves 165, 316 and 191), but on the whole they are larger (110-163+ mm). Härke found that large knives only occur in male graves; some 66% are associated with weapons, but this became increasingly less common during the 7th century (Härke 1989a, 147). This suggests that they were used as an alternative symbol of adult male status rather than of wealth or rank, especially in the poorer, or more simply furnished 7th- and 8th-century burials (ibid). To some extent this applies at Cuxton, where the largest knife, Cxt 299-B SF 82, is from the

grave of one of the oldest men, which contained no weapons. For children/juveniles, Härke found that the longest blade was 106 mm (ibid, 146-7); knife SF 67 from grave 291 is, therefore, unexpectedly large for a child of 6-7 years, but as this was a weapon burial it may be that the child was of some status and/or had been deemed destined for great things.

Of the six Cuxton graves where no knife was found, all but one contained only beads. Three are adults (one female and two of uncertain sex), while three are children. Since knives are more common in 'male' than 'female' assemblages (Härke 1989a, 146-7), and at Dover Buckland no male children were without a knife, but some girls were (Evison 1987, 113-4), it might be argued that three Cuxton children without knives were female.

The position of the knives in the different graves is summarised in Table 8. As at Portway, Andover, Dover, Buckland (Evison 1987, 115) and Castledyke (Drinkall and Foreman 1998, 282), most knives were worn or placed on the left side of the body, mainly near the waist but some by the left hip (14 examples). Seven were centrally placed, while three were on the right. Some knives were pointing downwards and some upwards, but in most cases the orientation of the blade is unknown. For the four knives that were possibly in a sheath it might be inferred that the knife was worn point down, but SF 59, from the female grave 382 Cxt 240-D, was supposedly found by the feet. It is, however, possible that items C and D from this burial were mixed at some point, as it is very unusual to find a knife in this location and the three fragments of SF 59 correspond better with finds noted by the left shin. At Dover Buckland it was found that some of the women had their knives in pockets, bags or purses, and even suggested that some knives may have been worn up the sleeve (Evison 1987, 115). At Cuxton there is little evidence for this, but the knives from Cxt 214 were in a bag, and it is not impossible that knives which were both diagonally and centrally placed, such as in graves 176 and 194 might have been in a sleeve or worn on the arm. In grave 191 it is likely that SF 114, which was found on the pelvis is part of the tang of knife SF 120, which was placed by the hip. None of the Cuxton knives had any evidence for suspension rings although these have been noted at Dover Buckland (ibid, 115) and elsewhere. Possible iron guard plates were noted on the context sheet for Cxt 190, but it was not possible to identify this find amongst the objects from the grave. This feature was noted in grave 64 at Dover Buckland, but the guard was not illustrated (Evison 1987, 234).

5.2 Miscellaneous iron objects

A few items cannot be accommodated in any of the main functional categories, and so are listed together here.

Structural items include a probable lynch pin/ringed staple and part of a chain. A probable lynch pin/ringed staple and a loop from a probable chain found (separately) at the foot of grave 179 (SF 115). As mineralised wood survives on the pin, these could derive from a small

box with simpler fastening and fittings than that found at Chamberlain's Barn, Leighton Buzzard, the handle of which was fitted through two ringed staples (Hyslop 1963, 187, Fig. 17). However, there is no evidence for any contents of a box in grave 179, and boxes are traditionally associated with females (ibid), so these finds could be coffin fittings. Lynch pin-type objects from Winkelbury Hill, Wilts, grave 9 (Speake 1989, Fig. 88, nos 11-13. At Swallowcliffe similar objects were called eyelets, but on both the large and small types the split ends are bent outwards to the sides rather than more-or-less straight, as here.

Fragments of wood with the remains of an iron object SF 51 were found by the left shin of the feet of the female in grave 382 (finds location B). As there was no other evidence for a coffin, they could be from a box or from an object handle. As noted above it could be that these finds were mixed with the iron knife (SF 59) that was thought to found by the feet (finds location C).

6 THE WEAPONS

6.1 Spears

The nine spearheads from Cuxton were classified according to the typology devised by Swanton, which is based on profile, proportions, cross-section and length (Swanton 1973; 1974). However, as spears were not cast, but made individually, there is considerable variation, even within groups, and some blades have features of more than one group (Swanton 1973, 10; 1974, 3). There is also some overlap between the different types, both chronologically and geographically, due to local and regional preferences (Swanton 1974, 3-4). Precise dating is difficult due to a general conservatism and the fact that, for the most part, the associated artefacts (shields, swords, knives) also have extended date ranges.

In national terms, spears occur in *c* 85% of all weapon graves and *c* 40% of all adult male burials (Härke 1989, tables 4.1, 4.2; Underwood 2001, 39). As a rule they were held in one hand, either underarm or overarm, leaving the other free for the shield (Underwood 2001, 46). The main impact of the blow, therefore, was at the tip (Swanton 1973, 4), but it has been suggested that spears with long angular sword-like blades (Swanton types E, F) were held in both hands and wielded with sideways cutting strokes (Underwood 2001, 40-41, 46). Javelins were probably thrown from a distance of 12-15 m, depending on the size of the weapon and the thrower (ibid, 25). From the available evidence, Anglo-Saxon spears seem to have ranged between 1.6 and 2.8 m in length; continental finds can be rather longer than this (Underwood 2001, 44). The only spear from Cuxton that could be measured was in grave 373, where the distance between the tip of the blade and the base of the ferrule was 2 m (SF 83, SF 85). This is not dissimilar to the spear from grave 81 at Dover Buckland, which was probably over 1.83 m long (Evison 1987, 27). The shafts of the larger spears seem to have been *c* 16-18 mm in

diameter; others were *c* 13-14 mm in diameter. The three ferrules from Cuxton are discussed after the spearheads.

6.1.1 Spearheads

Four main series of blade were identified by Swanton (1973; 1974): continental types (series A and B, mainly dating to the 5th century), leaf-shaped (series C and D), angular (series E and F) and corrugated (series G to L), and each of these groups includes a number of sub-types. Of these only series C-F are present at Cuxton, a narrower range than found at Dover Buckland (Evison 1987, 20). The relationship of the Swanton's types to Kent has been summarised by Brugmann (1997, 84-5); of relevance here are:

Types mainly found in Kent: C1-C5, D2, D3, E3, E4, F2

Types with a wide distribution: D1, E2, F1

Types rare in Kent: E1

The iron spearhead was attached to the shaft in one or more of three ways: by hammering the cleft socket onto the shaft, by one or two rivets through the socket, or by a cylindrical iron band around the socket (Swanton 1973, 7; Underwood 2001, 43). These features do not seem to be statistically important (Swanton 1973, 7), but may be of chronological significance. Rivets were found on some of the Mill Hill spears, but by the mid-6th century the cleft socket was the preferred type across the country, and remained so throughout the 7th-century, although not on the Continent (Swanton 1973, 7-9; 1974, 2). This is the case at Cuxton, where five of the eight examples have a triangular opening down one side. The exceptions are Cxt 164 SF 121, Cxt 290 SF 70 and Cxt 372 SF 3, where the sides of the seam touch; there is no indication of burring, welding or the use of rivets. Some blades were decorated, and the shafts may also have been fitted with rings of iron or copper alloy (Underwood 2001, 43-4), but this does not apply to any of the Cuxton finds.

The shaft was usually of ash, but could be of hazel, apple, oak or maple (Evison 1987, 27; Philp 1973, 202; Underwood 2001, 39). Due to lack of resources it was not possible to determine the species used for the Cuxton spears, but wood survives in all the sockets except Cxt 290-A SF 70 and Cxt 276 SF 47, and can perhaps be identified by future researchers. In addition there is a small patch of textile on Cxt 315 SF 84, while two types of textile (coarse and very fine) are extensively preserved on the shaft and blade of Cxt 290-A SF 70.

Table 9: The distribution of the spear fittings from Cuxton

Key: Cxt: context; SF: special find number

Cxt	SF	Blade type	Total length	Blade length	Ferrule	Side	Date of type
164	121	E2	217 (233?)	127 (140?)		Right	500-700+
246	46	C or D	112+	N/A		Right	450-700

Cxt	SF	Blade type	Total length	Blade length	Ferrule	Side	Date of type
276	47	D3?	144	35		Left	500-600
290	70	D1 (C2?)	195 (210)	90 (105)		Left	550-650/700
293	63	C2	281 (?287)	154 (160)		Left	450-700
293	71		22		Cylin-drical		
299	62	F2	268	105		Right	575-700
312	138	D1 (C1?)	208	103		Left	550-700
315	84	C3 (E3?)	233+	95+		Right	550-700
372	83	C3	453+	300+(?)		Right	575-700
372	85		105		Conical	Right	

Leaf-shaped (series C and D)

Leaf-shaped blades are lentoid in section. Those assigned to series C have a blade that is longer than the socket shank, while in Series D the reverse applies (Swanton 1973, 46-9; 1974, 8). There are some discrepancies between the groupings assigned by Swanton to the finds from Polhill and Dover Buckland and those given by Hawkes (1973) and Evison (1987, 26), but where comments are included below these are (unless otherwise stated) based on Swanton's observations.

Group C1 spearheads are simple and very small (up to 200 mm); they are not common in Kent (Swanton 1973, 51; 1974, 10-11). Swanton felt that the form went out of use *c* 550, but others have argued for a 7th-century date for the type (Geake 1997, 68). Group C2 forms mainly range between 200-350 mm in length and usually have a short solid shank between the socket and the blade. They are the most common form across the country and are also long-lived, possibly spanning the 5th to late 7th centuries. Most, however, date to the 7th century, and they are often found in more richly furnished burials (Swanton 1973, 51-3; 1974, 10). Type C3 spearheads are the largest in this group, ranging between 300-500 mm; the widest part of the blade is usually near the socket junction. They appeared in the late 6th century, but are a predominantly 7th-century form, continuing in a modified form into the late Saxon period (Swanton 1973, 55-7; 1974, 10). They are common in West Kent (Swanton 1973, Fig. 14) and the type has been found at Saltwood (Kerep 2000); four examples from West Kent were listed by Swanton (1974, 28-90). Type C4 blades are similar but smaller and narrower than those of type C3; again they mainly date to the 7th century. Type C5 is a small Kentish variant of type C4, which measures between *c* 160-260 mm (ibid, 10-11).

Type D1 blades are slightly larger than type C1 (160-280 mm); they have a similar early dating, but also continue into the 7th century. They are common in Kent, but not in other areas of southern England (Swanton 1974, 11) and are the most common form at Saltwood (Kerep 2000). Type D2 blades are longer (250-450 mm and more) and the blade is separated

from the socket by a length of solid shank. The form seems to have developed in the 6th century, became more popular in the late 6th century and continued until the end of the 7th century (ibid, 11). The main distribution seems to have been in Kent and the Thames valley (ibid, 11), and they are the most common type at Dover Buckland (Evison 1987, 26; Table II). Spears of type D3 have a very short blade on a long socket that flares out towards the base (total length 180-300 mm); they would appear to date to the 6th century (ibid, 11-12).

Six spears from Cuxton fall into the category of leaf-shaped blades. One of these, Cxt 293 SF 63, which has a clearly defined junction between the socket and the blade, was assigned to type C2, although at Polhill two very similar blades were placed in group D1 (see below). Group C2 blades are, nonetheless, not uncommon at Polhill, with between three (Swanton 1974, 73-4) and six examples (Hawkes 1973, 188) and the type is well represented in West Kent, with 12 examples listed by Swanton (1973, Fig. 12; 1974, 28-90). Blade SF 63 was associated with a cylindrical ferrule (see below).

The long blade from grave 373 SF 83 belongs to group C3; at 460 mm it is one of the larger examples of its type. This find is of interest as the ratio of the socket to the blade is rather greater than usual (a little over 2:3), and because it is one of few from the site to have a cleft socket with tightly fitting sides. Spearhead Cxt 315 SF 84 is problematic as the blade is incomplete and the profile is quite asymmetrical. In plan view there appears to be a long shank, but in profile this does not appear to be the case. The projected outline of the blade suggests that it was also of type C3, but it is not impossible that it belongs to type E4, and the two forms have been confused elsewhere. At Polhill a spear from grave 73 assigned by Swanton to group C3 (Swanton 1974, 73), but was classified by Hawkes as type E3/E4 (Hawkes 1973, 188; Fig. 59, no.609). Spearheads of group E3 seem to be particularly common in east Kent, but six were listed in West Kent (Swanton 1973, 87; Fig. 27; 1974, 28-90).

The other spear that could belong to series C (Cxt 246 SF 46) is too fragmented to assign to a group; it could be of type C2, but the socket is quite long and it is more likely that it belongs to series D2. Two blades (Cxt 290 SF 70, Cxt 312 SF 138) just fall into the size range of type D1 spears, although the proportions are more or less equal. Group D1 spears are not common in Kent, and most finds seem to be from sites near the coast (Swanton 1973, 67; Fig. 19). Two examples were, however, identified at Polhill (Hawkes 1973, 188; Fig. 659, nos 604, 607). Blade SF 70 is in poor condition and somewhat distorted, and it is difficult to be sure of the profile but the socket seems to be cleft u to the blade junction.

The most poignant find is the ‘spear’ from the infant burial Cxt 276, which has a long slender socket, and a tiny blade with flat section and apparently blunt tip. This find must be regarded as a symbolic spear (see below, use of weapons). It has been assigned to group D3, although being a miniature the early dating of the type may not apply.

Angular blades (series E and F)

Series E and F are the angular counterparts of series C and D; these straight-sided blades have a lozengiform cross-section, and can be of some considerable length. On type E blades the widest point is at or near the base of the blade (Swanton 1973, 74-99; 1974, 13). Type E1 is the smallest form (length 130-190 mm), and seems to be a 5th-century type that is very rare in Kent (Swanton 1973, 79 and Fig. 24; 1974, 13). Group E2 spearheads are larger (200-350 mm), and the blade and socket are separated by a short solid neck. Like type C2, this is a long-lived form that continued from the 6th century well into the 7th and beyond (Swanton 1973, 81; 1974, 13-4). Type E3 spearheads have an overall length of 350-450 mm; the blades have a low basal angle and are extremely long in proportion to the socket, which often has a solid neck with a flaring profile. Like group C3, group E3 seems to have gained rapid popularity in the 6th century; it continued into the 7th century and probably later (Swanton 1973, 85; Hawkes 1973, 188). Type E4 blades are more slender than those of group E3, but otherwise similar and with the same dating (Swanton 1973, 87; 1974, 14). Groups E2, E3 and E4 are common in Kent.

Type F1 blades are similar to type E1; they seem to date to the 5th and earlier 6th century (Swanton 1974, 15-6). Type F2 blades equate with type D2, with a solid shank between the blade and the socket; they seem to have been in use in the later 6th and 7th centuries, and probably later, and often occur together with low cone shield bosses (ibid, 16). Type F3 is a more exaggerated variant, with a short angular blade on a socket that has a long solid shank. Type F2 is mainly a Kentish form, and F3 is also, though less common (Swanton 1973, 95, 99).

Two spears from Cuxton fall into this group. Of these, Cxt 164 SF 121 is of type E2; the widest point is right at the base of the blade, while the sides are remarkably straight, giving it a triangular, trowel-shaped outline. Spearhead Cxt 299 SF 62 is slightly more lozengiform, and belongs to type F2, although the blade is rather longer than the majority (103 mm). It is separated from the long cleft shank by a length of solid shank. The reason for the protuberance at the base of this shaft is unclear, as none of the examples illustrated by Swanton have such a feature. Group E2 blades are found on a number of sites across east Kent, but less common in the west of the county, where only four were listed (Swanton 1973, 83; Fig. 26; 1974, 28-90). The main concentration of group F2 spears is by the coast, but Swanton lists five in west Kent (Swanton 1974, 28-90). That from Strood II is rather longer than that on SF 62; it was found in association with a cylindrical ferrule and a pottery vessel that is similar in form to that from grave 291 at Cuxton (Swanton 1973, 93; Figs 33, 55). Neither of these particular forms is paralleled at Polhill, although two group F2 blades were found there (Hawkes 1973).

Butt ferrules and fittings

In some cases, but not all, an iron ferrule was attached to the butt end of the shaft (Swanton 1973, 7; Harke 1992w, 87; Underwood 2001, 39, 43). These are usually hollow cones (either cleft or uncleft), although they can be solid cones or other forms (Underwood 2001, 43-4). All the ferrules from Dover Buckland are of conical form (Evison 1987, 28), and one from Cuxton is of this type. The first, Cxt 372 SF 85 is *c* 105 mm long and uncleft; it is broadly paralleled at Watts Avenue, Rochester (Rochester Museum), Guildown, Surrey (Swanton 1973, Fig.58) and also at Finglesham, Kent (Hawkes 1958, 22 Fig.14c).

The second type, SF 71 from grave 294, is a tanged ferrule comprising a small cylinder (diameter 20 mm, length 45 mm) that is closed at one end, with a central spike that projects not only inwards, but also outwards through a perforation in the cap. This has a near parallel at Strood II, although that lacks the external spike (Swanton 1973, 146; Fig. 55d), and a closer parallel from Roebuck Road, Rochester (Rochester Museum), which has a spike of 2 inches in length projecting from the base (Payne 1900, liv). At Finglesham a ferrule found by the right thigh was made of a riveted iron band with an internal spike and external point (Swanton 1973, 167; Fig. 64e). Two related objects were found at Kingston Down, 72). That from grave 111 is very small and was attached by rivets; as it was found on the other side pf the body from the spearhead it was suggested that it was from a walking stick (Faussett 1856, 60). The second, from grave 163, was described as the ferrule of a *pilum* (ibid, 72). While it is possible that SF 71 and the examples noted above are reused Roman objects, this seems most unlikely, as *pila* are rare in England (Manning 1985, 159-60). Furthermore, none of the finds noted above are like the collets at the junction of the tang and shaft of the Roman *pila* illustrated in the literature, which tend to be square in section (ibid, pl 76, V25a, b; 2002, 129-30; Figs 175, 176; Bishop and Coulston 1993, Figs 33-4). A very similar object was found on a Merovingian site at Sissach, Switzerland; it was not from a grave and so was of uncertain date, but the above suggests that it may also be a ferrule

Another intriguing feature of SF 71 is that it was found not at the foot of the grave but toward the wrist. As it was aligned with the spearhead, the question must be asked whether the spear was incomplete when buried, perhaps represented by the top and the terminal. Alternatively, SF 71 may have had another function, but again the more obvious possibilities, such as drill bit or graver, seem unlikely in the burial of a child. Given the other Kentish parallels, it must be assumed, therefore, it belongs to a class of ferrule that was standard for Kent, if not elsewhere. A small curved fragment of iron found by the right ankle in grave 316 (SF 86) may also be from a cylindrical ferrule, but is may be a shield mount (see below) as no other evidence for a ferrule was found.

6.2 Shields

The classification of the four shield bosses and their grips follows the systems devised by Dickinson and Härke (1992, Fig. 3 and Table 1; Härke 1992, 82-4) and Spain (2000); these in turn draw on studies by Evison (1963; 1987). Dickinson and Härke's study was principally concerned with finds from the Upper Thames region, but the system of classification has been found to apply to most parts of the country, despite 'strong regional preferences' (Dickinson and Härke 1992, 22-24). For convenience joint authorship is quoted for the individual sections of Dickinson and Härke's work that are referred to here. Spain's survey is concerned with Kent, and specifically with East Kent; it includes 114 shields from 15 sites, including Mill Hill, Deal and Buckland, Dover. The two sites in west Kent (Strood and Northfleet) were omitted from the final computer analysis, which covered 11 sites (Spain 2000, Fig. 1.1; appendix 1). This work suggests that the dates of some of the shield burials from Dover may be slightly earlier than proposed by Evison (ibid, 59).

Shields occur in nearly 25% of Anglo-Saxon male burials and are the second most common item of weaponry found (Underwood 2001, 77; Härke 1989, 52; Tables 4.1, 4.2). The board was usually flat, but can be slightly convex (ibid, 43-4, 50); it was made up of planks between 5-13 mm thick (mostly 6-8 mm), cut to shape with a central opening wide enough for the fist. From evidence recovered elsewhere, three size groups have been proposed: small (0.34-0.42 m), medium (0.45-0.66 m) and large (0.70-0.92 m), with most shields falling within 460 and 660 mm (Dickinson and Härke 1992, 45; Underwood 2001, 78-9); the validity of these groups has, however, been questioned (Stephenson 2002, 29-39). It is not known how the planks were secured, but they may have been glued (Dickinson and Härke 1992, 51; Underwood 2001, 78-9); the lack of board rivets suggests that this was the case for the Cuxton shields. The wood had to be sufficiently strong but also light; alder, poplar or willow were the most popular choices, but ash, birch, lime, maple and oak were also used (Dickinson and Härke 1992, 46-7; Stephenson 2002, 39-40). It was not possible to ascertain the species used for the Cuxton shields. The grip was secured to the back of the board across the opening, while the boss, secured to the front, gave space for the fist and also protected it. In most cases the flange of the boss was angled, probably to act as a spring and provide tension for the rivets (Dickinson and Härke 1992, 35; Stephenson 2002, 20). The board was often covered with leather (Stephenson 2002, 40-1) and decorated with metal fittings; the shield in grave 373 is the only decorated example from the site (see below, mounts).

Three of the Cuxton shields were probably laid flat in the grave and from the location of the bosses a diameter of 600 mm can be proposed for that in Cxt 246, 800 mm for that in Cxt 315, which may have been placed on top of the coffin, and 600-800 m for Cxt 372. By measuring the distance between the bosses and the edge mounts noted below it may be

possible to refine these figures, but the shields would appear to lie at the larger end of the scale noted above. They are, however, not that different from the group 3 shields at Mill Hill Deal. The presence of edge mounts in Cxt 246 and Cxt 315 might suggest that these boards were covered, although there is no other evidence to support this. Insufficient organic matter (wood/leather) survived to determine the thickness of the four Cuxton shields, but the twin edge mounts from grave 247 suggest a thickness of 6 mm. This fits well exactly to the data assembled by Dickinson and Härke (1992, 47-8), which shows that 75% of shields have a central thickness of 6-8 mm. Other fittings, however, suggest a greater thickness. The four decorative mounts from Cxt 372 have shanks of *c* 20 mm, while a loose rivet from Cxt 164 (SF 193) has a shank of *c* 17 mm long. The latter may have gone through a double thickness of wood or wood and organic matter (ibid, 52-3); other possible functions are discussed by Stephenson (2001, 50-1). These finds could equally reflect regional preferences and/or the late date of the shields, as there is some evidence that the boards became thicker and larger over time (ibid; see below, use of weapons).

Table 10: The distribution of the shield fittings (by boss form)

Key: Cxt: context; SF: special find number

Cxt	SF	Boss	Grip	Mounts	Position	Date
315	99, 100	3/6			Over left foot, laid flat?	575-650
315	197		Ia1			
315	101			Rivetted plate (2 frags, possibly the same)	Edge	
372	61	3/6			Over ankles/feet, laid flat	575-650
372	192		Ia2			
372	108			Two pairs, large	Centre	
315	198					
164	65	6			By left thigh, possibly on edge?	590-700
164	193		Ia1			
246	64	7			On left hip	625-720
246	49		Ia2			
246	146			One pair of rivets, small	Edge	
Total		4	4	3=8		

Shield bosses

The typology of shield bosses is governed by a number of factors, notably: overall size and height, flange width, degree of carination, the nature of the cone (straight or convex), and the number and shape of the rivets (Dickinson and Härke 1992, Fig. 3; Table 1). Other features, such as the method of manufacture (one piece, or two pieces joined at the carination), angle of

the flange and the nature of the apex are less diagnostic Härke has defined three types of apex: 'A, integral apex with solid rod or disc'; 'B, integral apex with simple point or short hollow rod'; 'C, inserted apex, rod, button or disc' (ibid, 32). All four bosses were X-rayed in profile and found to be made in one piece. The apexes of Cxt 315 SF 99/100 and Cxt 372 SF 61 appear to be integral, but those on the type 6 and type 7 bosses (Cxt 164 SF 65, Cxt 246 SF 64) appear to have been inserted. Bosses with inserted apexes are apparently less prone to split when subjected to stress, but it is unclear whether some were bosses designed in this way or whether all insertions are repairs (ibid, 32; Stephenson 2002, 19). The most common type of apex found in Kent is disc-headed, while a smaller number of bosses had spikes; no examples of the 'rod' apex type were found by Spain, and some bosses had no apex at all (Spain 2000, 30-1). The four bosses from Cuxton are more or less complete; it is possible to obtain a complete profile for all of them, and the angle of the flanges seems to have been more or less flat in every case. The boss from Cxt 315 is fragmented, but the others are virtually complete, and although few of the rivets that attached them to the boards survive (see below), there is no evidence for damage or repair. There is no evidence for padding inside any of the four bosses that were found on the site.

Table 11: Comparative dimensions of the Cuxton shields (based on Spain 2003)

Key to abbreviations: Cxt: context; Gp: shield form; Diam: diameter; H: total height; FW: flange width; WH (wall height); CVX: convex; SLPG: sloping; STRT: straight; KBHD: knob-headed; SDISC: small disc

Cxt	Gp	Diam	H	FW	WH	Cone	Wall	Carin-ation	Apex	Rivet
315	3/6	130	72	15?	25	CVX	STRT	None	Spike 10	--
372	3/6	134	60	15	13	STRT	SLPG	Slight	Rod (+ disc?) 10+	KBHD
164	6	127-130	80	11	13	STRT	STRT	None	Rod 16	KBHD
246	7	138	128	11	18	STRT	SLPG	None	Spike?	KBHD?

Bosses of Groups 1, 2, 4 and 5

The earliest shield bosses found in England are from imported Germanic shields, followed in the earlier 5th century by shields with bosses of Dickinson's Group 4. In the later 5th century bosses of Groups 1 and 5 appeared, which continued in use until 550 and later (Dickinson and Härke 1992, 24). Group 2 bosses, which appeared in the first half of the 6th century, are similar to Group 3, but have a straight-sided cone (ibid, 13-4; 24). They have five rivets, rather than four, but are otherwise similar in size to the Group 1 bosses. Group 1 bosses are less common in Kent, Essex and Sussex than in Wessex and the Upper Thames valley. Group 2 bosses were less popular, and there seem to be fewer examples of them south of the Thames

than to the north of it (ibid, 12-3). Only three Group 1 bosses and none of Groups 2, 4 or 5 were identified in Spain's analysis of Kentish finds (Spain 2000, 44, 49-50, 87).

Group 3 bosses

These bosses have a convex cone, straight-sided wall with marked carination and five rivets around the flange. They range between 73-93 mm in height, have a wall height of 16-30 mm, diameter of 140-174 mm and flange width of 17-28 mm (Dickinson and Härke 1992, 15). Group 3 shields are thought to been based on continental types and to have been introduced to England in the early 6th century via Kent as a result of contact with Francia. This form is the most common in Kent, Essex and East Anglia; it appeared in the Upper Thames during the first half of the 6th century, probably around the same time as Group 2. In Kent they are most common in the mid- to later 6th century and probably ceased *c* 600, although continuing for some time into the 7th century in other areas (Dickinson and Härke 1992, 15-17; 24; Spain 2000, 64). Research by Spain and Brugmann into the finds from Mill Hill, Deal, shows that the larger Group 3 bosses and longer grips were in use between *c* 500-560/70. The smaller examples with short strap grips came into use between *c* 560/70 and 590 (Spain 2000, 58, 65).

Group 3/6 bosses

Within the Group 3 bosses there was a gradual trend towards narrower and less carinated forms, and these in turn merge into the Group 6 forms. The analysis by Spain (2000, 47-8, 87) suggests that these transitional forms, which date from the later 6th century to early 7th century, do not form a completely distinct type, but that a group for them would be helpful for chronological purposes.

Of the two Cuxton finds assigned to this group, Cxt 372 SF 61 is small, with a low straight cone, flat flange, very slightly sloping wall, very slight carination and a rod apex that expands slightly at the top and may originally have been disc-headed. The position of mineralised wood on one side of the cone suggests that it lay against the side of the coffin. There is also a small patch of mineralised wood on the underside by one of the three surviving rivets. The associated buckle (Cxt 372 SF 2) places this grave in the 7th century. The closest match for SF 61 in the sample illustrated by Spain is from Sarre, grave 189, although this has a taller cone and the wall is upright (Spain 2000, apps 1, 3, no.53).

The boss from Cxt 315 (SF 99/100) has a higher, convex cone, but is nonetheless a low cone type. It has a spike and a near-flat flange, the latter with mineralised wood on the underside; there are also wood remains around the spike. This boss is probably of 7th-century date. The form has elements in common with continental forms (M Welch pers comm), but is also similar to a find from Strood, which was associated with a long grip and so should be of earlier date (Swanton 1973, 146, Fig. 55). It also resembles some group 6 bosses from St Peters Tip, although these all differ slightly in height, diameter, height of wall etc (Spain 2000, nos 111-113).

Group 6 bosses

This type of boss, which appeared at the very end of the 6th century, is smaller and lighter than those of Group 3, with a lower cone (Dickinson and Härke 1992, 20-1; 24; Spain 2000, 64). Two types were defined by Evison: a low curved cone, and a low straight-sided cone. The former should be not more than 150 mm in diameter (mainly 114-127 mm) and less than 80 mm in height, with or without a carination; the latter is between 114-140 mm in diameter and 89 mm in height, with a rod apex or small disc head (Evison 1963, 40-2, Figs 1c, 1d; 1987, 31-2; Dickinson and Härke 1992, 20; see also Spain 2000, 48). Both types occur at Taplow (first quarter of the 7th century), and it would seem that Group 6 bosses continued well into the 7th century (Dickinson and Härke 1992, 20). Group 6 bosses seem to be uncommon in the Upper Thames valley (ibid), but are fairly well represented in Kent (Spain 2000, app 2). X-ray suggests that the one example from Cuxton, Cxt 164 SF 65, may be of composite construction, as the rod appears to continue inside the peak of the cone. This boss has a flat flange with two knob-headed rivets in situ.

Group 7 bosses

In the mid-7th century Group 6 bosses evolved into those of group 7: a tall straight cone and the classic sugar-loaf form (Evison 1963, 42-50, Figs 1e, 1f). The latter, which is most typical of the period after 650 (Dickinson and Härke 1992, 21, 24; Spain 2000, 64), is absent from the Cuxton assemblage, but one example of a 'tall straight cone' is present (Cxt 246 SF 64). This type of boss, which dates from *c* 625 onwards, can be carinated and of composite construction, or conical, made of a piece of sheet metal with a seam where the ends join (Dickinson and Härke 1992, 31-2). The latter is clearly the case with SF 74, where the overlap at the base is 23 mm (cf Evison 1963, 44, Figs 22d, 22g; Dickinson and Härke 1992, 31, Fig. 19; Underwood 2001, 82; Figs 52, 53a). The spike of SF 64 is missing and although most of the flat flange survives, there is no evidence for any rivets, although these are visible on the X-ray (see below). Group 7 bosses are, apparently, rare in Kent (Dickinson and Härke 1992, 21; Geake 1997, 68).

6.2.1 Flange rivets

The survey of bosses from the Upper Thames suggests that the number of flange rivets used to secure the boss to the board is chronologically significant, progressing from four to five in number, although some have more than this (Dickinson and Härke 1992, 10, 15, 35; Underwood 2001, 82). This does not, however, seem to be the case for Kent, where Group 1, 2, 4 and 5 bosses are rare/absent and the use of five rivets seems to be the norm (Spain 2000, 30, 49-50; app 2); none of the finds examined by Spain had only four rivets (ibid, 30). The rivets used to secure the flange became smaller over time. Those of the 6th century are typically disc-headed type and 15-20 mm in diameter (Evison 1987, 31; Dickinson and Härke

1992, 35; Underwood 2001, 82); in Kent large domed rivets are also found (Spain 2000, 31). In the 7th century small knob- or pin-headed rivets became the norm due to the decreasing width of the flange (Evison 1963, 39; Spain 2000, 60, 62). All the Cuxton rivets are of the latter type (see Table 4). Boss Cxt 246 SF 64 is problematic as, although the X-ray hints at the presence of rivets, the spacing suggests that there were only four of them. Furthermore, although there appear to be rivet heads on the upper side of the flange, this is so corroded that it is impossible to be certain, especially as there is no trace of them whatsoever on the underside.

Table 12: The presence and dimensions of the flange rivets (by boss form)

Boss	Group	Originally	Surviving	Head diam	Shaft diam	Total length
Cxt 315 SF 99/100	3/6	5?	0	-	-	-
Cxt 372 SF 61	3/6	5	3	6 mm	2.5 mm	11+ mm
Cxt 164 SF 65	6	5	2	5-6 mm	3 mm	12+ mm
Cxt 246 SF 64	7	4?	3?	5? mm	?	?

In some cases washers were used on the underside of the rivets (Underwood 2001, 82); none were found in association with any of the Cuxton bosses, but one of copper alloy occurs with board mounts in grave 247 (see below). Some flange rivets were tinned or plated, but for Cuxton this could not be demonstrated, either positively or negatively. In Kent this feature is more common on the early shield of groups 1 and 3, and it may be of social significance (Dickinson and Härke (1992, 35; Underwood 2001, 82; Spain 2000, 30, 69-70).

6.2.2 Shield grips

Shield grips were rivetted to the board at right angles to the grain of the wood; they can be simple strips, or complex contruction (with wooden strengthening). There is good evidence from some sites that the former were bound in cloth or textile to protect the hand (Underwood 2001, 86; Fig. 55), and this was possibly the case with grip SF 49 from Cxt 246. The standard classification is that of Dickinson and Härke (1992, 24-7; 35-42), which defined three groups: short (type I), medium (type II) and long (type III). Each of these falls into two types – flat (a) and flanged (b); there are also sub-types dependent on outline. Type I is the most common in the Early Saxon period; most range between 100-160 mm in length (Dickinson and Härke

1992, 25-6; Underwood 2001, 84). All of the Cuxton grips seem to be of type Ia, the simplest form, which comprises a short flat strip with a rivet hole at each end.

Type Ia1 grips, which have expanded terminals, continued in use from the 5th to the 7th centuries; they occur with a variety of boss types, so are not precise dating indicators. The two examples of this type from Cuxton are Cxt 164 SF 193 and Cxt 315 SF 197. The former, which is largely complete (length 104 mm) probably had a length of 120-130 mm. The knob-headed type rivet in situ at one end has a shank *c* 12 mm long (diameter of head 5 mm, shank 2.5 mm). There is also a loose rivet, which has a larger, flatter head (diameter 8 mm) and a longer, thicker shank (diameter 3.5 mm, length *c* 17 mm). This cannot be from the boss, as that has smaller knob-headed rivets, and so may represent a repair to the grip. The grip from Cxt 315 is fragmented, but comprises three pieces, including an expanded terminal with rivet hole; the other end appears to have broken just before the rivet hole. The third piece is from the central part of the grip. In addition there are two strips found near the shield boss with rivet holes that do not fit with the normal grip arrangement (SF 198). Unless they represent repairs to the grip they must come from a mount of some form (see below).

Type Ia2, which are rectangular straps, are more helpful for dating, occurring in the late 6th and 7th centuries with bosses of Groups 6 and 7. The research by Spain and Brugmann shows that short strap grips tend to be associated with smaller Group 3 bosses, and that they came into use between *c* 560/70 and 590 (Brugmann 1999, 86-7; Spain 2000, 58, 65). Grip Cxt 372 SF 67 is missing, but X-ray shows it to be complete or near complete and quite narrow (length 122 mm, width 15 mm); a rivet/rivet hole is visible at one end. The other grip, Cxt 246 SF 49, is rather wider and is problematic as its length is uncertain and no rivet holes are visible. As it is associated with a Group 7 boss it should be a short grip, but the dimensions/rivet holes are perhaps obscured by the textile that adheres to one side of the grip and the wood that adheres to the other.

Grips of type Ib are short straight-sided strips with flanged, or winged, sides; type II grips are of medium length and are rare in England, Type III comprises long grips in the continental style. These forms are typical of the 5th and 6th centuries, and research by Spain and Brugmann shows that these grips tend to associated with the larger Group 3 bosses, and that they were in use between *c* 500-560/70 (Brugmann 1999, 87; Spain 2000, 58, 65). The absence of these types from Cuxton confirms the late 6th- or 7th-century date of the bosses discussed above.

6.2.3 Shield mounts and fittings

Mounts have been found on *c* 50% of all shields; a range of types has been identified (Dickinson and Härke 1992, 27), but most are quite simple. The most common arrangement comprises two pairs of disc mounts between 20-80 mm in diameter (usually 20-40 mm) on

either side of the boss (ibid, 27, 52-3; Fig. 18, a2). It has been suggested that convex mounts appeared *c* 600 together with group 6 bosses and that those of *c* 40-45 mm in diameter are a regional type for Kent (Spain 2000, 68, 89). This is seen in grave 373 (SF 108) at Cuxton, where the mounts are *c* 50 mm in diameter. Similar arrangements of larger rivets were found in grave 89 at Mill Hill, Deal and in grave 98 at Dover, where smaller twinned rivets were found in grave 71 (Evison 1987, 32; Fig. 47, 3c-f; Fig. 38, 8c). A shield from Watts Avenue, Rochester, now in Rochester Museum, also has four larger rivets that are more widely spaced, forming a square or cross. Three similar shield mounts were found in grave 16 at Alton, Hants (Evison 1963, Fig. 19, h-j), while other configurations are discussed by Evison (1987, 32). Lozenge mounts have been found on some shields (Dickinson and Härke 1992, 51, but none were present at Cuxton.

Metal edge bindings are rare in Anglo-Saxon burials, and are usually small clips or U-shaped strips of copper alloy secured by rivets. These probably held the leather cover in place at the seam (Dickinson and Härke 1992, 51) but for Holywell Row it was suggested that they served to show where the top of the shield was when it was needed in a hurry (Lethbridge 1931, 180). Unless they were repairs, this may be the function of the mounts described below, which were both found at the projected edge of the shield board.

In the case of grave 247 the shield boss was set on the left hip, and the mounts were found on the right hip. They comprise a closely spaced pair of domed rivets 9 mm in diameter, set *c* 1 mm apart with mineralised wood adhering to them (SF 146). From the same area was an oval plate or washer of copper alloy (length 18 vmm) with the remains of two iron rivets in it (SF 13). It is likely that the washer secured the rivets on the underside of the shield board.

In grave 316 two flat pieces of iron with the remains of two copper alloy rivets (no structure left) visible on the underside were found by the projected edge of the board on the left shin (SF 101). It is possible that these plates represent a repair rather than decoration. A small curved fragment of iron found by the right ankle in grave 316 (SF 86) that was also located by the edge of the board is problematic.It has mineralised wood adhering to it and may be part of a cylindrical spear ferrule (see above), but could possibly be part of a binding for the board. There are also two small and incomplete pieces found by the boss of this shield (SF 198) that are too wide for the flange and cannot be associated with the grip. One has two rivet holes, slightly staggered, with one rivet in situ, while the other has a single rivet hole that is centrally placed (see above, grips).

6.2.4 Shield straps

There is no evidence for the attachment of straps to the Cuxton shields. There is, however, an iron buckle from grave 247 (SF 48) that was found in an atypical position on the left side of

the chest; it is also possible that the highly decorated buckle Cxt 246 SF 8, found by the inside of the right thigh, was associated with this shield. Both were found close to the projected edge of the board and may well have been part of a shield strap or straps (see dress accessories, buckles). The association of a garnet-set buckle with a type 7 boss is exactly as would be expected for a later 7th-century burial. The context sheet for grave 373 also shows an iron buckle at the approximate perimeter of the board near the edge of the grave. This too may have between part of a shield strap, but the object was presumably lost on site as it was never accessioned or X-rayed.

6.3 Use of weapons

Cuxton lies on the outskirts of Rochester, an area of Early Saxon settlement, and weapons have been found in burial contexts both in Rochester itself (Payne 1895; 1897; 1900) and at Strood (Swanton 1973, 146). West Kent has, however, been somewhat overshadowed by East Kent in terms of studies of weapons and burial rites. A recent survey of weapon burials from 47 Early Saxon cemeteries across the country has shown that 18% of the total inhumation burials had weapons, and that 47% of all adult males were buried with some form of weapon (Härke 1989, 49; 1992, 217). Nine sites in Kent were included in the sample, but only Polhill (17 weapon burials) lies to the west of the Medway. The other site closest to Cuxton is at Holborough (four burials), which, like Polhill, dates to the 7th- to 8th century (Härke 1989, 60). Neither of these sites were included in Spain's study of Kentish shields (Spain 2000).

Taken on a site-by-site basis, there is considerable variety in the number and nature of the weapon burials (those in the survey ranged between one and 70, the latter at Sarre in East Kent). At Mill Hill, Deal, weapons occur in *c* 25% of the 106 graves; eight out of 22 adult male burials contained shields, while 20 contained spears; four had swords. At Dover Buckland there were 27 weapon graves out of 160; 34 contain spears, while 14 had shields (Evison 1987, Tables III, LV). Patterns can, however, be seen at a regional level (Härke 1989, 49, 60). From the sample, Härke concluded that in most areas between 15% and 22% of inhumation burials contained weapons (36-62% of adult males). Kent and the north, however, were found to differ from the norm in that less than 40% of adult males were buried with weapons, yet the average number of weapons in a single burial actually exceeds that in the rest of the country. This means that there are fewer, richer, weapon burials with more weapons in them, rather than large numbers of graves with one or two weapons and few other finds (ibid, 50). In terms of dating, Härke concluded that the peak of weapon burial was *c* 535-555; weapons were still well represented in graves dated to between the late 6th and late 7th century, but few were found in mid 7th- to mid 8th-century burials, and the custom died out *c* 700 (ibid, 51-2; Fig. 4.2).

Table 13: The distribution of the finds in the weapon burials

Cxt	Sex	Age	Spear	Ferrule	Shield	Knife
164	A	25-35	Left at head		By left thigh	Left, waist
246	AF?	17-35	Right at head		On left hip	Right hip
276	I	4-5	Left at head			Grave fill
290	J	6-7	Left at head			Left waist
293	J	6-7	Left at head	Left forearm		Left hip
299	AM	40-70	Right shoulder			Left arm
312	J	9-10	Left above head			Left chest /arm
315	A	25-44	Right at head		By left foot	Left waist
372	A	25-44	Right at shoulder	Right at feet	Over feet	Right at waist

While sets of weapons were often buried with Germanic and Scandinavian warriors, this is less the case in Anglo-Saxon England, where many graves have only the shield and spear, or just the spear. In national terms spears are the most common find, present in most weapon graves, and the only weapon in *c* 50% of them. Shields occur in *c* 8% of Anglo-Saxon burials and in *c* 45% of weapon graves (Härke 1989, Tables 4.1, 4.2; Dickinson and Härke 1992, 63). They are found together with spears in *c* 25% of weapon burials (ibid, 52). Swords are found in only 10% of weapon burials, while other items such as axes and arrows occur in less than 10% (Härke 1989, 52). Spear and shield combinations probably remained fairly consistent until the late 6th –late 7th century. In time the axe and sword largely replaced by the seax and the shield, but shield declined in the 7th century (ibid, 55; table 4.4). It would appear, therefore, that the choice and number of weapons that were buried together was gradually reduced, becoming more standardised and less practical as a 'set' of functional weapons, and thus more symbolic (Härke 1989, 55-9; 1992).

It has long been accepted different weapons signify different things (Hawkes 1973, 187; Swanton 1973, 2-3; Dickinson and Härke 1992. 61-2; Underwood 2001, 39). Spears are taken to be symbolic of war, but in Germanic society they defined a man as free and a warrior, and they were used by freemen of all ranks. The sword is generally taken as an indicator of higher status, although according to Stephenson (2002, 11), it was the shield, rather than the sword or spear, that was the mark of a warrior; and it may also have symbolised adult male status (Dickinson and Härke 1992, 68-9; Härke 1992; Spain 2000, 89). Seaxes seem to fall somewhere between the sword and the spear in terms of social significance (Hawkes 1973, 187). It has, furthermore, been argued that where weapons are present in adult graves of the 5th and 6th centuries they may have had some ethnic symbolism, representing a connection with the warriors of the first Germanic invaders (Spain 2000, 6-7). By the 7th century, however, this connection was less strong; weapons seem to have become symbols of power and elitism in general, and tend to occur in the richer graves,

but they also reflect a number of regional, local and familial factors (Härke 1989, 58-9; 1992, 217-9; Spain 2000, 5-8) and the lack of weapons does not necessarily mean unfree or non-warrior status (Härke 1992, 217-9).

To some extent Cuxton fits with these findings; as shown in Table 13, ten burials (*c* 30% of the total) contained some form of weapon, considerably higher than the national average as calculated by Härke (see above). It is, however, difficult to equate this with the number of male burials, due to the problems in sexing the human remains. In Kent, a rich area, the number of graves with swords is higher than average (Härke 1989, 52-5; Fig. 4.4) but none were present at Cuxton. Their absence merits comment. Härke found that where groups with swords were common, those with shields were not, and vice versa, and he suggested that in 'poorer' areas shields were used in place of swords. This may apply to Cuxton, where shields are present in 40% of the weapon graves. This sum fits well with the national average and the pattern for Kent, where shields are found in 38% of the weapon burials Kent (Dickinson and Härke 1992, 70). At Polhill, 13 graves contained spears and at least four graves contained seaxes, but no swords or shields were present. The lack of shields at Polhill was interpreted as an indicator of the late date of the cemetery, and it was suggested that from the mid-7th century only the most wealthy and least Christian males were buried with shields (Hawkes 1973, 187). On this premise, Cuxton was not necessarily poorer than Holborough, where two swords were found. Härke (1992, 218-9) has noted that weapon graves generally contain not only more finds than other male graves, but that these items are more varied and of better quality; it would seem, therefore that during the 7th century the practice of weapon burial became confined to adult males, and then restricted to the richest burials (Spain 2000, 5-6). Neither can be substantiated at Cuxton, where the weapon burials are not noticeably richer than most of the others. The one possible exception is the later 7th-century grave 247, which contained, in addition to the weapons, a composite buckle, originally with two garnet mounts encircled by beaded gold wire. The fact that this buckle was found by the thigh suggests that, as the waist was probably hidden by the shield, it may have been purposely placed so that it could be seen.

The small size of the Cuxton shield bosses might suggest that the shields were used by adolescents or young men, but this does not fit with the osteological data, and their dimensions are in fact quite standard for the period (Spain 2000, 56, Fig. 3.7). Decreasing boss diameter has been taken as a chronological indicator (Evison 1963, 39; Dickinson and Härke 1992, 24, 35), and it would also appear that the largest and thickest shields are the latest in date. This may reflect an increasing role (Dickinson and Härke 1992, 45-6; Underwood 2001, 79), but could equally reflect the fact they were only buried with adults (Stephenson 2002, 38). The latter would fit for Cuxton, where the projected board diameters fall at the larger end of the medium-sized group, or in the largest group. Arguably the

youngest person to be buried with a shield at Cuxton was the individual in grave 247, who was aged 17-35 years; the remains were tentatively identified as female, but this seems most unlikely. The adult in grave 165 was aged 25-35 years, while those in graves 316 and 373 were aged 25-44 years. It might seem surprising that the oldest male from the site (Cxt 299, aged 40-70) did not have a shield, but in fact the data fits well with the national pattern, which shows a sharp fall off in the burial of weapons with men over 40 and that they are extremely rare after age 55 (Dickinson and Härke 1992, 68-9; Table 18; Spain 2000, 77). This male did, however, have the most impressive knife (SF 82), which almost qualifies as a short seax (see knives).

Turning to the spears, spearhead length is thought to increase according to the age of the individual (Drinkall and Foreman 1998, 251). This cannot be clearly demonstrated at Cuxton. The longest blades were buried with individual aged 25-44 years (Cxt 372 and probably also Cxt 315), but the next longest was buried with a child of less than 7 years (Cxt 293). The oldest male (Cxt 299) had the fourth longest spear. The smallest spear, is however, as it should be, from the infant burial Cxt 276. This can be compared with the small spear or dart only 90 mm in length was buried with a child in grave 139 at Dover Buckland (Evison 1987, 26). The fact that half of the spears were buried with children, three of them under 7 years, and one between 9-12 years, is intriguing, as they would have been too young even to have been in training as warriors. It may be that, as suggested by Swanton (1973, 4) that, at least where the spear would have been too large for the child to handle, it was a symbolic gift demonstrating the status the deceased would have enjoyed as adult. This probably applies to Cxt 293, and possibly also to Cxt 290 and perhaps Cxt 312.

The frequency of decorated/damaged weapons increases with age (Härke 1992, 140-5, Tab 19), but the ritual 'killing' of weapons was not common in Anglo-Saxon England, and was not a Kentish tradition (Dickinson and Härke 1992, 64; Härke 1992, 218-9), although examples of broken spears were noted at Dover Buckland (Evison 1987, 28). Where ferrules are lacking it is impossible to know if a spear was intact or not when buried. The only possible candidates for such a practice at Cuxton, therefore, are graves 316 (unlikely; see below) and grave 294, where the cylindrical ferrule was found by the left forearm; it seems, however, hardly likely that this rite would be applied to a child only 6-7 years old.

Looking at the disposition of the weapons in the Cuxton graves, the spears, shields and knives were placed in a variety of locations (see Tables 9, 10). In national terms some 66% of shields were placed on the central axis of the grave (Dickinson and Härke 1992, 65), but in Kent they were commonly stood on edge (ibid, 65-7; Spain 2000, 71-7, Fig. 4.7). Two of the Cuxton shields were placed at or over the feet, that in grave 247 appears to have been over the hip, as if held by the deceased, while that from Cxt 164 may have been standing. From the surviving evidence it is impossible to establish the condition and completeness of the shields

at the time of burial, and where damage is present (eg the fractured boss from Cxt 31) it is also hard to ascertain whether this was pre- or post-burial. It is likely that the shields from Cxt 246 and Cxt 372, which were laid over the hip and feet respectively, were complete; if so their maximum diameter will be dictated by the width of the cut for the burial. For the others it is possible that shields were stood on their sides, or that only the bosses or part of the shield were buried, as the bosses were placed by the side of the grave, boss Cxt 315 was damaged and the rivets that would have secured it to the board are missing.

In national terms, spears are more commonly found on the right side (Härke 1992, 126, Abb 19), but here four were on the right and four on the left (Table 13); all were pointing to the head of the grave in typical Anglo-Saxon fashion. Knives were found in all of these graves, to the left of the body, to the right, on the chest, at the waist or at the feet; some were pointing up while others were pointing down or laid obliquely (see knife section). In grave 165 the shield and spear were on the same side of the body, but in grave 247 they were on different sides.

Axes, typical of the 5th and 6th centuries, are absent, as are seaxes, which are typical of the later 6th and 7th centuries. None of the shields or spears are associated with a shield-on-tongue buckle, but these are rare on the site. Nonetheless, the combination of evidence would point to the late 6th to first half of the 7th century for the weapon burials. The latest datable burial is grave 247, which contained the type 7 shield boss. The lack of swords might indicate that none of those buried at Cuxton were of an elevated rank, but could also reflect the location of the community or the date of the cemetery, as some graves, both with and without weapons, had quite impressive buckles and other desirable equipment. On the other hand, a parallel may be drawn between the lack of swords and the lack of Kentish brooches, which suggests that Cuxton belonged firmly to the Saxon traditions of settlements to the west of the Medway rather than the Jutish traditions of East Kent.

7 LIST OF ILLUSTRATED SMALL FINDS

The following table gives a list of illustrated small finds. Catalogue details can be found in the grave catalogue. Illustrations can be found in the grave catalogue.

Context	ON Number	Record ID (database)	Object Identification	Sample Number	Material	Material2
305	1	I-1	Pendant		Gold	
372	2	I-2	Buckle		Copper alloy	
178	3	I-3	Buckle		Copper alloy	
190	4	I-4	Buckle		Copper alloy	
293	5	I-5	Buckle		Copper alloy	
290	6	I-6	Buckle		Copper alloy	
164	7	I-7	Buckle		Copper alloy	

Context	ON Number	Record ID (database)	Object Identification	Sample Number	Material	Material2
246	8	I-8	Buckle		Copper Alloy	Silver
305	9	I-9	Ring		Silver	
305	10	I-10	Ring		Silver	
261	12	I-12	Lace tag		Copper alloy	
246	13	I-13	Shield Fitting		Copper alloy	Iron
193	14	I-14	Lace tag		Copper alloy	
261	15	I-15	Buckle-Plate		Copper alloy	
261	16	I-16	Buckle-Plate		Copper alloy	Iron
282	17	I-17	Mount		Copper alloy	
261	18	I-18	Buckle		Copper alloy	
305	19	I-19	Bracelet		Copper alloy	
282	20	I-20	Purse frame		Copper alloy	
305	21	I-21	Workbox		Copper alloy	Iron
305	22	I-22	Needle case		Copper alloy	
363	24	I-24	Buckle		Iron	Copper alloy
214	25	I-25	Buckle		Iron	Copper alloy
186	26	I-26	Bead		Amber	
214	27	I-27	Bead		Stone	
210	28	I-28	Bead		Glass	
296	29	I-29	Bead		Glass	
193	30	I-30	Bead		Glass	
193	31	I-31	Bead		Glass	
302	32	I-32	Bead		Glass	
305	33	I-33	Mount		Glass	
305	34	I-34	Bead		Glass	
168	35	I-35	Bead		Glass	
168	36	I-36	Bead		Glass	
357	37	I-37	Bead		Glass	
214	38	I-38	Bead		Glass	
305	39	I-39	Pendant		Gold	Glass
214	40	I-40	Pendant		Animal bone	Iron
214	41	I-41	Pendant		Glass	Copper Alloy
214	42	I-42	Comb		Animal bone	Iron
214	43	I-43	Shears		Iron	
214	44	I-44	Pendant		Animal bone	Iron
276	45	I-45	Knife		Iron	
246	46	I-46	Spear		Iron	Wood
276	47	I-47	Spear		Iron	
246	48	I-48	Buckle		Iron	
246	49	I-49	Shield Grip		Iron	Wood
214	50	I-50	Ring		Iron	
246	52	I-52	Knife		Iron	Wood
240	53	I-53	Pin		Iron	Textile
214	54	I-54	Ring		Iron	
214	55	I-55	Bead		Glass	
240	56	I-56	Unidentified		Iron	
214	58	I-58	Spatulate tool		Iron	
240	59	I-59	Knife		Iron	Wood

Context	ON Number	Record ID (database)	Object Identification	Sample Number	Material	Material2
214	60	I-60	Chatelaine		Iron	
372	61	I-61	Shield boss		Iron	Wood
299	62	I-62	Spear		Iron	Wood
293	63	I-63	Spear		Iron	Wood
246	64	I-64	Shield boss		Iron	Wood
164	65	I-65	Shield boss		Iron	
293	66	I-66	Knife		Iron	Wood
290	67	I-67	Knife		Iron	Wood
282	69	I-69	Strip		Iron	Textile
290	70	I-70	Spear		Iron	Wood
293	71	I-71	Spear		Iron	
299	72	I-72	Buckle		Iron	Copper alloy
293	73	I-73	Buckle		Iron	
293	74	I-74	Pin		Iron	Textile
282	75	I-75	Awl/piercer		Iron	
282	76	I-76	Knife		Iron	Wood
296	77	I-77	Chatelaine		Iron	Leather
296	78	I-78	Chatelaine		Iron	
296	79	I-79	Knife		Iron	Wood
296	80	I-80	Shears		Iron	Textile
299	81	I-81	Knife		Iron	
299	82	I-82	Knife		Iron	Copper alloy
372	83	I-83	Spear		Iron	Wood
315	84	I-84	Spear		Iron	Wood
372	85	I-85	Spear		Iron	Wood
305	87	I-87	Chatelaine		Iron	
305	88	I-88	Knife		Iron	
305	89	I-89	Buckle		Iron	Textile
305	90	I-90	Shears		Iron	
305	91	I-91	Knife		Iron	
305	92	I-92	Knife		Iron	
305	93	I-93	Pendant		Bone	Iron
312	94	I-94	Knife		Iron	Wood
312	95	I-95	Knife		Iron	
312	96	I-96	Buckle		Iron	Copper alloy
363	97	I-97	Buckle		Iron	Textile
315	98	I-98	Buckle		Iron	
315	99	I-99	Shield boss		Iron	Wood
315	100	I-100	Shield boss		Iron	Wood
363	102	I-102	Knife		Iron	
363	103	I-103	Knife		Iron	
315	104	I-104	Knife		Iron	Wood
372	105	I-105	Knife		Iron	Wood
367	106	I-106	Knife		Iron	
372	108	I-108	Shield Fitting		Iron	Wood
149	109	I-109	Tool		Iron	
164	110	I-110	Hook		Iron	Wood
166	111	I-111	Buckle		Iron	

Context	ON Number	Record ID (database)	Object Identification	Sample Number	Material	Material2
190	112	I-112	Mount		Iron	
190	113	I-113	Mount		Iron	
178	115	I-115	Fitting		Iron	Wood
172	116	I-116	Knife		Iron	Wood
164	117	I-117	Knife		Iron	
166	118	I-118	Knife		Iron	Wood
193	119	I-119	Knife		Iron	Wood
190	120	I-120	Knife		Iron	Wood
164	121	I-121	Spear		Iron	Wood
296	122	I-122	Buckle		Iron	Leather
178	123	I-123	Knife		Iron	Wood
282	125	I-125	Knife		Iron	Wood
285	126	I-126	Pin		Copper alloy	
261	127	I-127	Disc		Copper alloy	
261	128	I-128	Coin		Copper alloy	
261	129	I-129	Mount		Iron	
261	130	I-130	Awl		Iron	Wood
261	131	I-131	Knife		Iron	
261	132	I-132	Strip		Iron	
261	133	I-133	Buckle		Copper alloy	
305	135	I-135	Purse frame		Iron	Textile
214	136	I-136	Bead		Glass	
282	137	I-137	Buckle		Copper alloy	
312	138	I-138	Spear		Iron	Wood
318	139	I-139	Knife		Iron	
261	140	I-140	Mount	7	Copper alloy	
305	141	I-141	Workbox		Copper alloy	
214	142	I-142	Bead		Shell	
214	143	I-143	Key	60	Iron	
214	144	I-144	Key	60	Iron	
214	145	I-145	Knife		Iron	
246	146	I-146	Shield Stud		Iron	Wood
261	147	I-147	Mount		Copper alloy	Leather
261	148	I-148	Mount	7	Copper alloy	
41	152	I-152	Bead		Stone	
357	153	I-153	Bead		Glass	
357	154	I-154	Bead		Glass	
210	155	I-155	Bead		Glass	
210	156	I-156	Bead		Glass	
214	157	I-157	Bead		Glass	
214	158	I-158	Bead		Glass	
214	159	I-159	Bead		Glass	
214	160	I-160	Bead		Glass	
214	161	I-161	Bead		Glass	
214	162	I-162	Bead		Glass	
214	163	I-163	Bead		Glass	
214	164	I-164	Bead		Glass	
214	165	I-165	Bead		Glass	

Context	ON Number	Record ID (database)	Object Identification	Sample Number	Material	Material2
214	166	I-166	Bead		Glass	
214	167	I-167	Bead		Glass	
214	168	I-168	Bead		Glass	
214	169	I-169	Bead		Glass	
214	170	I-170	Bead		Glass	
214	171	I-171	Bead		Glass	
214	172	I-172	Bead		Glass	
214	174	I-174	Bead		Glass	
214	175	I-175	Bead		Glass	
214	176	I-176	Bead		Glass	
214	177	I-177	Bead		Glass	
214	178	I-178	Bead		Glass	
214	179	I-179	Bead		Glass	
214	180	I-180	Bead		Glass	
214	181	I-181	Bead		Glass	
214	182	I-182	Bead		Glass	
305	183	I-183	Ring		Silver	
305	184	I-184	Ring		Silver	
305	185	I-185	Pendant		Silver	
305	186	I-186	Mount		Copper alloy	Iron
305	187	I-187	Mount		Stone	
282	188	I-188	Buckle		Copper alloy	
282	189	I-189	Buckle		Copper alloy	
282	190	I-190	Mount		Copper alloy	
214	191	I-191	Bead		Stone	
372	192	I-192	Shield Grip		Iron	Wood
164	193	I-193	Shield Grip		Iron	
261	194	I-194	Pin		Iron	
282	195	I-195	Tweezers		Iron	
282	196	I-196	Tool		Iron	Wood
315	197	I-197	Shield Grip		Iron	Wood
315	198	I-198	Shield Fitting		Iron	Wood

8 BIBLIOGRAPHY

Akerman, J,Y, 1855 *Remains of Pagan Saxondom*, London

Bayley, J, 1987 Qualitative analyses of some of the beads, in Evison, V I, 1987, 182-9

Bishop, M C, and Coulston, J C N, 1993 *Roman military equipment*, London

Blackmore, L, in prep Assessment of the finds from Prittlewell, Essex (sitecode EX-PRO03)

Cumberland, A, 1938 Saxon cemetery, Risely, Horton Kirby, Trans Dartford District Antiq Soc **8**, 14-30

Cumberland, A, 1940 Risely Saxon Cemetery, *Archaeol Cantiana* **LIII**, 142

Dickinson, T, 1974 *Cuddesdon and Dorchester-on-Thames, Oxfordshire, 'Princely' Sites in Wessex*, BAR 1

Dickinson, T M, 1974 Excavations at Standlake Down in 1954: the Anglo-Saxon graves, *Oxoniensia* **38**, 239-57

Dickinson, T, and Härke, H, 1992 *Early Anglo-Saxon Shields*, Archaeologia **113**

Drinkall, G, and Foreman, M, 1998 The Anglo-Saxon cemetery at Castledyke South, Barton-on-Humber, *Sheffield Excav Rep* **6**, Sheffield knives

Eck, T, 1891 *Les deux cimetières gallo-romaines de Vermand et de St-Quentin*, Paris/St Quentin workbox/containers

Evison, V I, 1956 An Anglo-Saxon cemetery at Holborough, Kent, *Archaeol Cantiana* **70**, 84-141 spears

Evison, V I, 1963 Sugar-loaf Shield bosses, *Antiq J* **43**, 38-96

Evison, V I, 1987 *Buckland Anglo-Saxon Cemetery*, HBMCE.

Faussett, B, 1856 *Inventorium Sepulchrale: an account of some antiquities dug up at Gilton, Kingston, Sibertswold, Barfriston, Chartham and Crundale, in the county of Kent, from AD 1757 to AD 1773*

Feugère, M, 2002 *Weapons of the Romans*, Stroud

Gale, D A, 1989 The Seax, in S C Hawkes (ed), 71-83

Geake, H, 1997 *The Use of Grave Goods in Conversion Period England*, BAR Brit Ser **261**

Green, B, and Rogerson, A, 1978 *The Anglo-Saxon cemetery at Bergh Apton*, Norfolk, East Anglian Archaeol **7**

Gröbbels, W, 1905 Der Reihengräberfund von Gammertingen, Munich NECA

Guido, M, 1989 Comment, in Speake, G, 1989, 51-2

Guido, M, 1999 *The Glass Beads of Anglo-Saxon England c. AD 400-700*, Reports of the Research Committee of the Society of Antiquaries **58**, London

Hampel, A, 1994 *Der Kaiserdom zu Frankfurt am Main, Ausgrabungen 1991-93*, Nussloch

Härke, H, 1989a Knives in early Saxon burials: blade length and age at death, *Medieval Archaeol* **33**, 144-48

Härke, H, 1989b Early Saxon weapon burials: frequencies, distributions and weapon combinations, in S C Hawkes (ed)

Härke, H, 1992 Shield technology, in Dickinson, T, and Härke, H, 31-54

Härke, H, 1992 *Angelsächsische Waffengraber des 5 bis 7 Jahrhunderts, Zeitschrift fur Archäologie des Mittelalters Beiheft* 6, Cologne

Haughton, C, and Powlesland, D, 1999 West Heslerton *The Anglian cemetery vol 1, The excavation and discussion of the evidence*

Hawkes, S C, 1958 The Anglo-Saxon Cemetery at Finglesham, Kent: a reconsideration *Medieval Archaeol* **2**, 1-71

Hawkes, S C, 1973 The dating and social significance of the burials in the Polhill Cemetery, in Philp, B, 1973, 186-214

Hawkes, S C (ed), 1989 *Weapons and warfare in Anglo-Saxon England*, Oxford Comittee for Archaeol Monog **21**

Hawkes, S C, 1990 Bryan Faussett and the Faussett Collection: an Assessment, in E Southworth (ed), *Anglo-Saxon Cemeteries. A reappraisal*, 1-24

Hawkes, S C, Speake, G, and Northover, P, 1979 A seventh-century bronze metalworker's hoard from Rochester, Kent, *Frühmittalterlichen Studien* **13**, 382-92 check: dies, mounts for drinking cups (EX-PRO)

Heid, S, 1991 Fränkische Kapselanhänger, in Engemann and Rüger, Ausgewahlte Denkmaler im Rheinschen Landesmuseum Bonn, Koln/Bonn

Hilton, S A, 1980 check Dissertation on Horton Kirby, London

Hirst, S, 2006 The beads, in Walton Rogers, P, Henig, M, Hirst, S and Marzinzik, S, Early Anglo-Saxon Dress Accessories from Saltwood Tunnel, *CTRL specialist report series*, in ADS 2006

Hyslop, M, 1963 Two Anglo-Saxon cemeteries at Chamberlain's Barn, Leighton Buzzard, Bedfordshire, *Archaeol Journ* **120**, 161-200

Huggett, J W, 1988 Imported grave goods and the Anglo-Saxon economy, *Medieval Archaeol* **32**, 63–96

Hutchinson, M E, 1989 The identification of shell beads in grave S14 and a cowrie shell in grave S4, in Poulton 1989, 96

Hyslop, M, 1963 Two Anglo-Saxon cemeteries at Chamberlain's Barn, Leighton Buzzard, Bedfordshire, *Archaeol Journ* **CXX**, 161-200

Kerep, A, 2000 Saltwood spears

Koch, U, 1977 Das Reihengraberfeld bei Schretzheim, Germanische Denkmaler der Volkerwanderungszeit Serie A, Band 13, Berlin beads

Leeds, E T, 1936 *Early Anglo-Saxon Art and Archaeology*

Lethbridge, T C, 1931 *Recent excavations in Anglo-Saxon cemeteries in Cambridgeshire and Suffolk*, Cambridge Antiq Soc New Series, 3

Lethbridge, T C, 1936 *A Cemetery at Shudy Camps, Cambridgeshire*. Cambridge Antiq Soc **5**, No.5

MacGregor, A, 1985 *Bone, antler, ivory and horn: the technology of skeletal materials since the Roman period*, London

MacGregor, A, 1997 *Ashmolean Museum Oxford. A Summary catalogue of the continental collections (Roman Iron Age, Migration Period, Early Medieval,* BAR Int Ser **674**

MacGregor, A, and Bolick E 1993 *Ashmolean Museum. A Summary Catalogue of the Anglo-Saxon Collections*, BAR **230**

Malcolm, G, and Bowsher, D, with Cowie, R, 2003 *Middle Saxon London, Excavations at the Royal Opera House 1989-99*, MoLAS Monograph **15**

Manning, W H, 1985 *Catalogue of the Romano-British iron tools, fittings and weapons in the British Museum*, London

Martin, M, 1989 Bemerkungen zu den chronologischen Gliederung der fruhen Merowingerzeit, *Germania* **67**, 12-41 buckles

Marzinzik, S, 2003 Early Anglo-Saxon belt buckles (late 5th to early 8th centuries A.D.): Their classification and context, BAR British Series 357, Oxford

Matthews, C L, 1962 The Anglo-Saxon cemetery at Marina Drive, Dunstable, Beds AJ 1, 25-47

Meaney, A L ,1964 *A Gazetteer of Early Anglo-Saxon Burial Sites*

Meaney, A, 1981 *Anglo-Saxon Amulets and Curing Stones* BAR Brit Ser **96**

Meaney, A L, and Hawkes, S C, 1970 *Two Anglo-Saxon cemeteries at Winnall*, Soc Medieval Archaeol Monog Ser **4**

Moosbrugger-Leu, R, 1971 Die Schweiz zur Merowingerzeit, Bern workbox/containers

Morris 1962 in Matthews, C L, 1962

Ozanne, A ,1962-3 The Peak dwellers, *Medieval Archaeol* **6-7**, 15-52

Parfitt, K, and Brugmann, B, 1997 The Anglo-Saxon cemetery at Mill Hill, Deal, Soc Med Archaeol mongr **14**, London

Payne, G, 1895 Researches and discoveries in Kent, *Archaeol Cantiana* **XXI**, xlvii-lvi

Payne, G, 1897 Researches and discoveries in Kent, *Archaeol Cantiana* **XXII**, xlix-lxii

Payne, G, 1900 Researches and discoveries in Kent, *Archaeol Cantiana* **XXIV**, li-lx

Philp, B, 1973 'Site 24. The Anglo-Saxon Cemetery at Polhill, Dunton Green, in Philp, B, *Excavations in West Kent 1960-1970*, 164-214

Pirling, R, 1974 Das römisch-fränkische Gräberfeld von Krefeld-Gellep, 1960-1963, 2 Teil: Katalog und Tafeln, GDV Ser B, Bd 8, Berlin

Poulton, R, 1989 Rescue excavation on an early Saxon cemetery site and a later (probably late Saxon) execution site at the former Goblin Works, Ashtead, near Leatherhead' *Surrey Archaeol Soc* **79**, 67-99

Quast and Schussler, 2000 Germania 78.i, 75-96 garnets

Renner, D, 1970 *Die durchbrochenen Zierscheiben der Merowingerzeit, Römisch Germanisches Zentralmuseum*, Mainz, Kataloge vor-und frühgeschichtlicher Altertümer **18**, Mainz

Roes, A, 1963 *Bone and antler objects from the Frisian terp mounds*, Haarlem

Rollier, P, 1911 Armes et bijoux trouvés a Arçon (Doubs), Revue Charlemagne, 156-60

Schulze-Dörrlamm, 1990 Romanisch oder Germanisch? Untersuchungen zu den Armbrust- und Bügelknopffibeln des 5. und 6. Jahrhunderts n. Chr. aus den Gebieten westlich des Rheins und südlich der Donau, Jahrb, RGZM 33.2, 593-720 bracelets

Smith, C R, 1846 Visit to Hartlip, Kent, *JBAA* **1**, 314-316

Smith, C R, 1852 Anglo-Saxon and Frankish remains, in C R Smith (ed) *Collectanea Antiqua, Etchings and Notices of Ancient Remains, Illustrative of Habits, Customs and History of Past Ages*, 2, 203-248

Roach Smith, C, 1856, Introduction, in Faussett, B, ix-liv

Spain, S, 2000 *The shield in early Anglo-Saxon Kent: a computer assisted analysis of shield bosses and an investigation into the use of the shield in the burial rite*, unpublished MA dissertation, University of London

Speake, G, 1979 Isle of Wight

Speake, G, 1989 *A Saxon bed burial on Swallowcliffe Down, Excavations by F de M Vatcher*, English Heritage Archaeol Rep **10**

Stephenson, I P, 2002 *The Anglo-Saxon Shield*, Stroud

Swanton, M J, 1973 *The Spearheads of the Anglo-Saxon Settlements*

Swanton, M J, 1974 *A corpus of Pagan Anglo-Saxon Spear-Types,* Brit Archaeol Rep **7**, Oxford

Tylecote, R F, Corfield, M, Biek, L, and Wyles, S R, 1980 Metallographic, chemical and microscopical examination, in Haslam, J, A Middle Saxon Iron-smelting site at Ramsbury, Wiltshire, *Medieval Archaeol* **24**, 39-41

Tyler, S, 1992 Anglo-Saxon settlement in the Darent valley and environs, *Archaeol Cantiana* **CX**, 71-81

Underwood, R, 2001 *Anglo-Saxon weapons and warfare*, Stroud

Walsh, R, 1981 Recent investigations at the Anglo-Saxon cemetery, Darenth Park Hospital, Dartford, *Archaeol Cantiana* **XCV**I, 305-20

Wamers, E, 1995 Eine burgundische Pyxis 'vom Niederrhein'. Zu merowingerzeitlichen Amulettkapseln und Kosmetikbuchsen, *Fruhmittelalterlichen Studien* **29**, 144-66

Wamers, E, 1996 Reichdosen, in *Die Franken*, 1000-1001

Webster, L, and Backhouse, J, 1991 *The making of England: Anglo-Saxon art and culture AD 600–900*, London

Welch, M, 1999 Glass beads in early Anglo-Saxon contexts, in Guido, 1-10

Werner, J, 1950 Das alamannische Fürstengrab von Wittislingen, Munchen workbox/containers

West, S E, 1985 West Stow West, S E, 1985 *West Stow: the Anglo-Saxon village*, E Anglian Archaeol Rep **24**, Bury St Edmunds

West, S E, 1998 EAA24

White, R H, 1988 *Roman and Celtic objects from Anglo-Saxon graves, a catalogue and interpretation of their use*, BAR **191**

Youngs, S M, 1989 *The Work of Angels. Masterpieces of Celtic Metalwork, 6th-9th centuries.* British Museum