

Sewerby, Yorkshire

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The Textiles

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The information about textiles from the Sewerby cemetery has been gleaned from fragments on the grave goods, in which the fibres are often replaced, or partially replaced by metal oxides. The remains of clothing, present as masses of dark organic matter round the metal objects, were carefully lifted by the excavators, and seemed at first likely to contain sizeable textile fragments; but the state of preservation of fibres was poor, the surface of textiles even when oxidised deteriorated, and in some cases, where it seemed to the eye that fragments of fabric had survived, these were in fact "earth replacements", in which, though even the spinning direction of threads could be seen, the "fibres" were formed only by fine soil crystals (Pl. ). The results of H.M.Appleyard's fibre examinations are given in Appendix , p. . Although the actual amount of textiles was disappointing, the archaeologists' careful observations of the positions of these areas of organic matter perhaps add something to our limited knowledge of the garments of the period.

The weaves represented include most of the types generally found on Anglo-Saxon sites:-

Tabby weaves The nine samples identified are Z spun throughout, and only one (Grave 19.4(b)) is so fine as to suggest a linen cloth.

Twill weaves: four-shed Of these, ten examples are Z spun throughout, and seem all to have been simple 2/2 diagonal twills, as far as can be judged from such small fragments. One, from Grave 12.5, has a well-napped or teasled surface, and fibre replacements on a girdle hanger from another grave (Grave 49.10), originally thought perhaps to be fur, may come from the nap of a similar weave. The practice of raising and matting the surface fibres was well known in Roman Britain (1) but it uncommon in Anglo-Saxon textiles. A napped fragment with a tablet-weave border from Stretton-on-Fosse, Warwickshire, (Grave 13.F.102), comes from a cemetery with some Romano-British features; other possible examples, however, have been found at Mucking, Essex (Graves 784, 845, and 878) and at West Garth Gardens, Bury St.Edmunds (Grave IX). The fibres of all these are replaced, and so many well preserved samples from other sites show no sign of napping that it seems unlikely the technique was common among the Anglo-Saxons.

Of at least eight twills with Z spun yarn in one system and S spun yarn in the other, one was certainly a broken diamond twill (Grave 19.4(c), fig.1.b) and two others showed either broken diamonds or chevrons (Graves 38.3, 57.5, fig.1.a). The use of a different spinning direction in warp

and weft often indicates a better quality fabric, and evidence from other sites suggests that these are often twills with patterns (2). One of the Z, S twills had a tubular selvedge (Grave 8.2, fig.2.b), a type known from other Anglo-Saxon fabrics, from Broomfield Barrow, Barrington, Haslingfield and Wakerley.

In Grave 57 some coarse fragments (5 (d)) are of a twill in which the warp (?) is Z throughout, and the weft (?) thread changes from Z to S in two places, indicating coloured stripes; the S wool is visibly darker than the Z, and H.H.Appleyard's fibre analysis shows this was naturally pigmented, and the Z yarn unpigmented but dyed, possibly yellow. Replaced twills and tabby weaves with stripes and checks indicated by changes in the spinning direction of groups of threads have been found at Mucking, Essex, Worthy Park, Rants and Updown, Kent.

twill weaves: three-shed One fragment of three-shed twill also comes from Grave 57. This weave, which is not found in Scandinavia until the Viking period, appears on a number of Anglo-Saxon sites; it is possible that it, like the napped twills, is a legacy of the Roman occupation (3).

Belts and braids Some interesting details are preserved - a decorated tablet-woven braid in a wrist clasp (Grave 57.7, fig.2.a), and other possible tablet twists from neck and wrist (Graves 15.5, 38.6-7) (4); threads that suggest the fringe of a cloak (Grave 49.15); and leather in a wrist clasp (Grave 38.11), perhaps a leather cuff or sleeve-edging, as suggested on wrist clasps from Holywell, Cambridge and Sleaford, Lincolnshire (5). A belt fragment in a warp-face tabby weave is replaced (Grave 19.5) and the back cannot be seen, so that it is impossible to say if it was patterned, as in the warp-face braid from Laceby, Lincolnshire (6); this, and a coarser partially replaced example from Mucking, Essex (Grave 55.2), were both probably of flax.

Garments The arrangement of brooches, wrist clasps and buckles in graves in eastern England has suggested that the women's dress here probably had a good deal in common with the Pannonian costume shown on monuments of the early centuries A.D.(7). An undergarment with long sleeves had over it a thicker gown, perhaps simply a rectangle of woollen fabric folded into a tube and caught on the shoulders with brooches. Textile evidence in England suggests that the third brooch shown fastening the neck of the undergarment on some of the Pannonian reliefs, can be used here for catching the loose fold of the overgown on the breast, or for closing a cloak. The costume is completed by a belt, necklaces, and for married women a headveil or hood.

The arrangement is clearest at Sewerby in Grave 19. A tabby weave, probably of wool, is found on the backs of the quoit brooches on the

shoulders and the great gilt central brooch, suggesting that all three pinned the overgown; a fine tabby, probably flax, lying underneath the centre brooch nearer to the woman's skin than the gown, could be either from the underdress, or from a headveil tucked in round the neck; there is a woven belt, and over all a cloak or shroud of fine diamond twill - most probably a cloak, since though it lay above the gilt brooch instead of being fastened by it, the woman's hands, lying on her breast, were outside it. A mass of plant or grass stems adhering to this twill suggest either that there was no coffin, or perhaps that flowers were placed on the breast. One small textile fragment does not obviously belong with any of these garments, a scrap of twill only present on the front of the belt buckle, but something like a bag attached to the belt could account for this.

In Grave 49 the gown fabric, of which traces are preserved on the back of one of the small brooches, seems to have been a Z,S spun twill, and the cloak, lying above these brooches and the central brooch, another twill with different spinning which, to judge by traces where it touched the girdle hanger, may have been napped. In Grave 35, the position of the hands, extended over the hips, shows that the tabby weave between the wrist clasps and the vertebrae comes from the gown, and again in Grave 38 similar fabric traces on the back of one shoulder brooch and the front surface of the wrist clasps, as the woman lay with one arm extended and one folded on her breast, indicate that her gown was a twill.

Grave 12 is unusual in having four brooches. Three occupy the usual positions, with woollen twill from the gown preserved behind them; on the front of the left shoulder brooch are napped fibres, corresponding to those of the napped twill on the back of the extra brooch to the left of the neck, suggesting that this one fastened the cloak; the fine necklace, which lay over this brooch, was described by the excavators as probably placed on the body, not worn round the neck. A tabby weave under the foot of the left shoulder brooch may be from the headveil, tucked in to keep it in place, perhaps also represented by the vegetable fibres, ?flax, identified with matter from the other shoulder brooch.

Grave 57, which has the most varied collection of textiles, is more difficult to interpret, as hardly any bones survived, and the grave goods have obviously shifted towards one end. The combination of fragments of the coarse striped twill on the front of the large brooch and possibly also on the wrist clasps suggests a patterned cloak; the fur-like layer on this twill was identified by H.M.Appleyard as wool, without pigment, which cannot be a nap raised from the fabric with its dyed and pigmented threads, and perhaps might be a sheepskin edging or

or lining to the cloak. The Z,S chevron twill on the other two brooches and possibly on the back of the large brooch, suggests the gown; the position of the three-shed twill on the pincatch of one brooch might possibly come from the underdress, while the rather coarse tabby on the front of the annular brooch could be from a hood.

#### notes

- 1 J.P.Wild, "Soft finished textiles in Roman Britain", Classical Quarterly, LVII, no.1, 1967, 133-5.
- 2 G.M.Crowfoot, "Two textiles from the National Museum, Edinburgh", Proc.Soc.Ant.Scot. LXXII, 1947-8, 225 ff; G.M.Crowfoot in F.H. Thompson, "Anglo-Saxon sites in Lincolnshire" Ant.Journ. XXXVI, 1956, 189; G.Crowfoot in H.R.Davidson & L.Webster, "The Anglo-Saxon burial at Coombe, Kent" Med.Arch. XI, 1967, fig.7; E.Crowfoot in P.J.Tester, "Excavations at Fordercroft, Orpington", Anch.Cant. LXXIV, 1969, 51; E.Crowfoot in C.Hills & P.Wade-Martins, "The Anglo-Saxon cemetery at the Paddocks, Waffham", East Anglian Archaeology, Report no.2, 1976, 29, fig.12 a,b; R.Bruce Mitford, The Sutton Hoo Ship Burial I, 1975, 445, 447, SH 1, 2, 9; and numerous unpublished examples.
- 3 G.M.Crowfoot, "Anglo-Saxon tablet-weaving" Ant.Journ. XXXII, nos.3,4, 1952, 190; G.M.Crowfoot, "The textile remains" in E.T.Leeds & H.de S. Shortt, An Anglo-Saxon cemetery at Petersfinger, near Salisbury, Wilts 1953, 61; R.Bruce Mitford (1975), 446, SH 7, SH 8; and unpublished fragments from eleven other cemeteries. J.P.Wild, Textile Manufacture in the Northern Roman Provinces 1970, 49-50, 101, 117.
- 4 G.M.Crowfoot, "Textiles of the Saxon period in the Museum of Archaeology and Ethnology", Proc.Camb.Ant.Soc. XLIV, 1951, 26-30; G.M.Crowfoot (1952), 189-191; E.Crowfoot in S.E.Chadwick, "The Anglo-Saxon cemetery at Finglesham, Kent", Med.Arch. II, 1958, 36-37; E.Crowfoot (1967), 38, fig.6; E.Crowfoot (1976), fig.12.c; A.S.Henshall, "Textiles on the back of a brooch from Blewburton Hill, Berks", Berks.Arch.Journ. LVII, 1959, 17-21; and examples from many other cemeteries, unpublished.
- 5 T.C.Lethbridge, Recent Excavations in Anglo-Saxon cemeteries in Cambridgeshire, Cambs.Ant.Soc.Quarto, N.S.III, 1931, Grave 98, Holywell, and p.79.
- 6 G.M.Crowfoot (1956), 188.
- 7 Jochen Garbsch, Die Norisch-Pannonische Frauentracht im 1. und 2. Jahrhundert, München, 1965, ~~pl.~~ pls.1, 8, 13 and 16.1.  
Margrethe Hald, Oldnanske Tekstiler, Copenhagen, 1950, 377 ff.

Sewerby

Anglo-Saxon Cemetery

Textile Inventory

Only one clear selvedge, the tubular example from Grave 8.2, was preserved on any of the textile fragments, but as in Anglo-Saxon textiles, and particularly twills, the warp count is normally higher than that of the weft, the more closely packed count has been placed in the warp position (e.g., count 16/10 per cm). Spinning directions are indicated by the letters Z and S - i.e. Z,S, probable warp Z spun, weft S spun; Z,Z, both yarns Z spun.

Where the actual fibres of the textile have been replaced by metal oxides, leaving a cast of the fabric on the object, the abbreviated term "replaced" has been used in the catalogue.

Grave 8 (Female)

2. Square headed brooch (l.lower jaw)

Back Replaced textile round head of pin, fairly coarse, Z and S threads, probably twill, some areas still fibrous; WIRA animal, i.e. wool.

One detached replaced piece, 1.4 cm long, 4 mm wide, tubular selvedge on 8 warps (fig.2.b), wefts 10 per cm, presumably comes from this weave. Also detached, scrap 1.0 X 0.6 cm, replaced Z,Z twill, count 6/6 on 5 mm.

Associated finds: pair annular brooches (shoulders), knife, 60 beads.

Grave 12 (Female)

2. Squareheaded brooch (l.scapula)

Textiles, mostly replaced: Back (a) mass of fabric, best round pin c.1.5 X 1.0 cm, surface deteriorated, Z,Z, well spun, 2/2 twill, even but loose so that the threads are packed and pulled, count c.15/11 per cm. (b) from foot, c.3.0 X 2.5 cm, both systems Z, tabby, count 12/12 per cm. Front (c) replaced fibres, possibly napped surface of textile (see 5).

3. Squareheaded brooch (pair of 2, r. of sternum)

Area coarse Z threads mixed with earth. Against back: remains probably of twill, one Z system left, probably 2 (a).

4. Squareheaded brooch (r.clavicle, near jaw)

Back: area c.3.0 X 1.5 cm, fabric curving round pin, Z,Z, well spun, 2/2 twill, threads packed, count 16/10 per cm, probably 2 (a).

Appearance suggests wool (WIRA, unidentifiable). One piece of S ply thread lying across weave may come from beads.

Samples of organic matter with this brooch contained small fragments of vegetable matter (WIRA).

5. Small bronze brooch (under necklace, l.clavicle)

Back: replaced areas c.2.5 X 2.0 and 3.5 X 2.0 cm, Z,Z, twill, surface well napped and weave pulled, count difficult to see clearly but c.10/10 per cm. Fibres on brooch 2 are almost certainly the raised nap of this weave. A deteriorated area of the same falls over onto the front of the brooch; some finer Z ply threads across the plate may come from a border.

Associated finds: necklace, knife.

Grave 15 (Female, coffin)

5. Quoit brooch (r.shoulder)

Front: along top of pin, deteriorated remains, coarse, Z,Z, replaced, (a).

Back: (b) underside of pin, fragments fine weave, Z, ?tablet twists.

6. Squareheaded brooch (c. upper chest)

(a) round pin, replaced, Z,Z, 2/2 twill, count c.10/10 per cm, probably same as on quoit brooch. The fabric lies in folds across the back of the brooch; between the folds, strong of beads, threaded on coarse yarn. Dark matter against lower part of brooch with threads preserved by bronze.

(grave 15, con.)

7. Quoit brooch (under 1. end of 6)

Blackish matter round it, ?deteriorated textile, some Z threads identifiable. WIRA possible vegetable fibres.

17. Iron ring, no. 590170

Patch of replaced textile, deteriorated Z, Z, twill.

19, 20. Bronze plates from workbox

Traces thread on both surfaces. Excavation report mentions very fine threads wound in spiral, as if on needle, but these were not available for study (1).

36. Glass bead

Scrap of 3 ply thread inside.

Associated finds: Beads (chest), bead wristlet, bronze needle.

Grave 16 (Female)

1. Bronze wristclasp, 590159a.

Against top surface: area textile, 0.7 X 0.4 cm, Z, Z, probably tabby weave, count c.10/10 per cm. Under surface: scraps of thread lying side by side, mostly Z ply, some S ply; these look like tablet twists, but go the wrong way of the clasp for a cuff edging, unless they come from pattern on a braid, cf. Grave 52.7 (fig. 2.a).

2. Bronze wristclasp, 590160

Traces similar textile on front to that on 1.

Associated finds: 2 beads, crystal pendant.

Grave 19 (Female)

2. Quoit brooch (l. shoulder)

Fragments replaced, c.1.0 X 0.9 cm, tabby weave, count 16/10 per cm, (a). Replaced fragment with bones from this brooch, 0.8 X 0.7 cm, Z, S, twill, with displaced meeting, see below 4 (c).

3. Quoit brooch (r. shoulder)

Back: replaced Z, Z, tabby weave, count estimated c.12/11 per cm, (a).

Front: (b) patches finer textile, some Z threads.

4. Gilt squareheaded brooch with garnet knobs

Back: next to metal, small areas, best c.1.2 X 1.0 cm, lying in folds, Z, Z, tabby, count c.15/10, fibre too deteriorated for identification, but appearance suggests wool; probably (a) from 2 and 3.

(b) over it is, i.e. lying nearer wearer's skin, best area 0.6 X 0.5 cm, Z, Z, fine tabby weave, count 16/9 on 5 mm, i.e. 32/18, appearance suggests linen.

(c) loose fragment c.5.0 X 4.0 cm from top of brooch, Z, S, twill, broken threads but clear areas show broken diamond (fig. 1.b), count 16/13 per cm.

WIRA wool. Fabric is in two layers; other loose scraps have mass of grass or plant stems adhering.

5. Silvered bronze buckle (behind pelvis)

(d) Over pin, scrap replaced textile, Z, Z twill, 2/2, count c.14/10 per cm.

Inside buckle and iron end: (e) scraps replaced textile, probably a belt, Z, Z, tabby weave, count 24/12 per cm, warp-face weave, weft almost concealed.

6. Bronze thread box

Dark organic matter, similar to that from Grave 15.7, possibly decayed textile, WIRA report p.

Associated finds: short beads attached to quoit brooches.

- (1) Fine tightly wound 2, 3 and 4 ply threads, probably from tablet braids, have been found in workboxes from Sibbertswold, Kent, and Uncleby, Yorkshire.

Grave 35 (Female)

5. Annular brooch (r. shoulder)

Organic matter containing some fine Z threads: WIRA ?vegetable.

9. Girdle hanger

Organic matter lying over the hanger:

(a) next to bronze, clearest patch 1.7 X 1.5 cm, fibre too deteriorated to identify, Z,Z, weave not clear, but long threads suggest a twill.

(b) above this, dark brown matter probably from textile, unidentifiable.

(c) other matter, deteriorated textile, probably some Z, some S threads.

Organic matter lying under the hanger:

(c) weave and fibre deteriorated, again probably Z and S threads $\frac{1}{2}$

11. Wrist clasps

Deteriorated textile against front of clasps, between them and vertebra; lump, possibly in folds, c.4.0 X 3.0 cm overall, Z,Z, regular tabby, count 16/16, one thread system softer and thicker than the other:

WIRA earth replacement (see p. , Pl. ). Organic matter under clasps, u.e., ? sleeve or border, has Z threads possibly coarser than those on front.

Grave 38 (Female)

4. Annular brooch, 590137 (shoulder)

Traces Z and S threads on back.

3. Bronze wrist clasp (590136) Pl.A.8253/1

Top area 3.5 X 4.0 cm textile, Z,S, twill, diagonals confused, possibly a broken diamond, count c.10-12/10-12; fibres decayed, probably appear much finer than originally; weave in two layers, the side away from the bronze mixed with fine root fibres.

11. bronze wrist clasp, 590140

Top deteriorated textile over area 3.2 X 1.0 cm, Z,S, WIRA fibre unidentifiable. Against under surface, fragment 3.8 X 1.6 cm, probably end of sleeve, deteriorated; against bronze under this, layer probably leather, perhaps cuff (p. ).

6-7. Iron pins and bronze girdle hangers, 590106

Across iron pins, over area 6.5 X 2.6 cm, folds replaced textile, Z,Z, tabby weave, count 10-11/7-8 per cm; lying on top of this, twist of finer Z spun S ply thread. Underneath the tabby weave, against the bronze, mass of similar fine plyed threads, ~~possibly~~ <sup>probably</sup> from tablet weave, ~~but no sign of wefts, so perhaps a fringe.~~ On bronze ring mass deteriorated replaced textile, Z,S, probably twill.

Associated finds: pair to annular brooch; necklace with clasp, iron knife, thread box.

Grave 42 (Female)

1. Bronze penannular brooch, 590146

Underneath: layer fibrous, ?wood, but very deteriorated, possibly leather, length of the pin and half the ring. Fragment textile, 1.0 X 0.8 cm, protruding across the ring, Z,Z, weave unidentifiable.

Front: textile, mainly replaced, along pin, 4.0 X 0.8-1.0 cm, Z,Z, weave unidentifiable.

2,3. Wrist clasps, 590147

On 2: traces underside, Z,Z, twill, deteriorated.

On 3: fragment, 0.5 X 0.6 cm, Z,Z, twill, count 6/6 on 5 mm.

Associated finds: iron knife.

and one fragment from edge of tablet-weave, 4-hole, length 1.3 cm, 3 twists on 3 mm., wefts c. 10 per cm.

Grave 49 (Female, coffin)

10. Girdle hanger

Traces replaced threads and fibres, originally suggesting fur, but probably napped surface of textile, cf. Grave 12.

11. Girdle hanger

Traces replaced threads and organic matter, as in Grave 12, brooch 4.

15. Small squareheaded brooch

Front: (a) replaced textile, area c.1.5 X 0.7 cm, very deteriorated fine twill, Z,Z, probably simple 2/2, count 8/7 on 5 mm, c.16/14 per cm.

(b) on head, lying across twill (a) long tufts from pile or fringe, very little twist, but possibly loosely plaited.

Back: (c) Traces very deteriorated twill, spinning Z,S.

(d) round pin, coarse Z threads.

16. Large squareheaded brooch

Deteriorated textile, probably (a) on 15, lying across brooch, with beads and finger bones underneath. The textile apparently dissolved into mud with the removal of preservative, i.e. probably an "earth replacement" as in Grave 35.11.

. Small squareheaded brooch, 9470

On square plate, small area 1.- X 1.4 cm, Z,Z, twill, fine, regular, count estimated c.14/12, surface damaged, probably (a) on 15. Lying across one edge, piece of cord, replaced, 8 mm long, circ.3.0-3.5 mm.

Associated finds: bronze cauldron, beads, wrist clasps, knife.

No grave number

Under bronze buckle with leather belt fragment, 590198

Soil with area of textile preserved, 6.0 X 2.8 cm, Z,Z, tabby weave as far as can be seen, count 10/8 per cm.

Grave 50 (Female)

6. Pair brooches, 744262

Brooch A

Underneath: wood, then layers of (a) textile, dark brown, Z,S, twill, 2/2, too deteriorated for fibre identification or count; the same on the top of the pin and ring of brooch.

(b) small patch under (a) replaced on pin head, and detached fragment 1.2 X 1.2 cm, coarser weave, one system, ?weft, coarse S; the other, ?warp, finer Z in pairs, count 6/6 threads per cm, with two threads after the paired ?warps passing in four-shed twill; i.e. almost certainly the selvedge of a twill with the edge loops missing.

Brooch B

Underneath: folds as held by pin, twill (a) fine Z,S, pulled diagonally.

Front: above pin, area 1.0 X 0.9 cm, probably coarser twill, Z,S, (b).

Grave 51 (Female)

7. Annular brooch, 744284

Back: (a) on ring and under pin, area replaced and semi-replaced, 2.5 X 1.0 cm, fine Z,Z, tabby weave, count 15/14 per cm, appearance suggests flax. Underneath: Z,Z, deteriorated, probably same.

Front: area 2.8 X 1.3 (b) semi-replaced, Z,Z, coarser tabby, count 10/9.

9. Annular brooch, 744283

Back: (a) fragments on pin attachment, pin and ring, areas 1.5 X 2.0, 1.0 X 0.8 cm, replaced Z,Z, tabby, count 14/14 per cm, surface with ?skin replacement over the weave.

Front: area 3.0 X 2.0, replaced, Z,Z, tabby, count 13/8, again skinned over. The chin probably touched the front of this brooch, which accounts for skin replacement on the replaced textile on both sides.



Grave 54 (Female)

24. ?Buckle, 744270

Area replaced textile, 1.7 X 1.3 cm, Coarse Z,Z, count 8/4 per cm, weave as far as can be seen tabby, but long stretch of one thread suggests possible pattern float; other side of object, again long Z threads.

26. Penannular brooch, 744286

Front: across pin, replaced Z,S, twill, 2/2 loosely woven, count c.6/5 on 5 mm, (a).

Back: on ring, below pinhead, replaced fragment 0.8 X 1.0 cm, Z,S, twill, 2/2, close and regular, count estimated 14/12 per cm, (b).

27. Penannular brooch, 744289

Textiles as on 26, but larger areas preserved, loosely woven Z,S twill (a) on front, close and even Z,S twill (b) on back; detached small pieces. Under fragments of (b) area 2.7 X 1.8, third twill (c) 2/2 very similar to (b) but with Z,Z spinning, count 7/6 on 5 mm. In view of their likeness it is possible this may come from a fabric with stripes in the weft of Z and S threads, cf. Grave 57.5 (d).

28. Buckle and plate, 744271

Mass of replaced material over and round buckle, clear area on plate, c.3.0 X 3.0 cm, Z,S, fine twill, 2/2 with reverses, i.e. chevron or diamond, count c.12/12 per cm, possibly (a). Leather belt fragment, replaced

Grave 55

2. Iron dagger, 744273

Mass of decayed textile, one clear replaced area 1.5 X 1.2 cm, Z,Z, twill, 2/2, count c.12/12 per cm.

Grave 56

2. With bronze tweezers, 744292

Fragment of leather with stitch holes along edge, ?case for tweezers, with traces of Z,Z, deteriorated textile; on iron fragment, tiny scraps, Z,Z, probably twill.

3. Iron object, 744276

On spatulate end, coarse Z threads, c.1.5 mm in diameter, 8-9 probably plaited, tied in knot. Under this, along the iron, replaced leather; ?object in leather case, tied to belt by cord ?

5. Buckle with plate, 744293

On iron plate, replaced area c.2.0 X 1.9 cm, textile in folds, fine Z,Z, twill, regular 2/2, count 7/6 on 5 mm.

Grave 57 (Female)

3. Small long brooch, 744295

In solid fold behind head of brooch, (a) replaced textile, clear area 1.0 X 0.8 cm, Z,S, twill, 2/2, count 5/4 on 5mm.

On pin catch, (b) replaced textile, and small detached fragment, Z,Z, three-shed (1/2 or 2/1) twill, fine, regular, count 7/7 on 5 mm (fig.1.c,d).

4. Annular brooch, 744296

Front: on ring near head, area 3.5 X 1.5 cm, Z,S, twill, (a) on 3, count c.10/8 per cm, four-shed with reverse, i.e. probably chevron or diamond; 3.(a) probably comes from a 2/2 area of this.

(c) beside this, area 2.0 X 0.6 cm, and detached piece 1.2 X 1.0 cm, Z,Z, coarse tabby, count 5/3-4 per cm.

Back: textile under leather on pin head, possibly (c), deteriorated.

On catch and ring, area 1.5 X 1.5 cm, Z,S, twill, 2/2 as far as remains, count 10/9-10 per cm, solid weave, probably (a).

(Grave 57. con:)

5. Cruciform brooch, 744297

Front: on top, layer that looks like fur, but identified by HMA as wool, i.e. possibly sheepskin, as there seems to be a skin layer between this and the textile lying underneath.

(d) wool textile, length 6.3 cm, greatest width 2.8, broken in middle; lower part all Z,Z, four-shed 2/2 twill, until four threads at the top of the piece where ?weft changes to S; the upper piece is all Z,S, very pulled. On the arm of the cross, a piece 2.2 X 3.0 cm, badly distorted, Z,S, except for 4-5 threads again with Z weft at the end of the piece; counts 8/7, 7/6 per cm. The change of thread probably indicates a fabric with weft stripes; the Z thread is lighter to the eye (HMA unpigmented but dyed) the S darker (naturally pigmented).

(e) on one arm of the cross, triangular fragment 3.1 X 1.0 cm, fine Z,S twill, four-shed, with weft chevron (fig.1.a) count probably c.12/12 per cm, but weave very pulled diagonally; rather fine to be (a).

Back: round bar of pin attachment, scraps, the best c.3.0 X 1.0 cm, in folds near cross-bar and a twist round the clasp, Z,S, four-shed twill with broken reverse as in fig.1.a, probably (e), count c.14-16/12 per cm.

7. Bronze objects, 744299

Top of lump: remains with appearance of textile, but again probably an earth replacement, as in Graves 35 and 49.

Bracelet: fine Z threads.

Wrist clasp(?): top, layer of ?sheepskin as on brooch 5; under this, layer 2.0 X 1.0 cm, solid coarse Z,Z twill, count 8/8, and under this area 3.5 X 1.5 cm, Z,S, twill, count 9/8; it is possible these are both fragments of twill (d) on 5, with stripes in ?weft, though the Z,Z layer is deteriorated and now more open.

Under clasp, fragments of border to sleeve, width preserved 3.2 cm, length 1.2 cm, fragment tablet-woven braid with cut edge turned under, which has been sewn to the clasp with Z spun thread used double; twists 10 per cm, Z thread, wefts S ply, c.10-11 per cm; both edges of braid missing; twists mixed Z and S, remains of brocaded step pattern in coarse S ply thread, and holes where missing pattern threads went (fig.2.a).

Appendix : Fibre examinations of Textile Specimens

H.M.Appleyard, F.T.I.

( Mr.H.M.Appleyard carried out examinations on samples from graves from the earlier excavation for the Wool Industries Research Association, and on the samples from Grave 57 in his capacity as consultant.)

The samples from Dewerby are in a very bad state of preservation. Most of them contained a considerable amount of organic matter, and attempts were made to separate this from anything which resembled textile by using a low power binocular microscope. In one of the samples from Grave 12.4, we could not find anything which we could recognise as having been of a fibrous nature. In Grave 15.7 we found some fragments which could possibly have been of vegetable origin, and in the other sample from Grave 12.4 some small fragments of vegetable matter.

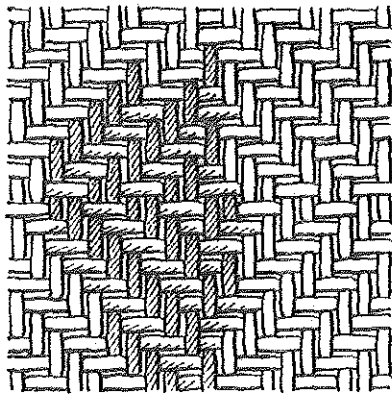
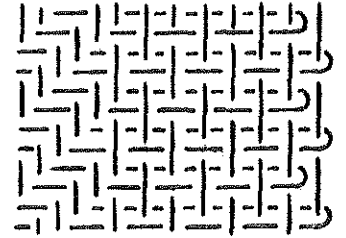
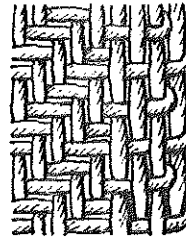
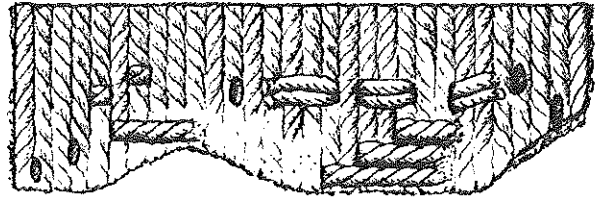
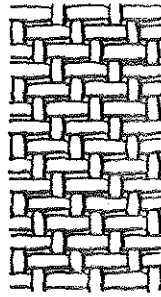
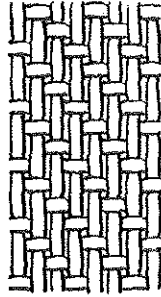
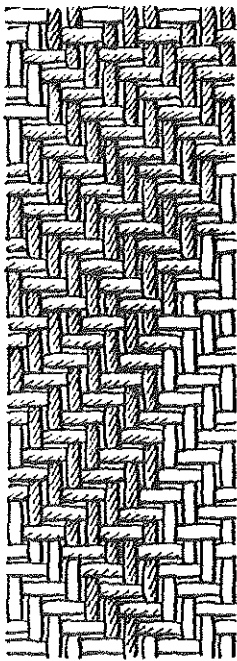
Samples labelled Grave 8.2 and Grave 19.4 were the most interesting; fibres from 8.2 were definitely of animal origin, some were medullated, but none of them showed any signs of scale pattern and could not be identified further. Sample 19.4 contained three types of animal fibre, one type was fine to medium in diameter, some of which were medullated, none of these fibres had any scale pattern remaining. The second type were some type of fur fibre, they were fine and had a ladder type medulla, there were pigment granules on the cortical bridges between the medullary spaces; there was no evidence of scale structure. The third type was coarse with a very wide lattice type medulla, of the kind found in coarse fibres from primitive breeds of sheep or from British mountain breeds, coarse goat hair or even deer.

When further samples from Grave 19.4 were sent, the S and Z spun yarns were examined separately, and both contained fine to medium non-medullated fibres and coarse medullated fibres. We could not, however, find any fur fibres in either yarn so that it seems possible that in the original samples the fur fibres were extraneous; but in samples in this condition it is not always possible to say what was originally part of the yarn.

In the samples from Graves 35 and 38, it was only in the sample from Grave 35.5 that we could find any fibrous material and this appears to be of vegetable origin. Sample Grave 35.11 was interesting in that the weave structure was apparently intact, but the fibres have all been replaced by mineral deposits; we could not find any fibre as such in this sample or the samples from Graves 38.11, 35.9 or 35.11 above the wrist clasp. The photograph of Grave 35.11 (Pl. ) shows that the substance which had replaced the fibres was almost in fine crystalline form. It is certainly interesting to see how the "yarns" still retained their fibrous appearance.

In samples from Grave 57, brooch 5, weave (d) Z twist, these are certainly animal fibres, and I am sure that they are wool even though there is a lot of extraneous matter which could not be removed. Most of the fibres are fine, others are medium diameter; there was no medulla or pigment and they looked to have been dyed yellow. Weave (d) S twist again had a lot of extraneous matter, but I am sure that they are fine pigmented wool fibres. Fibres from weave (a) are very badly degraded, they are a mixture of fine and coarse animal fibres which from their general appearance are, I think, wool. Some of the coarser fibres are medullated and pigmented.

In the sample from the front of the brooch, there are some very clearly defined scale margins on the fibres, they are medium diameter wool fibres, some have broken type medulla. There is no pigment and I think they were most likely to have been undyed.



Sewerby. Fig.2.

- a. Tablet woven band with pattern threads and sewing threads, from wristclasp Grave 57.7.
- b. Tubular selvedge on four-shed twill, Grave 8.2, and diagram showing passage of threads with the tube spread out.

Sewerby. Fig.1.

- a. Grave 57.5. Weft chevron twill (possibly part of broken diamond)
- b. Grave 19.4(c). Broken diamond twill. (The shaded threads in these figures show the area preserved)
- c. Diagram of three-shed twill, 2/1
- d. Diagram of three-shed twill, 1/2 (See Grave 57.3)