

# The Coppergate Helmet

By Dominic Tweddle

Tweddle, D. 1983. The Coppergate helmet. (Hjälmen från Coppergate i York.) *Fornvännen* 78. Stockholm.

A helmet was discovered in 1982 during building works at Coppergate, York. The cap of the helmet is composed of eight individual pieces rivetted together. There are two hinged cheek pieces with brass edge bindings, and the neck was protected by a curtain of iron mail, found inside the helmet. The nasal is decorated with a pair of confronted animals with their rear quarters developing into interlace. Over the eye sockets are hatched brass eyebrows. At the junction of these is an animal head acting as terminal to a narrow field with half-round edge bindings forming the crest of the helmet. This is filled with a metal foil decorated in repoussé with an inscription in Latin. A second field filled with an identical inscription runs from ear to ear.

Comparison of the script and decoration with Northumbrian manuscripts suggests a date in mid eighth century for the helmet.

*Dominic Tweddle, York Archaeological Trust, 47 Aldwark York YO1 2BZ England.*

The Coppergate helmet was discovered in 1982 during building works at 16–22 Coppergate, York. It lay face down near the corner of a rectangular plank-lined feature which also contained a spearhead of seventh-century or later form, a wooden disc with five perforations, an antler beam, and several pieces of wood.

The helmet — made of iron with brass fittings — consists of four main elements: the cap, two hinged cheek pieces, and a curtain of mail protecting the nape of the neck.

The cap is composed of a broad band almost encircling the head. To this a second, narrower, band is rivetted at the back and runs from the back to the front of the head, where the ends of the brow-band are rivetted on at either side. This nape to nose band is linked to the circular brow-band by short bands running down at each side from the crown of the head towards the ears, and rivetted on. The four spaces left by this framework are filled by triangular plates with their corners cut off, again rivetted on; a construction which is particularly apparent where the bulldozer has torn one of these plates away. At the front two half circles have been cut out of

the brow band for the eyes. Between them there is a long nasal — a continuation of the nose to nape band — expanding from the junction of the eye holes to form two points, one in each of the long edges, before tapering again. Finally, towards its rounded end the nasal expands once more. The nasal has a plain brass edge moulding and is covered with a separately-made brass plate rivetted on. This is decorated with a pair of symmetrical interlacing animals with hatched and contoured ribbon like bodies, and spiral hips. These animals develop at their lower ends into interlace of Adcock's basic pattern A (Adcock 1978). Over the eye holes there are copper-alloy eyebrows decorated with oblique transverse hatching, and terminating at their outer ends in animal heads viewed in profile. They have long snouts and bared teeth, with the teeth carefully delineated. The animals have high domed foreheads, and incised, comma-shaped eyes. In both cases the eye and lower jaw develop into a spiral on the animal's neck. At the junction of the eyebrows there is a separately made animal head, viewed from above. This has an expanding muzzle with spiral nostrils. The top of

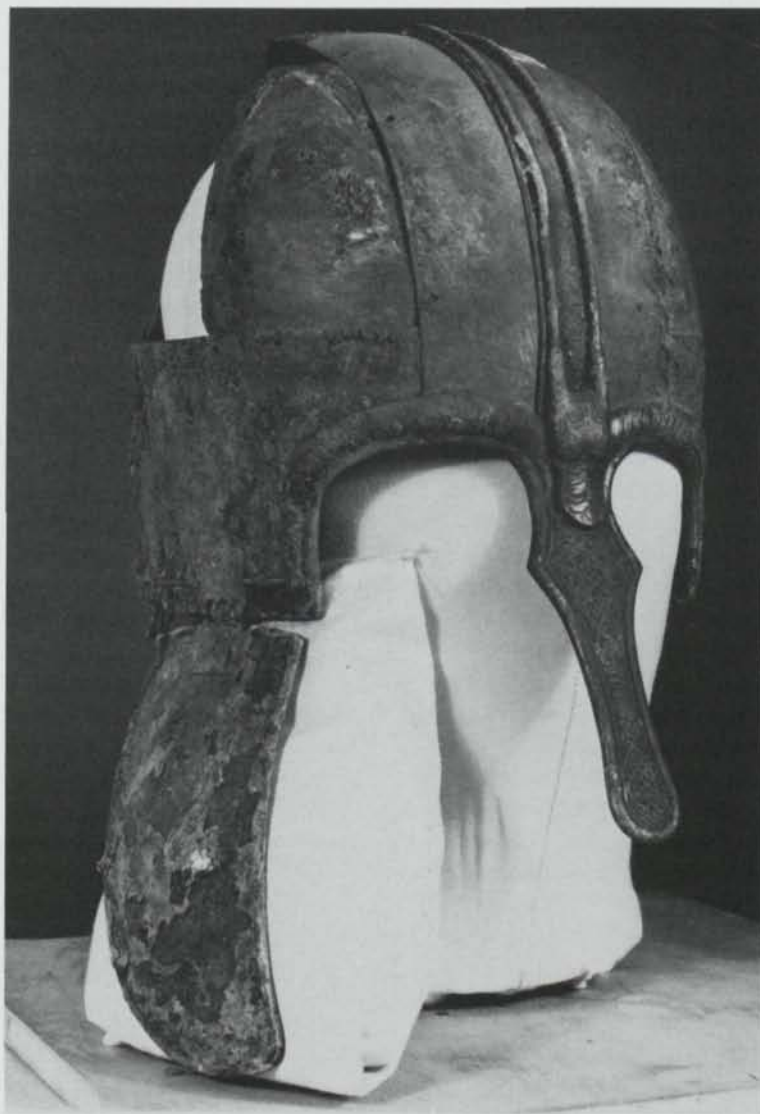


Fig. 1. The Coppergate helmet. — Hjälmén från Coppergate i York.

the muzzle is decorated with incised chevron ornament. The animal has a high forehead, and again the incised eyes are comma shaped, and develop into spirals. The animal's ears are placed at the very back of the head and merge into the pair of half-round, hatched, copper-alloy bindings delimiting the narrow decorative field forming a crest to the helmet.

At the back of the helmet this field has a rounded end which just overlaps the top edge

of the brow-band. At this point the edge binding is flattened, and decorated with a pair of confronted profile animal heads, similar to those on the ends of the eyebrows. The edge binding holds in place a single copper-alloy strip decorated in repoussé with the retrograde inscription, running from front to back, IN NOMINE DNI NOSTRI IHV SCS SPS DI ET OMNIBVS DECEMVVS AMEN OSHERE XPI, which is terminated by an interlace

triquetra within a circle. At right angles to the crest, are two other narrow fields, one running down towards each ear. These have the same hatched, half-round edgebindings as the crest, and again the fields have rounded ends just overlapping the upper edge of the circular brow-band. In each case the edge binding is flattened at this point and decorated with a pair of confronted profile animal heads. Each of these fields is filled with a single sheet of copper-alloy with a retrograde inscription in repoussé. Viewed from the front, the left-hand inscription has been heavily damaged by the bulldozer, which has torn the bindings out of position, and broken the inscription into pieces. However, reading from the crest towards the brow-band, the word OM-NIBVS, the first two letters of the word AM-EN, and most of the word OSHERE can be read, so this appears to be a repetition of part of the inscription on the crest. To the right the inscription is more easily readable, running from the crest to the brow-band, IN NOMI-NE DNI NOSTRI IHV SCS SPS, again a repetition of part of the inscription on the crest. It is evident that the inscription running from ear to ear was intended to duplicate that on the crest of the helmet, but that the right-hand element has been the right-hand inscription near the crown of the head, before the word IN, is a semi-circular frame which was originally intended to fit into the semi-circular end to the bindings where they overlap the brow band near the ear.

At each side of the cap was a separate cheek piece attached by a hinge, of which only the left-hand one is still in situ. This has a rear edge curved to form a point with the straight front edge, which is aligned with the rear edge of the eye hole. Inside, in the centre of the cheek piece there is a square-headed rivet which may have formed the point of attachment for a leather or textile strip tying under the chin to hold the cheek pieces firmly in place when the helmet was worn. The cheek piece in situ has a plain copper-alloy edge binding, with on the rear edge several prominent copper alloy loops developing from it. Presumably these were used as fixing points for the mail which protected the nape



Fig. 2. Nasal of the Coppergate helmet. — Coppergate-hjälmens nässkydd.

of the neck. The deep copper-alloy binding from which this was suspended partially remains in situ along the rear edge of the cap, although much of the brow-band to the rear of the cap is missing, having been corroded away, or damaged in antiquity.

The mail itself, composed of alternate horizontal rows of butted, and lapped and rivetted links, survived bundled up inside the helmet, and was still attached to the edge binding of the cap by three rings. It lay on top of the second cheek piece, which must have been detached before the helmet was buried. The

second cheek piece is very similar to the first except that the central rivet on the inner face has a flat, circular head not a square one.

Preliminary surface analyses of the metals of which the helmet is made, by C. Caple of the Department of Archaeological Sciences of the University of Bradford, reveal that the iron of the cap has substantial traces of manganese and arsenic. The surface of the iron was apparently not plated. The copper-alloy strips carrying the inscriptions are made of a very pure brass, of the order of 75 per cent copper and 25 per cent zinc, with very few impurities, as are their half round bindings.

The Coppergate helmet is of great interest as it is one of only three Anglo-Saxon helmets known from this country, the others coming from the rich burial at Benty Grange, Derbyshire, excavated by Thomas Bateman in 1848 (Bruce-Mitford 1974); and from the royal burial at Sutton Hoo, Suffolk. (Bruce-Mitford 1978).

At first sight any comparison with the Benty Grange helmet might look unpromising since although the Benty Grange example has a nasal, and fixed ear pieces and nape guard, it was made of horn plates, now lost through decay, over an iron frame, and lacks the elaborately decorated eye sockets seen on the Coppergate example. Moreover, the Benty Grange helmet has a free standing boar on the crest. However, the frame supporting the horn plates of the Benty Grange helmet is constructed in a manner very similar to the cap of the Coppergate example, that is with a circular brow-band, another band running from the back to the front of the head, and with a third band at right angles to this running from ear to ear, although on the Coppergate helmet this was made of two pieces, separately rivetted, not a single band. At Benty Grange the bands making up the frame are narrower than those on the Coppergate example, and for this reason there are subsidiary strips in each of the quadrants created by the main elements. As noted above, there is little comparison in the decoration between the two helmets, but both have christian symbols on them. On the Benty Grange helmet this takes the form of a small silver latin cross

applied to the nasal, whereas on the Coppergate helmet there is the christian inscription.

There are more obvious parallels between the Sutton Hoo helmet and that from Coppergate, in that both have separately made cheek pieces, both have thorough protection for the neck: a rigid neck guard at Sutton Hoo, and mail on the Coppergate example. Moreover, both helmets have decoration over the eye sockets consisting of brows ending in animal's heads portrayed in profile, with an animal head viewed from above at the junction of the eyebrows, although on the Sutton Hoo helmet this head faces upwards, confronting a downward facing head at the end of the crest. These features are seen also on some of the Swedish helmets of this period such as those from Vendel grave 14, and Valsgärde grave 7. As on the Coppergate helmet some of these Swedish examples also had mail neck guards as did the examples from Vendel graves 10, 11, and 12, and Valsgärde graves 6 and 8 (Bruce-Mitford 1978). There are, however, important differences between the Coppergate and Sutton Hoo helmets. In particular the Sutton Hoo helmet was apparently raised from a single piece of metal, with a separately applied tubular crest, and a face mask, all structural features not paralleled on the Coppergate example. Moreover, the Sutton Hoo helmet has a more elaborately decorated surface, embellished with impressed foils, and enriched with gilding, garnets, and inlaid silver wires, again features lacking on the Coppergate example where the decoration is much more restrained, although of course this difference in decoration may simply reflect the differing social status of their owners. These parallels between the Sutton Hoo, Vendel, and Valsgärde helmets, and the Coppergate example should perhaps occasion little surprise, since, as Bruce-Mitford (1978) has pointed out, the form of all these helmets, if not their decoration, is derived from that of late Roman parade helmets.

Although some indication of the date of deposition of the helmet may eventually be derived from C14 dating, or dendrochronological work on the timbers which lined the feature in which it was found, for the time



being its dating must be derived from internal evidence; from a consideration of the helmet's form; from the content and epigraphy of the inscriptions; and from the form of the animal ornament. The form of the helmet is, in fact, of only limited help in dating. As noted above, there are only two comparative Anglo-Saxon pieces, the Sutton Hoo helmet deposited c.625 (Bruce-Mitford 1975) and the Benty Grange helmet which is of seventh-century date (Bruce-Mitford 1974). There is, however, no way of knowing whether these helmet forms were confined to the seventh century, or continued into the eighth century, and even, conceivably, beyond. The 9th/10th-century helmet from Gjermundbu, Haug, Norderhov, Buskerud, Norway, for example, is in form a descendent of the type used at Vendel and Valsgärde (Graham-Campbell 1980) which, as noted above, have a number of parallels with the Coppergate helmet. Unfortunately there is no equivalent helmet of this period from England.

The content of the inscriptions is more revealing as it is demonstrably Christian, and, therefore, probably unlikely to have been made before A.D. 627 when St. Paulinus baptised King Edwin of Northumbria in York, although it could on these grounds have been made at almost any time subsequently. In fact, the form of the letters narrows the possible date range, since the forms are those characteristic of the decorative capitals, used to make the transition between the large decorated initials and the main body of the text in Northumbrian manuscripts of the very late seventh century, and the first part of the eighth century, as in the Lindisfarne Gospels, for example (Kendrick *et al.* 1960). Indeed it is possible that the inscriptions were laid out by a scribe, and then raised in repoussé by a metalworker. Certainly, this use of the repoussé technique would support an eighth-century date, since it is a technique which was widely practised in the eighth century, as on the Ormside bowl, for example (Wilson 1964).

The form of the profile animal heads would also fit comfortably into a very late seventh, or early eighth-century Northumbrian milieu.



Fig. 3. Profile animal heads of the eyebrows of the Coppergate helmet. — Coppergate-hjälmen; detalj av avslutande djurhuvud på vänster ögonbrynsskydd.

Similar animal heads viewed in profile, with long snouts, carefully delineated teeth, and slightly comma-shaped eyes appear in the *Lindisfarne Gospels*, probably made c. 698 A.D. (Kendrick *et al.* 1960). They are used for example on the initial E on f.91r, although here they are portrayed with open jaws, and very similar heads appear on the initial M on f.90r (Alexander 1978). Animal heads of the same form occur on f.1r of the *Cologne, Domibibl. Cod.* 213, an early eighth-century Northumbrian product (*ibid.*) and they occur also on either end of the beam supporting the figure of King David on f.172r of the *Durham Cassiodorus*, again a Northumbrian manuscript dating to the second quarter of the eighth century (*ibid.*). The heads of the *Durham Cassiodorus* are perhaps the closest in form to those used on the Coppergate helmet, although they lack the ears developing into

spirals. This is a feature seen in a rudimentary form in the *Lindisfarne Gospels*, as for example on the initial M on f.90r (ibid.), but the closest parallel to the Coppergate animals is to be found in the *Lichfield Gospels*, probably a product of the second quarter of the eighth century. Such a head with a spiral ear occurs on the end of the downstroke of the P in the XPI monogram on the initial page of St. Matthew's Gospel (p. 5), for example (ibid.).

The very late seventh or early eighth-century date suggested for the Coppergate helmet by these manuscript parallels for the profile heads is supported also by a consideration of late Anglo-Saxon profile heads in metal. Possibly the closest parallel in metal to the heads on the ends of the eyebrows of the Coppergate helmet is the head to be found on the end of a mount of unknown purpose from the River Thames, and dated by Wilson (1964) to the eighth century. This three-dimensional head has the same long snout and prominent, carefully delineated teeth as the Coppergate heads, moreover, the eyebrows curve down onto the animal's neck on each side and end in spirals, a feature paralleling the neck spirals of the Coppergate animals. The head on the Thames mount, however, differs from the Coppergate heads in that it lacks the domed forehead and comma-shaped eye. Moreover, the jaws are open, and the tongue projects. Despite these differences the comparison is significant, and more so since the top of the Thames mount is decorated with oblique hatching which is very similar in appearance and technique to that used on the eyebrows of the Coppergate helmet. Heads very similar to that employed on the Thames mount are used on the eighth-century chape no. 15 from the St. Ninian's Isle treasure (Small *et al.* 1973). Here again there is the same long snout and comma-shaped eye as used on the Coppergate helmet, although the foreheads of the animals are low, and in each case the teeth have been reduced to a pair of canines. Here also the oblique hatching on the beasts's muzzles is similar to that used on the eyebrows of the Coppergate helmet. It is probably no more than coincidence that on one side of the chape is the

inscription INNOMINEDS (in nomine d.s.) which echoes part of the inscription on the Coppergate helmet. Animal heads similar to those on the Coppergate helmet seem also to have been used on the early eighth-century Witham hanging bowl, now unfortunately lost (Small *et al.* 1973). Here the heads used as terminals to the escutcheon loops have the same long snout, carefully drawn teeth, and domed forehead as the Coppergate animals. Finer details are, however, lacking on the surviving drawings.

A number of the three-dimensional metal heads noted above also have parallels with the head viewed from above at the junction of the eyebrows of the Coppergate helmet. All of the animals have the same blunt end to the snout, while the animals of the St. Ninian's Isle chape also employ the same comma-shaped eyes, as well as chevron decoration on the snout (Small *et al.* 1973). It is more difficult to find manuscript parallels for this third animal head on the Coppergate helmet, but in the *Cologne, Dombibl. Cod.* 213, on f.1r there is an animal head viewed from above with a rounded end to the muzzle, and comma-like eyes, and which is used as the terminal to a narrow decorative field, in the same way as the head on the Coppergate helmet (Alexander 1978). A similar head is used as a terminal on the initial M on f.18v of the *Lindisfarne Gospels*, although here as a conceit the head viewed from above is composed of coin-joined heads in profile (Backhouse 1981).

The date in the very late seventh century, or early part of the eighth century, suggested for the Coppergate helmet on the basis of the art-historical parallels for the profile heads, and the head viewed from above is considerably modified by a consideration of the animals on the nasal. Animals with their rear quarters developing into interlace do not appear in Anglo-Saxon manuscript art before the middle of the eighth century, as in the *Stockholm Codex Aureus*, for example (Alexander 1978). Moreover, certain details of the animals are best paralleled in manuscripts of this period. The Coppergate animals have long narrow snouts. The jaws expand slightly and have rounded ends. The animals' fore-

heads are domed, and the ear is extended to form a lappet. Very similar heads occur in the initial Q on f. 80r of the late eighth-century *Barberini Gospels*, where, as on the helmet, the animal bodies taper, have spiral hips, and are hatched. Similar animal heads also appear on f. 27r of the *Morgan Psalter*, a mid eighth-century manuscript possibly made in the area of Lincoln (Alexander 1978). The *Barberini Gospels* is a southern English manuscript, and the *Morgan Psalter* draws on southern English sources, and another hint of southern English connexions for the Coppergate animals is provided by a cross shaft from Colerne (Wilts.) decorated with an almost identical pair of confronted animals with hatched and contoured bodies and spiral hips. The precise nature of these links with southern English art will be the subject of further research, but the comparisons are striking enough to place the Coppergate helmet in the mid eighth century at the earliest.

Little is added to the mid eighth-century date suggested for the Coppergate helmet on the basis of this comparative material, by a consideration of the spear head which was found close to the helmet. This spearhead has a long almost parallel-sided blade, with a slightly rounded point. The blade is narrow (c. 3.5 cm wide) in comparison with its length (c. 36 cm. 45 cm for the spearhead as a whole), and the shoulders between the blade and socket slope gently. The split socket still has some of the wood of the shaft in it, held in place by two rivets. In Swanton's (1973) classification this specimen falls into the series E3/4. Series E3 developed rapidly in the sixth century, and became firmly established in the seventh. That it continued into the late Anglo-Saxon period is indicated by the disco-

very of a spearhead of this type in the tenth-century Westly Waterless, Cambs., hoard, and Swanton notes the close correspondance between this type and Petersen's type G of the Viking Age (ibid.). Series E4 is essentially a variant of E3, again principally of sixth- and seventh-century date.

### Acknowledgements

I am grateful to my colleagues R.A. Hall, N. Pearson, J. Jones, S. O'Connor, and J. Spriggs for discussing various aspects of the helmet with me. P.V. Addyman, Director of the York Archaeological Trust, in particular has provided much stimulating discussion, and has kindly read and commented on the text. M. Budny has generously discussed the manuscript parallels with me.

### References

- Adcock, G. 1978. Theory of interlace and interlace types in Anglian sculpture, in J.T. Lang (ed.), *Anglo-Saxon and Viking Age sculpture*. British Archaeological Reports, British series, 49, 33–45.
- Alexander, J.J.G. 1978. *Insular manuscripts 6th-9th century. A survey of manuscripts illuminated in the British Isles*, 1, London.
- Backhouse, J. 1981. *The Lindisfarne Gospels* London.
- Bruce-Mitford, R.L.S. 1974. *Aspects of Anglo-Saxon archaeology*. London.
- 1975. *The Sutton Hoo ship burial 1, excavations, background, the ship, dating, and inventory*, London.
- 1978. *The Sutton Hoo ship burial 2, arms, armour, and regalia* London.
- Graham-Campbell, J. 1980. *Viking artefacts, a select catalogue*. London.
- Kendrick, T. D. et al. 1960. *Evangeliorum quattuor codex Lindisfarnensis*, Oltun, Lausanne.
- Small, A. et al. 1973. *St Ninian's Isle and its treasure*. Oxford.
- Swanton, M. J. 1973. *The spearheads of the Anglo-Saxon settlements*. London.
- Wilson, D. M. 1964. *Anglo-Saxon ornamental metalwork 700–1100 in the British Museum*, catalogue of the later Saxon Antiquities, 1. London.

## Hjälmen från Coppergate i York

I den sedan flera år pågående undersökningen av Coppergate-området i centrala York påträffades 1982 en hjälm, som genom sina likheter med Sveriges vendeltida hjälmar är av särskilt intresse för svensk forskning (fig. 1).

Hjälmen påträffades liggande med framsidan nedåt nära ett av hörnen i en rektangulär anläggning, som även innehöll en spjutspets från 600-talet eller senare.

Hjälmen är av järn med beslag av kopparlegering. Kalotten består av åtta sammannittade delar: ett brett tinningband som gått runt huvudet, ett band som löper från näsa till nacke, en remsa från hjässan till vardera örat samt fyra närmast triangulära plåtar som täcker de återstående ytorna. Den har käkskydd fästa med gångjärn och försedda med kantlister av mässing. Nacken har skyddats av ett nedhängande ringpansar, fäst vid den kantlist av mässing, som löper runt hjälmens nederkant. Ringpansaret påträffades inuti hjälmen tillsammans med ett av käkskyd-

den, som lossnat. Nässkyddet (fig. 2.) pryds av motställda djur med bandformiga strierade kroppar med höftspiraler; kropparna övergår bakåt i bandflätning. Hjälms strierade ögonbrynsskydd av mässing avslutas av djurhuvuden i profil (fig. 3.). Mellan ögonbrynsskydden bildar ett ovanifrån sett djurhuvud avslutning på den smala list med upphöjda kanter, som utgör hjälmens kam. Mellan kanterna ligger en metallfolie med en inskrift i upphöjd relief: IN NOMINE DNI NOSTRI IHV SCS SPS DI ET OMNIBVS DECEMVVS AMEN OSHERE XPI. I listens andra ände går de upphöjda kanterna samman och avslutas i motställda djurhuvuden i profil. En liknande list, med en i det närmaste identisk men nu delvis förlorad inskrift, har löpt från öra till öra.

Vid en jämförelse av inskrift och ornamenterik med northumbriska handskrifter framstår en datering av hjälmen till 700-talets mitt som sannolik.