

Bossed Penannular Brooches: a Review of Recent Research

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A GROUP of 9th and 10th-century insular brooches is discussed here in the light of a recent paper by O. S. Johansen, entitled 'Bossed Penannular Brooches'.¹ The corpus of brooches catalogued by Johansen is reviewed and the removal of three of his forty-three examples is suggested. Two additions are made, including one hitherto unpublished fragment, which prompts a revision of Johansen's classification of the material into subgroups. Problems relating to the manufacture and distribution of the bossed brooches are considered, leading to the conclusions that the brooches were cast and not hammered, and that they are unlikely to have been produced in NW. England, as well as in Ireland, as claimed by Johansen. It is also argued that the suggestion that the group is the product of a Norse milieu is unacceptable, with the exception of one subgroup. A discussion of the cultural affinities of the bossed brooches shows that the group is firmly rooted in the native Irish brooch tradition, although displaying influences from both England and Scotland.

OLAV SVERRE JOHANSEN'S paper, 'Bossed Penannular Brooches: a Systematization and Study of their Cultural Affinities',² must be warmly welcomed since it provides the first detailed catalogue and full survey of an important group of insular brooches of 9th and 10th-century date. Since Johansen's completion of his research in 1972, a certain amount of new evidence concerning these brooches has come to light, including one additional brooch fragment. The present discussion is also prompted by the fact that Johansen advanced a number of conclusions concerning the manufacture, distribution and

¹ I am indebted to Johansen for having discussed his research with me, whilst in progress, and for having given me a copy of his thesis, thereby encouraging me to take a close interest in these brooches. My thanks are offered to the staff of the following institutions for their assistance in the examination of the material: British Museum; Historisk Museum, Bergen; National Museum of Antiquities of Scotland; National Museum of Iceland; National Museum of Ireland; Schleswig-Holsteinisches Landesmuseum für Vor- und Frühgeschichte; Society of Antiquaries of London; Ulster Museum. I am most grateful for permission to study and photograph the Assheton Collection; and also wish to thank Sir Richard Proby for permission to examine his brooch (B1). I have benefited particularly from the advice and comments of Robert Stevenson, Mrs Leslie Webster, and Professor David Wilson.

² *Acta Archaeologica*, XLIV (1973), 63-124. All references to Johansen in the text are to this paper. The numbering of the brooches follows Johansen (pp. 118-22); full sources are cited by him and so they are not normally repeated here. Likewise little reference is made to previous discussion of these brooches, as this is fully covered by Johansen (pp. 94-103).

cultural affinities of the bossed brooches which are not wholly convincing and which are in part rather controversial.³

CLASSIFICATION

Johansen's group definition is clear: "*to the group of bossed penannular brooches belong those brooches which have unconnected terminals decorated with metal bosses*" (Johansen, 65). The introduction of the term 'bossed penannular brooches' for this group is particularly to be welcomed. Division into subgroups of his forty-three brooches and fragments, so defined, is based on tendencies observed in an attribute combination diagram (*ibid.*, fig. 25). As he himself admits, "the number of brooches is too small, and too many are too fragmentary, to allow for a procedure of grouping on the basis of correlation percentages" (*ibid.*, 89), so that the attribute combination diagram simply provides a summary of a subjectively selected number of observed attributes. Johansen is fully aware of this fact and states that "the intention has not been to present a balanced selection of attributes" (*ibid.*, 89). This selectivity has led Johansen to overlook an ornamental attribute which, it is argued below, has considerable potential for the division of the material into subgroups.

Johansen's subgroup definitions are as follows (*ibid.*, 80-81):

"To *Subgroup A* belong those bossed penannular brooches which have sub-triangular terminals divided into panels by engraved ribbons" (e.g. PL. V).

"To *Subgroup B* belong those bossed penannular brooches which have sub-rhombic terminals and no surface-covering pellet pattern on the terminals."

"To *Subgroup C* belong those bossed penannular brooches which have sub-triangular terminals, at the narrow ends of which are carved out zoomorphic heads seen from above" (e.g. PL. VI, A).

"To *Subgroup D* belong those bossed penannular brooches which have sub-circular terminals" (e.g. PL. VI, B).

"To *Subgroup E* belong those bossed penannular brooches which have sub-triangular or sub-rhombic terminals, with more than half of the terminal surface occupied by a pellet pattern" (e.g. PL. VII, A).

"To *Subgroup F* belong those bossed penannular brooches which have sub-triangular terminals carrying bosses with filigree ornaments" (e.g. PL. VIII, A).

There remains one brooch which belongs to this group and which does not fit into any of the above subgroups. This is termed 'brooch G'. Altogether Johansen's catalogue contains forty-three brooches and fragments which are allocated to his subgroups as follows (*ibid.*, 118-22):

| | |
|----------------|---------------|
| Subgroup A: 24 | Subgroup E: 3 |
| Subgroup B: 7 | Subgroup F: 3 |
| Subgroup C: 3 | Brooch G: 1 |
| Subgroup D: 2 | |

³ A shortened version of this paper is to be published in *Norwegian Archaeol. Review*, ix (1976), together with comments from Olav Sverre Johansen.

It is, however, argued below that Johansen's catalogue needs alteration; in particular by the removal of three examples, and the addition of two. It is also suggested that some fragments are in fact unclassifiable (for revised totals, see below, p. 37).

The recent recognition of an unpublished brooch fragment from the Cuerdale, Lancs., hoard⁴ creates problems of classification within the subgroups as defined by Johansen. This fragment (PL. VII, c, D) consists of a sub-circular terminal ornamented with a central boss and an overall pellet pattern. The sub-circular terminal form qualifies it for subgroup D, as defined above. However, it lacks the single openwork animal which forms the outer terminal edge on both the two D-brooches and has instead the overall pellet pattern which is the distinguishing ornamental attribute of subgroup E. Since subgroup E already includes brooches with both sub-triangular and sub-rhombic terminals (PL. VII, A), it seems logical to widen the definition further to include those with sub-circular terminals. This redefinition brings the new Cuerdale fragment into the subgroup for which its ornament best qualifies it.

It therefore becomes necessary to provide a new definition of subgroup D which would exclude this new fragment. The most distinctive ornamental attribute of the two D-brooches is the presence of 'marginal' animals: a single animal extended along the outer margin of each terminal. This attribute is also shared with C-brooches, but not with any others in the group. In the light of the importance of 'marginal' animals in the 9th-century Irish brooch tradition,⁵ this attribute would seem to be of greater significance than the diagnostic ornamental attribute of C-brooches selected by Johansen (p. 81), which is the presence of "carved out zoomorphic heads seen from above" at the narrow ends of their terminals. It is therefore proposed that the three C-brooches and the two D-brooches are placed together in one sub-group (C/D), and the following definitions are advanced in line with those of Johansen:

To *subgroup C/D* belong those bossed penannular brooches with terminals which have the outer margin formed by a single extended animal (e.g. PL. VI, A, B).

To *subgroup E* belong those bossed penannular brooches which have more than half of the terminal surface occupied by a pellet pattern (e.g. PL. VII, A, C, D).

A second addition to be made to the catalogue is a bronze penannular brooch (PL. VII, B) which forms part of a hoard of eleven brooches found at Rogart, Sutherland, in 1868.⁶ The ornament on each terminal consists of five metal bosses. Since it is a truly penannular brooch decorated with metal bosses it must, by definition, be admitted to Johansen's group, although it may not be referred to any of his subgroups. Rather than widen the definition of any subgroup to accommodate this unique brooch, it seems preferable to adopt the

⁴ In the Assheton Collection; I am most grateful for permission to publish this fragment. For details see Appendix, p. 47.

⁵ J. A. Graham-Campbell, 'Two Groups of Ninth-century Irish Brooches', *Jnl. Roy. Soc. Antiq. Ireland*, cxi (1972), 117 ff.; also J. A. Graham-Campbell, 'The Lough Ravel, Co. Antrim, Brooch and Others of Ninth-century Date', *Ulster Jnl. Archaeol.*, xxxvi-xxxvii (1973-4), 52-7.

⁶ A. Small, C. Thomas and D. M. Wilson, *St. Ninian's Isle and its Treasure* (London, 1973), 81-2.

principle used by Johansen with 'brooch G' and designate the Rogart example 'brooch H'.⁷

Four fragments from the Cuerdale hoard (A17b, A17h, B5a and B5b),⁸ although clearly once part of bossed penannular brooches, do not possess sufficient attributes to allow them to be assigned unequivocally to subgroups. It seems desirable to introduce a 'miscellaneous' category to cover them.

One Cuerdale fragment (A17d), which consists of part of a terminal corner, has been allocated by Johansen to subgroup A, although its ornament cannot be paralleled on any brooch in this subgroup. It is, however, paralleled closely on the right-hand terminal of brooch B1, where the detail on the fragment can be seen to be the pigtail, or head-lappet, of a bird. It is suggested therefore that A17d be transferred to subgroup B.

In addition to these alterations to the catalogue, there are three brooches included by Johansen (A6, A15 and B6) which ought to be removed, for the following reasons.

A6. This brooch is now known to be a 19th-century reproduction, since the 'no. 63' incised on the pin has been discovered to refer to a museum register of such reproductions.⁹ As in fact suspected by Johansen (p. 119), A6 is an 'idealized' copy of A7.

A15. The sources for the existence of this brooch, as quoted by Johansen (p. 119), can all be demonstrated to refer to 19th-century reproductions of A13. Lovett's photograph¹⁰ is of a Waterhouse reproduction, like that illustrated in the mid 19th-century catalogue referred to by Johansen (p. 119).¹¹ In Waterhouse and Co.'s catalogue of their reproductions,¹² it is stated that this brooch is copied from that found at Ballyspellan, Co. Kilkenny, in 1806 (A13). The only other source cited by Johansen (p. 119) for the existence of A15 is Fairholt,¹³ but he omits to mention that the brooch is described there as being "set with garnets on the outer edge, and crystals in the centre".¹⁴ It would therefore have been quite unlike any other bossed penannular brooch, but Fairholt's description corresponds well with Waterhouse and Co.'s account of their reproductions; these were made "in Silver, Silver Gilt, inlaid with Bog-oak and Irish Diamonds, Irish Amethyst, and Malachite; also in Gold and Irish Pearls".¹⁵ It seems clear that Fairholt drew a reproduction of a bossed brooch (A13), and that there is therefore no evidence to support the independent existence of brooch A15.

B6. Johansen (p. 121) catalogues this brooch on the basis of an illustration in Macalister,¹⁶ but he also points out that "the very existence of this brooch is

⁷ For details and references see Appendix, p. 47.

⁸ For details see Appendix, p. 47.

⁹ I am most grateful to Dr Joseph Raftery for this information.

¹⁰ *The Reliquary and Illustrated Archaeologist*, x (1904), fig. 10.

¹¹ Johansen's reference is in fact to the *Art Journal Illustrated Catalogue of the Great Exhibition of 1851*, p. 20.

¹² *Ornamental Irish Antiquities* (subtitled *Irish Antique Brooches*; published in 1852, 1853 and 1872).

¹³ F. W. Fairholt, 'Remarks on Irish Fibulae', *Trans. Brit. Archaeol. Assoc., Third Annual Congress, Gloucester 1846* (1848), 86-93.

¹⁴ *Ibid.*, 91 and pl. v, 3.

¹⁵ *Op. cit.* in note 12.

¹⁶ R. A. S. Macalister, *The Archaeology of Ireland* (London, 1928), 315, fig. 19.

uncertain . . . it may well be that Macalister made this drawing with e.g. B₂ and B₄ in mind". It is unsound practice to catalogue a brooch which is not known definitely to have existed when the only evidence consists of a rough sketch, included in a figure prepared solely to illustrate different brooch types. Johansen is right to draw attention to the sketch, but this hypothetical brooch cannot form part of the catalogue proper.

As a result of these additions, alterations and deletions, the total number of brooches and fragments available for discussion now stands at forty-two. They are to be assigned to the following subgroups:

| | | | |
|---------------|----|----------------|---|
| Subgroup A: | 19 | Subgroup F: | 3 |
| Subgroup B: | 5 | Brooch G: | 1 |
| Subgroup C/D: | 5 | Brooch H: | 1 |
| Subgroup E: | 4 | Miscellaneous: | 4 |

MANUFACTURE

The conclusion reached by Johansen (p. 68) as to the method of manufacture of the bossed brooches is of considerable interest. He claims that "they are made of silver ingots by hammering, possibly combined with heating, and by carving, polishing and engraving". If this is the case, then this group of brooches is unique amongst the insular material since all the indications are that the penannular and pseudo-penannular brooches of the period were cast in two-piece moulds.¹⁷ Since 'carving, polishing and engraving' are techniques which may also be used to finish a cast brooch, the discussion must centre on the evidence advanced by Johansen for the actual hammering of ingots into bossed brooches. He presents two lines of argument (pp. 68-9): the existence of 'rough-outs' in the Cuerdale hoard, and the surface evidence of the brooches themselves, particularly the lack of traces of the casting process.

The two 'rough-outs' in the Cuerdale hoard (*ibid.*, fig. 63) together constitute a single artifact which may have been intended as a penannular brooch. This object is unique, and there is no evidence whatsoever that it was intended to be a *bossed* brooch. It has sub-triangular terminals different in form to those of any bossed brooch, and a rectangular hoop-section, also without parallel (FIG. 12). Johansen might wish to argue that such features would have been altered by further working, but its overall dimensions (diam: *c.* 15 cm.) would have remained in excess of those of the bossed brooches.

Johansen's second main point (p. 68) is that, although many of the brooches might give an impression of having been cast, "scars and roughnesses in the surface" indicate otherwise. At the same time he points out the malleability of silver, but does not take into account the consequence that 'scars and roughnesses' can be caused by wear and damage sustained during the use of the

¹⁷ R. B. K. Stevenson, 'The Hunterston Brooch and its Significance', *Medieval Archaeol.*, xviii (1974), note 8.

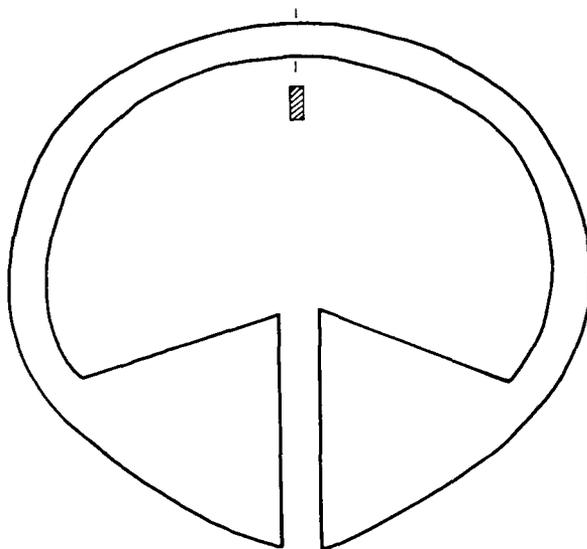


FIG. 12
RECONSTRUCTION OF CUERDALE 'ROUGH-OUTS'
Sc. 1:2 (p. 37)

brooches, or during their circulation in hoards, or as a result of their deposition in the ground.

In an attempt to resolve this problem, the British Museum Research Laboratory has undertaken to examine microscopically the crystalline structure of a terminal fragment from the Cuerdale hoard (A17d). The structures resulting from casting, and from annealing and hammering, present significant observable differences. The final results will be published in the *Norwegian Archaeological Review*, ix (1976) (see note 3).

Some individual brooches deserve further comment. Johansen (p. 69) observes that F1 (Rathlin) "seems to have a cast body", but then so has F2 (Hatteberg), as an examination of the terminal fringe, in the detail photograph (ibid., fig. 61), will reveal immediately. The same is true of the F3 (Cuerdale) fragment. This evidence for casting displayed by the F-brooches finds support in a highly relevant mould from Hedeby (PL. VIII, B).¹⁸ This mould would have produced a penannular brooch with sub-triangular terminals having zig-zag outer margins, and crescentic mouldings at the junction of hoop and terminal (cf. F2, PL. VIII, A). Each terminal is provided with three small pegs to which bosses might have been attached.

In the case of D1, Johansen (p. 69) suggests that the body was hammered from an ingot and that then the bosses were cast on to the terminals. This seems

¹⁸ For an earlier photograph of this mould, when in a more complete state, see T. Capelle, *Der Metallschmuck von Haithabu* (Neumünster, 1968), pl. 25, 7.

an unduly complex procedure when soldering would have sufficed. It is altogether more probable that the body and bosses were cast as one.

Johansen (p. 92) points to the very close similarities between A₁ and A₂, including the facts that the "breadth of hoops and terminals as well as thickness of hoops are identical".¹⁹ Dissimilarities in ornament can only be found in minor details. These facts make it highly probable that A₁ and A₂ were cast from moulds made from a common model.²⁰ This is likely to have incorporated the majority of the ornament, so that the slight differences can be accounted for by secondary working, after casting.

Given the malleability of silver, it is perfectly possible for a craftsman to remove the obvious traces of the original casting process. It is also possible for silver objects to sustain wear and damage which might suggest that they had been deliberately hammered. Some of the brooches discussed above were definitely cast, and the fact remains that the manufacture of brooches by hammering does not appear to have been a normal practice in either Ireland or Britain at this period.

Johansen (p. 105) implies that niello was never used on the bossed brooches and so contrasts them with 9th-century Anglo-Saxon silver-work, on which it is commonly found. The problem is that the majority of bossed brooches are 19th-century finds, many having been in private collections, and so have been subjected to non-professional cleaning which is likely to have removed all traces of niello. It is probable that niello has been used in some instances, although there is no conclusive surviving evidence.

CHRONOLOGY

Johansen concludes (p. 91) that "a general date for the whole group of brooches may be given as *c.* 850–*c.* 950". After independent consideration of the evidence of the coin-hoards containing fragments of bossed penannular brooches, the present author's conclusion that "the development and *floruit* of these bossed brooches took place in the second half of the 9th century, even if their production continued into the 10th" is in close agreement with that of Johansen.²¹ It should, however, be noted that the hoard dates quoted by Johansen have been revised by Dolley.²² The dates for the deposition of the relevant hoards should now be taken as follows: Cuerdale, *c.* 903; Goldsborough, Yorks., *c.* 920; Storr Rock, Inverness-shire, *c.* 935. These changes do not affect Johansen's conclusions. The deposition of the Kirkoswald, Cumbria, hoard is now dated by Dolley *c.* 870 (cf. Johansen, p. 93).²³

¹⁹ In making comparisons between A₁ and A₂, it should be noted that Johansen's illustrations of A₁ (figs. 35–6) are not at a scale of 1:2, as indicated, but at about 3:4.

²⁰ The relevant clay moulds were probably not used more than once, but several moulds are likely to have been produced from a single pattern or model (*loc. cit.* in note 17).

²¹ *Jnl. Roy. Soc. Antiq. Ireland*, cii (1972), 114.

²² R. H. M. Dolley, *Hiberno-Norse Coins in the British Museum* (London, 1966), 45–50.

²³ *Ibid.*, 49.

Johansen (p. 91) comments that “the bossed penannular brooches are rich in ornamental attributes, but only a very few can be utilised for dating purposes”. There are, however, additional attributes to those used by Johansen such as the 9th-century development of ‘marginal’ animals which can be used to reinforce his arguments, in this case for subgroup C/D.

A further piece of evidence, which can be brought forward in support of the 9th-century date of F-brooches, as advanced by Johansen (p. 93), is the presence in the Cuerdale hoard of a pinhead fragment.²⁴ This unpublished fragment provides the only parallel for the highly distinctive pinhead of the Rathlin brooch (F1), in that it too has three ‘channels’ with pierced holes to receive wires, now missing (cf. Johansen, 85). In addition, it may be suggested that another fragment from the Cuerdale hoard also derives from a brooch similar to F1. This fragment²⁵ consists of an animal executed in openwork, with an incised contour line and spotted body, in the manner of the openwork animals of the Rathlin brooch, for which it provides the only close parallel.²⁶

DISTRIBUTION

According to Johansen (p. 92), “probably workshops were situated in the Northwest of England as well as in Ireland”, and he cites his distribution-map (fig. 26) in support of this statement. The distributional evidence is pressed further in his conclusion that “chorological as well as contextual attributes of the bossed penannular brooches strongly support an origin in a Viking milieu”, in Ireland and northern England (p. 114). The actual evidence, however, is not analysed in detail and closer examination of the distribution-pattern leads to conclusions which differ significantly from those of Johansen.

Interpretation of distribution-maps is a notoriously hazardous procedure, but there are a number of different approaches which may be taken into consideration. In the first place, the number of actual find-spots in Ireland should be contrasted with the number in England. This approach is preferable to contrasting the totals of all brooches and fragments since many examples from a single hoard, such as that from Cuerdale, will inevitably introduce a bias. The revised number of individual finds from Ireland is twenty-one, whereas there are only four finds from northern England, and two of these are from hoards with strong Irish associations (see below, p. 42); the four other known finds are from three different countries. These figures suggest that Ireland was the main area of production, with the possibility that northern England was a secondary centre. The figures are, however, equally open to the interpretation that Ireland was the sole area of production, whence brooches were distributed abroad (to four countries), with the largest number travelling the shortest distance (to northern England).

This latter interpretation finds support when the evidence is re-analysed on a

²⁴ B.M. reg. no: 41, 7-11, 284.

²⁵ B.M. reg. no: 41, 7-11, 455.

²⁶ H. Shetelig (ed.), *Viking Antiquities in Great Britain and Ireland* (Oslo, 1940), iv, fig. 10, bottom left.

different basis. Given the high degree of mobility shown by fragments of silver ornaments in the Viking age, once they entered the general pool of hack-silver, it is probably more realistic to use only complete artifacts for distributional analysis designed to locate areas of production. There are nineteen brooches, complete with their pins, known from Ireland and only one such brooch from northern England (A11).²⁷ These figures suggest that northern England is unlikely to have been an area of manufacture.

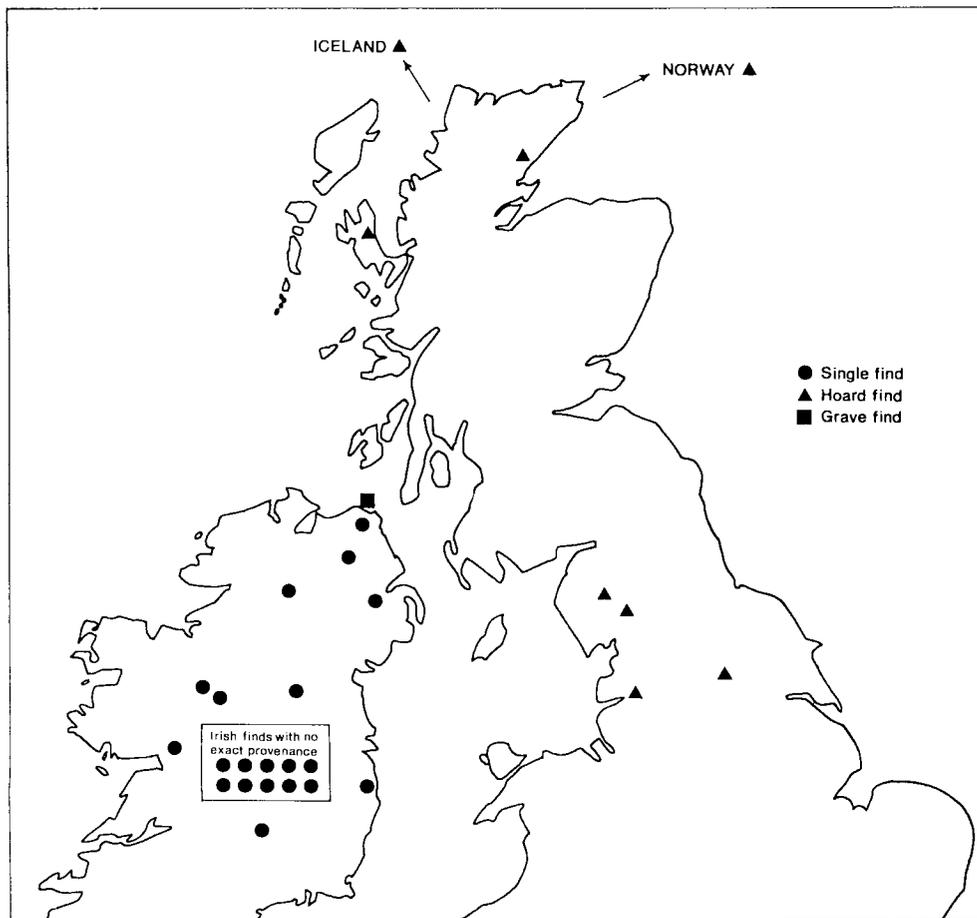


FIG. 13

DISTRIBUTION-MAP OF BOSSSED PENANNULAR BROOCHES (p. 42)

²⁷ In fact, the pin of this brooch, from Orton Scar, Westmorland, is probably a replacement. It is unlike any other A-brooch pin and its head is decorated with stamped ornament, of opposed triangles, characteristic of Norse work; there is no stamped ornament on the body of the brooch.

A factor of great importance in interpreting distribution-maps is to consider the nature of each individual find. If the bossed penannular brooches are approached on this basis, a marked distinction becomes evident (FIG. 13). Not one of the twenty-one finds from Ireland is known to be from a silver hoard, a factor of some significance now that forty-two Viking-age hoards, containing objects other than coins, are known.²⁸ All seven silver finds outside Ireland form part of hoards, which suggests that the brooches belong to different contexts within and without Ireland. This fact also provides a simple explanation for the distribution of such brooches in northern England, western Scotland, Iceland and Norway. The presence of the Norse in Ireland gave them access to bossed brooches and, if they acquired them there, the known distribution throughout the Norse world was just as might be predicted for the period. It should be added that it is probable that the Cuerdale and Goldsborough hoards were assembled in Ireland, although deposited in northern England. This suggestion is based not only on the presence of so many Irish and Hiberno-Viking brooches and fragments in these two hoards, but also on the fact that a high proportion of the arm-rings (and fragments), which they contain, belong to a group which has been isolated as being of specifically Hiberno-Viking manufacture.²⁹

It is a remarkable fact that, if, as claimed by Johansen, bossed penannular brooches originated in a Norse milieu, only one of the twenty-one brooches from Ireland is known to have been associated with Norse objects, or to have derived from a Norse site. This one exception is from a Scandinavian burial on Rathlin Island³⁰ and belongs to subgroup F (Hatteberg, etc.), the brooches of which appear to be Norse imitations of what are otherwise brooches of Irish manufacture (see below, p. 45 f.). It is thus not surprising that this brooch, alone amongst the Irish finds, should have come from a Norse context.

These conclusions may be summarized as follows:

1. The distributional evidence suggests that *almost all bossed penannular brooches were produced in Ireland*. There are no particular chorological reasons for introducing northern England into a discussion of the *origins* of the group as a whole.
2. The distributional evidence within Ireland suggests that *bossed penannular brooches were almost all native products* since, with only one exception (F1), they are not known to have been found in Norse contexts. There is, therefore, no chorological basis for arguing that the *origins* of these brooches need have involved a Norse milieu.
3. The contextual attributes of the bossed penannular brooches suggest *an origin in a native Irish milieu*, with the additional dimension of *distribution outside Ireland in a Norse milieu*.

²⁸ J. A. Graham-Campbell, 'The Viking-age Silver Hoards of Ireland', in D. Greene (ed.), *Proc. Seventh Viking Congress* (Dublin, forthcoming), Appendix C.

²⁹ *Ibid.*

³⁰ R. Warner, 'The Rejuvenating of Two Important Penannular Brooches of the Viking Period', *Ulster Jnl. Archaeol.*, xxxvi-xxxvii (1973-4), 58-70.

DISCUSSION OF CULTURAL AFFINITIES

Since Johansen submitted his manuscript for publication in 1972, a number of studies of penannular brooches have appeared concerning the 9th-century background against which the development of the bossed brooches must be considered.³¹

Johansen (p. 104) is right to point out that these bossed brooches stand apart from 8th-century Irish brooches in that they are truly penannular in form. But there is a return to the penannular form in Ireland during the 9th century, as a result of influences from the Pictish tradition.³² Irish brooches of 9th-century date may be either pseudo-penannular or penannular in form, and therefore the bossed penannular brooches can be seen to fit into the native tradition.

In connexion with the origins of the terminal design of A-brooches Wilson has brought the evidence of the Pictish brooch tradition to bear on the dating of the brooch design on the stone from Dunadd, Argyllshire, referred to by Johansen (p. 110), and has placed it firmly in a 9th-century context.³³ An important addition to this discussion is the bronze penannular brooch from the Rogart, Sutherland, hoard (brooch H, PL. VII, B). The lobed terminals of this brooch, and the presence of a crescentic moulding at the junction of hoop and terminal, relate it to the Pictish tradition and make it unlikely that it is an Irish export.

The other two surviving brooches from the Rogart hoard belong definitely to the Pictish tradition and are likely to belong to the early 9th century, because of their typological relationship with those of the St Ninian's Isle, Shetland, hoard and those from Croy, Inverness-shire.³⁴ The form of the Rogart brooch could perhaps be derived from the form of the Pictish four-lobed brooch, with raised birds' heads, such as that also found at Rogart.³⁵

In fact, Wilson goes so far as to suggest that the Dunadd sketch and the Rogart brooch represent an initial stage in the development of the A-brooches.³⁶ That such an initial stage may only have come to fruition in Ireland is not improbable, when seen in the context of the other influences that brooches from Scotland had on the Irish tradition in the 9th century, possibly as a result of the flight of small numbers of people from Scotland in the face of the Vikings.³⁷

The problem of the origins of the compartmentation of the terminals of A-brooches, by means of linked bosses (PL. V), remains a controversial matter. Granted that no adequate Irish prototype exists for this type of framework (Johansen, 105), it is agreed that external influences are involved. The possibility must, however, be borne in mind that influences from different sources may have become merged in the development of the final product. One possible source of inspiration for the use of bosses has been advanced above on the basis of the evidence from Scotland.

³¹ *Opp. cit.* in notes 5 and 6.

³² *Ibid.*

³³ *Op. cit.* in note 6, 87-8.

³⁴ *Ibid.*, chapter 4.

³⁵ I am grateful to Robert Stevenson for this suggestion.

³⁶ *Op. cit.* in note 6, 101.

³⁷ *Opp. cit.* in note 5.

Johansen (p. 110) concludes that "specific features such as the make-up of ribbons and bosses may be more easily paralleled in the Saxon metalwork" than in Scandinavian metalwork. He is thus in agreement with both Wilson³⁸ and the present author³⁹ on this point. The difference of opinion is over the origin of the division of the terminals into panels by the use of linked bosses. On this point, Johansen (p. 110) concludes that "the general design is best paralleled on Scandinavian tortoise brooches and rectangular mountings and brooches".

These rectangular mountings and brooches constitute what Johansen (p. 108) rightly describes as a small group of S. Scandinavian objects dated *c.* 800. This material is separated chronologically by two generations from the A-brooches, and no such rectangular mount or brooch is known from Ireland or Britain. It is surely unacceptable to introduce material which is so remote in both period and distribution from the bossed brooches. Whatever the chance similarities, the rectangular mounts and brooches cannot be considered relevant to the present discussion.

Johansen (p. 106) argues for the Scandinavian oval brooches (the so-called 'tortoise' brooches) as the source for the panelled style in Ireland, but with the major qualification "that one can only tentatively suggest a connection". There are, however, three reasons for accepting the alternative case for an Anglo-Saxon connexion as more than tentative. In the first place, there is the nature of the ribbons and the bosses. Secondly, there is the question of form and material. Is it more probable that convex bronze objects or flat silver ones will have influenced the design of flat silver brooch terminals? The latter must surely have a greater degree of probability. Thirdly, there is the manner in which the linking bands are used. The search for parallels has been to locate a source in which straight bands are used to link bosses in the manner employed on the brooch terminals (PL. V). Johansen (p. 108) prefers the oval brooches as the source, since these have "fairly straight bands", rather than the Anglo-Saxon metalwork on which curved bands are often used. Johansen does not, however, do full justice to the 9th-century Anglo-Saxon material in his discussion.

There are three finds which merit close consideration in this context: a brooch from the Beeston Tor, Staffs., hoard,⁴⁰ the horn-mounts from the Trewiddle, Cornwall, hoard,⁴¹ and a horn-mount from Burghead, Morayshire.⁴² Both the Beeston Tor and Trewiddle objects are from coin-dated hoards, deposited *c.* 875.⁴³

On the Beeston Tor brooch the bands are curved, with bosses at their intersections, so that the fields which result are curvilinear. Johansen (p. 107) dismisses the brooch on this account, but fails to take into consideration the circular form of the object and the influence that this may have had on the craftsman's choice

³⁸ D. M. Wilson, 'A Group of Penannular Brooches of the Viking Period', *Árbok hins íslenska fornleifafélags* (1958), 95-100.

³⁹ *Jnl. Roy. Soc. Antiq. Ireland*, cii (1972), 114-15.

⁴⁰ D. M. Wilson, *Anglo-Saxon Ornamental Metalwork, 700-1100, in the British Museum* (London, 1964), pl. xi, 3.

⁴¹ *Ibid.*, pl. xxxvi, 94 and 95.

⁴² J. A. Graham-Campbell, 'The Ninth-century Anglo-Saxon Horn-mount from Burghead, Morayshire, Scotland', *Medieval Archaeol.*, xvii (1973), 43-51.

⁴³ *Op. cit.* in note 22, 49.

of four interlocking circles to divide up its surface. Given a rectangular or triangular object to ornament, the same craftsman working in the same style would probably have chosen to use the bands in straight lines. Such is the case with the Trewhiddle horn-mounts, and indeed with other objects decorated in the 9th-century Trewhiddle style.⁴⁴ Johansen's objection (p. 107) to the Trewhiddle mounts is that the bosses used on these pieces were not directly associated with the bands. The Burghhead horn-mount, on the other hand, displays exactly those features that Johansen finds lacking in the other objects. The fields on this mount are created by bands which run straight and which also serve to link bosses.⁴⁵

In the light of this evidence, a strong case is established for 9th-century Anglo-Saxon silver ornaments having been the major influence on the development of the A-brooches in Ireland. This is further reinforced by the apparent influence of the Trewhiddle style on the animal ornament of some of the A-brooches, for instance, the square snouts of the animals on A7, A8, A9 and A11, and also the speckled bodies of the animals on A9.⁴⁶ Johansen (p. 103) objects that it is not possible "to establish an Irish/Anglo-Saxon milieu in Ireland in the period 850-950", but this is to miss the point. Since the brooches involved are all so closely related, it is only necessary that there should have been some specific initial impulse received in a single workshop.

Johansen does not discuss the layout of the ornament of his subgroups C and D. C/D brooches have a single central boss and an animal extended along the outer margin of each terminal (PL. VI, A, B). The use of marginal animals on Irish brooches has been isolated as a 9th-century development, when they are also found in openwork, as on a brooch from Lough Ravel, Co. Antrim.⁴⁷

The use of sub-circular terminals in subgroups C/D and E (as redefined) can easily be paralleled in a 9th-century Irish context. This form would, however, appear to be the result of influence from the Pictish brooch tradition, as can be observed on such brooches as that from Ervey, Co. Meath.⁴⁸

F-brooches (PL. VIII, A) present a different problem and Johansen (pp. 104, 109-12), following Bøe,⁴⁹ Shetelig,⁵⁰ and Wilson,⁵¹ is surely right in seeing strong Norse connexions for this subgroup. The combined conclusions of these authorities is that this subgroup represents the products of a Scandinavian milieu, of Norse craftsmen working in an insular tradition. This conclusion may be reinforced by the evidence of the Hedeby mould (PL. VIII, B), and by the fact that all three F-brooches have come from specifically Norse contexts. This origin for the F-brooches is in complete contrast to that argued above for the other subgroups. It is consequently of interest to note the number of significant differences which

⁴⁴ Op. cit. in note 40; e.g. pl. xxx, 82 and pl. xxxvi, 93.

⁴⁵ Op. cit. in note 42, fig. 19b.

⁴⁶ For these features of the Trewhiddle style see D. M. Wilson and C. E. Blunt, 'The Trewhiddle Hoard', *Archaeologia*, xcvm (1961), 75-122.

⁴⁷ *Ulster Jnl. Archaeol.*, xxxvi-xxxvii (1973-4), 52-5.

⁴⁸ *Ibid.*, 55.

⁴⁹ J. Bøe, 'A Hoard from West Norway', *Antiq. Jnl.*, xiv (1934), 159-62.

⁵⁰ H. Shetelig, 'The Norse Style of Ornamentation in the Viking Settlements', *Acta Archaeologica*, xix (1948), 69-113.

⁵¹ D. M. Wilson, 'The King's School, Canterbury, Disc-brooch', *Medieval Archaeol.*, iv (1960), 16-28.

exist between F-brooches and the other bossed brooches, in technique, form and ornament.

F-brooches are the only ones to have filigree decoration, and they alone have stamped ornament on their bodies. F1 and F2 are the only brooches with hoops of Johansen's type 2 cross-section. The crescentic moulding at the junction of hoop and terminal is not found on any of the other brooches in the group. The openwork zoomorphic ornament of F1 is unique, and the openwork fringes of F2 and F3 are likewise not found on the other brooches. F-brooches thus have a number of distinctive attributes otherwise absent from the group. Since it is agreed that these particular brooches are the products of Norse, or Hiberno-Norse, craftsmen, their special attributes provide yet another argument for the brooches of subgroups A to E being the products of a different milieu.

CONCLUSION

The publication of these bossed penannular brooches constitutes a major contribution to our knowledge of the flourishing tradition of brooch manufacture in Ireland during the latter part of the 9th century. This firmly rooted tradition is seen to be receptive to impulses from both England and Scotland, from which something new and distinctive was created. A further impulse behind this period of experimentation with new brooch types may well have been the introduction of large quantities of silver into Ireland by the Vikings.⁵² The Norse settlers in Ireland borrowed the idea of bossed penannular brooches for themselves, as is evidenced by subgroup F. They seem not, however, to have become an established Norse fashion in the manner of the so-called 'thistle-brooches', which are of slightly later date, of far wider distribution, and which survive in greater numbers.

APPENDIX

CATALOGUE ADDITIONS AND REVISIONS

For obvious reasons Johansen's numbering of the brooches and fragments has been retained (pp. 118-22), although it is not clear on what basis he chooses to change from numbers to letters (e.g. A1-16, then A17a-h).

A2 (PL. v). The windings of silver wire on the pin have now been restored by the British Museum to the condition recorded in the early photographs of this brooch.

A4. This brooch terminal is in two pieces so that my measurement of its breadth, as quoted by Johansen (p. 118), is only approximate. The reverse is ornamented with a single incised line around its edge and a pair of concentric circles around each clinch.

A6. To be deleted (19th-century reproduction; see above, p. 36).

A15. To be deleted (19th-century reproduction; see above, p. 36).

A17a. The boss attached to this terminal plate fragment is hollow, and not solid, as claimed by Johansen (p. 120). It must therefore be reclassified as type 3, and cannot be described as 'identical' with the loose boss (A17b), also from the Cuerdale hoard, which is correctly described by Johansen as being of his type 2 (loc. cit.).

⁵² Op. cit. in note 28.

A17b. This isolated boss cannot be attributed unequivocally to subgroup A and should therefore be assigned to the 'miscellaneous' category.

A17d. To be transferred to subgroup B (see above, p. 36).

A17h. This fragment may well be from an A-brooch, but the profile of its intact outer edge is not paralleled in this subgroup. It is safest to assign it to the 'miscellaneous' category.

B1. The reverse of this brooch is ornamented with an incised line round the edge of the terminal, and a circle around the central clinch.

B2. The description quoted by Johansen (p. 121), of a silver brooch in *Ulster Jnl. Archaeol.*, v (1857), 347, fits brooch G as well as, if not better than, B2.

B5a and *B5b.* As Johansen (p. 84) indicates, these two fragments cannot be attributed unequivocally to subgroup B. They should therefore be included in the 'miscellaneous' category.

B6. To be deleted (not known definitely to have existed; see above, p. 36 f.).

C2 (PL. VI, A). Sir William Betham's *Sketch-Book of Antiquities*, preserved in the National Library of Ireland (Tx. 1959), includes a drawing of this brooch (p. 34). The caption states that "the above antient silver fibula was found in the County of Roscommon in the year 1840". It is worth noting that C1, which it closely resembles, was also found in Co. Roscommon.

E4 (PL. VII, C, D). Provenance: Cuerdale, Lancashire. Present location: in private possession (the Assheton Collection).

Remarks: Left-hand terminal fragment with a double-sided boss. The front is ornamented with two concentric circles of pellets, covering the entire field; the boss on the reverse is encircled by a billeted band, poorly executed.

F1. This brooch was found, associated with some beads, in one of a number of burials at Church Bay, Rathlin Island, Co. Antrim. See now R. Warner, *Ulster Jnl. Archaeol.*, xxxvi-xxxvii (1973-4), 61-2.

F3. This fragment from the Cuerdale hoard is in the Assheton Collection. It is in very fresh condition in comparison with the Hatteberg brooch (*F2*), and the openwork fringe is ornamented with an opposed-triangle stamp, similar to that used on the hoop of *F2* and the borders of *F1*.

H (PL. VII, B). Provenance: Rogart, Sutherland. Present location: in private possession (Countess of Sutherland).

Bibliography: *Proc. Soc. Antiq. Scotland*, viii (1868-70), 309, pl. xvi, 3; Anderson (1881), 10-11, fig. 7; *Catalogue of the National Museum of Antiquities of Scotland* (Edinburgh, 1892), 200-1; Allen and Anderson (1903), xcv, fig. 26; Smith (1914), 236, 248, fig. 9, no. 3; Small, Thomas and Wilson (1973), 82, 101.⁵³

Remarks: This bronze penannular brooch is described as being silvered, or tinned, and is ornamented with five bosses with beaded collars on each terminal. Miss Audrey Henshall, in her unpublished catalogue of the Sutherland collection, records the brooch as being "1.65 ins across" (c. 4.1 cm.) and comments that the pin is a replacement. In Small, Thomas and Wilson [(1973), 82, 89] it is suggested that this pin, which is broken and out of proportion with the brooch itself, belonged to one of the missing brooches from the hoard.

⁵³ Sources quoted as in Johansen (pp. 122-4), with the addition of Small, Thomas and Wilson (1973), op. cit. in note 6.