

# The Viking Age trefoil mount from Jarlshof: a reappraisal in the light of two new discoveries

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with a contribution by Katherine Eremin

## ABSTRACT

*Two recent finds of unusual trefoil mounts from England have led to a reappraisal of the trefoil mount from Jarlshof, Shetland. This study supports Eldjárn's proposition, based upon two closely related finds from Iceland, that this series of trefoil fittings was produced in the British Isles, although Scandinavian influence is apparent in their form, decoration and metallic composition.*

## INTRODUCTION

In 1956 was published both Eldjárn's survey of the pagan Norse graves of Iceland and Hamilton's excavation report for Jarlshof, Shetland. Within the former were two unique trefoil 'brooches', from Hafurbjarnarstaðir and Hóll, which Eldjárn (1956, 308) believed to be of Celto-Norse origin on account of their ornament. The Jarlshof publication also included an example of this unusual trefoil 'brooch' form (Hamilton 1956, 150), the Shetland find-location lending some support to Eldjárn's theory of an Insular origin for the type. Eldjárn subsequently published a short note specifically on these trefoil 'brooches', entitled 'Smásaga um tvær nælur — og þrjár þó' (A short note on two brooches, and yet three), in which he alluded to the recently published Jarlshof 'brooch', which he believed might have been cast in the same mould as the two Icelandic finds (Eldjárn 1961, 34). The discovery of two further trefoils belonging to this group in England, in 1996, lends further support to Eldjárn's theory of an Insular origin and provides an opportunity to study the Insular finds in more detail, including an analysis of their metallic compositions.

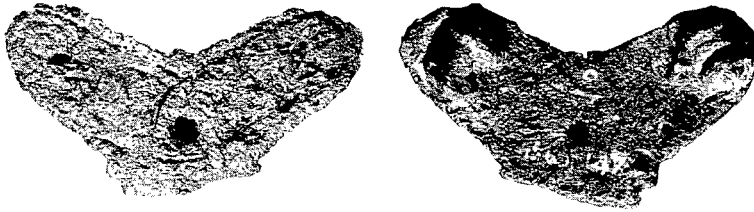
## THE INSULAR FINDS

### JARLSHOF, SHETLAND (NMS: HSA 859) (ILLUS 1)

The copper-alloy trefoil object, which was identified by both Hamilton and Eldjárn as a brooch (Hamilton 1956, 150; Eldjárn 1956, 310) is incomplete, with one arm missing (Hamilton 1956, pl XXIX:3). It was recovered from a 10th-century midden, alongside a path leading to dwellings, and is said to have been badly burned, although its poor condition (on account of which it has been photographed rather than drawn) is more likely to be a result of damage and corrosion than of fire.

The span between the two surviving arms is 48 mm and the distance between each arm tip and the triangular protrusion opposite is 39 mm. It has a flat upper surface which originally had cast ornament, a

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ILLUS 1 Trefoil mount from Jarlshof (decorated face (left); reverse or back (right). Scale 1:1 (Copyright National Museums of Scotland)

spiral of which is just discernible filling the tip of one of the arms. Despite the poor condition of the Jarlshof trefoil some elements of the original decoration can be identified by comparison with the better preserved mounts described below. As each arm in this trefoil series displays a slightly different interlace scheme it is possible to identify the Jarlshof spiral as corresponding with either of those filling the two shorter arms, suggesting that it is the long arm which is missing. It is also possible to trace an incised border around most of the Jarlshof trefoil, together with the overlapping sequence of a central triquetra. It is difficult to compare the actual dimensions of this object with the parallel finds on account of its poor condition. However, the proportions of the surviving arms correspond with the two smaller arms of the Icelandic and English examples and like these it has small protrusions where the arms intersect. On the reverse of each surviving arm is a pair of cast perforated lugs with a corroded cross-pin between. The original centre of the trefoil is perforated. These two features make it questionable whether the Jarlshof trefoil functioned as a brooch.

Despite the poor condition of the Jarlshof trefoil, the surviving traces of ornament, together with its distinctive form, led to Eldjárn's association of it with the Icelandic examples. He considered it likely that the Jarlshof trefoil had been cast in the same or a very similar mould as the two examples from Iceland (1961, 34).

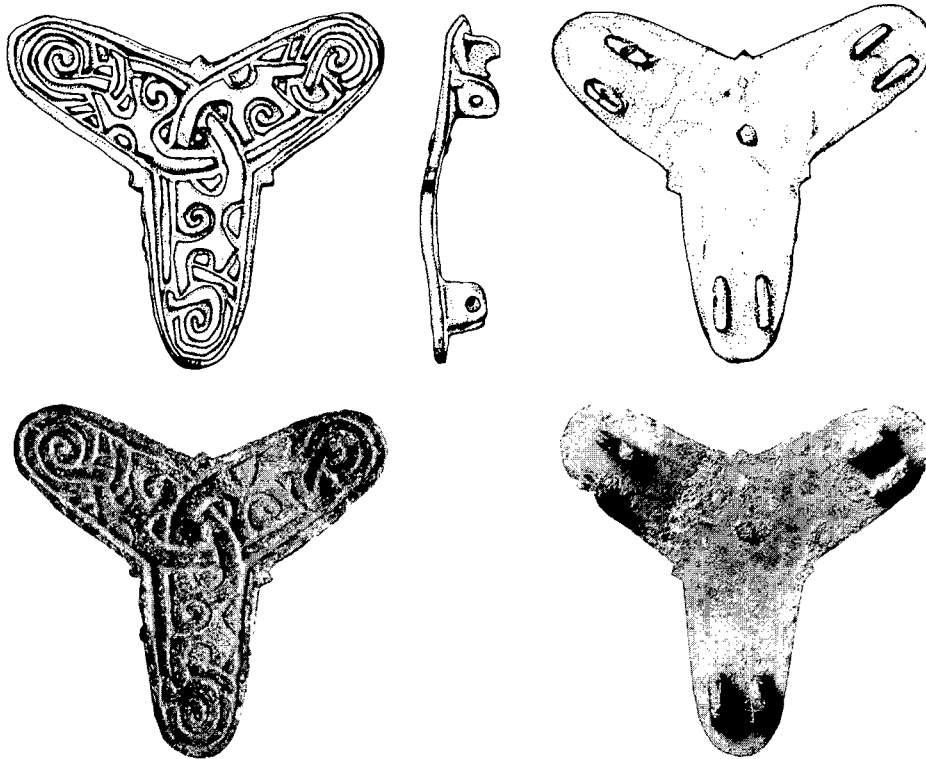
#### SKIPTON-ON-SWALE, NEAR THIRSK, NORTH YORKSHIRE (PRIVATE OWNERSHIP) (ILLUS 2)

In the spring of 1996 a copper-alloy trefoil mount was found with the aid of a metal detector, by Mr J Robson and Mr T Jones, approximately 100 mm beneath the surface of a ploughed field in Skipton-on-Swale, North Yorkshire (*The Searcher*, no 133, 1996, 26). More detailed contextual information is unavailable, but a late Anglo-Saxon pin with filigree decorated head was recovered from the vicinity (Robson, pers comm).

The trefoil has one arm longer than the other two, with a maximum span between the arms of 52 mm and the distance between each arm tip and the triangular projection opposite varying from 39 mm to 42 mm. Its ornamental surface survives intact and is highlighted by surviving traces of white metal over much of its surface, which XRF analysis has confirmed to be tinned (Eremin 1996). The ornament consists of raised strands of interlace within each of the trefoil's arms which interconnect through the device of a central triquetra. The trefoil is framed by a raised border, which encompasses small pointed protrusions where the arms meet. The interlace is of a slightly different construction in each arm. The tips of the two shorter arms are both filled with a prominent spiral which feeds into a mouth-like opening, above which is a smaller, lappet-like spiral. The truncated blocks of interlace are characterized by their angular construction, with semicircular indentations in their outlines to accommodate spirals and small infilling sections. The decoration of the long arm is characterized by the 'dog-leg' terminal of its lower spiral. In the centre of the trefoil is a corroded iron rivet head. The trefoil is slightly bent, with one of the arms possibly having been bent whilst in the plough layer. On the reverse of each arm terminal is a pair of perforated cast lugs, one of which has been broken to its perforation, probably in antiquity.

#### EWERBY, NEAR SLEAFORD, LINCOLNSHIRE (NORTH LINCOLNSHIRE MUSEUM) (ILLUS 3)

In the spring of 1996 Mr D Woodthorpe recovered a copper-alloy trefoil object remarkably similar to the above example from North Yorkshire, whilst metal-detecting in a ploughed field just outside the village of



ILLUS 2 Trefoil mount from Skipton-on-Swale. Scale 1:1 (Photographs copyright National Museums of Scotland)

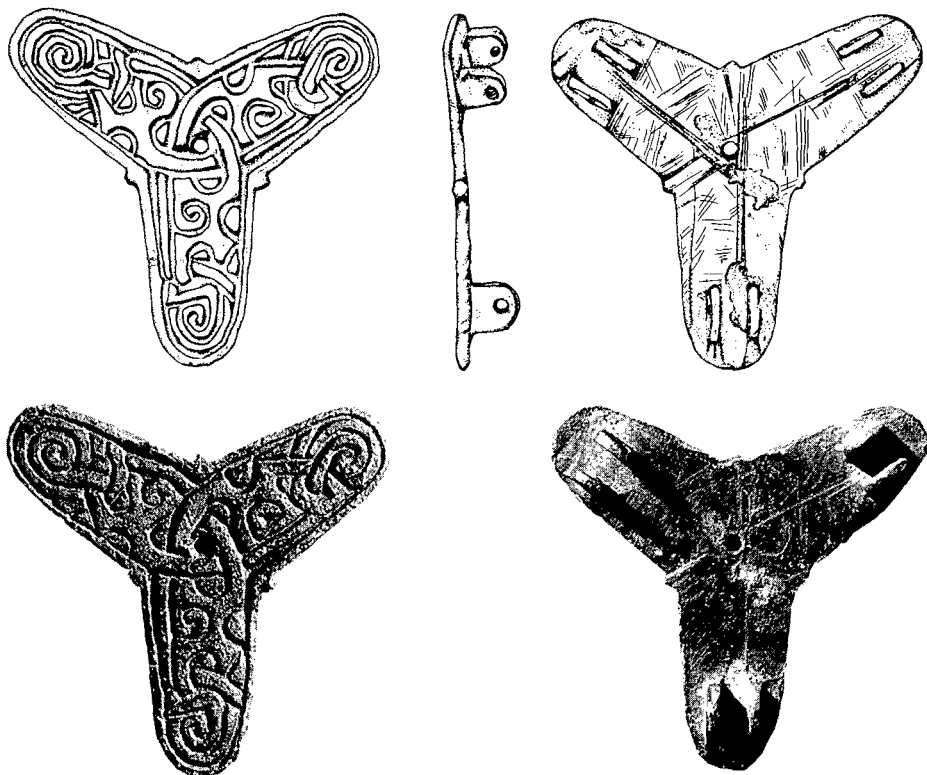
Ewerby, Lincolnshire (*The Searcher*, no 135, 1996, front cover, 8, 12–13). Although there were no associated finds, there is evidence for both Early and Late Saxon activity in the area (Woodthorpe, pers comm).

As with the Skipton-on-Swale trefoil, this Lincolnshire find also has one arm longer than the other two, with a maximum span between the arms of 51 mm, the distance between each arm tip and triangular protrusion opposite varying from 38 mm to 41 mm. The ornament on each of the arms is identical with that of the corresponding arm of the Skipton-on-Swale trefoil. Although no substantial traces of white metal survive on the front of this mount, a trace survives on the edge of one of the arms and XRF analysis suggests that, like the Skipton-on-Swale example, this mount was also tinned (Eremin 1996).

There is a perforation at the centre of the mount. On the reverse of each arm terminal is a pair of perforated cast lugs. Covering the surface of the back of this mount are curious scratches. The lighter ones could well be the result of the surface having been roughly filed after casting. However, the deeper grooves that run from the lugs to the central perforation would appear to reflect a distinctive pattern of wear.

#### STYLISTIC FEATURES

The ornamental scheme on the above three Insular finds is identical with that of the two from Iceland. It consists of raised strands of truncated interlace which fill each arm and interconnect in the centre in a triquetra-like knot. Although lacking any clearly distinguishable zoomorphic features, such as eyes or feet, the interlace with its prominent spiral terminals has a strong zoomorphic feel, which is confirmed when compared with Jellinge-style ornament from Scandinavia, such as the ribbon animals on the Søllested collar, Denmark (Bailey 1980, 56, fig 4).



ILLUS 3 Trefoil mount from Ewerby. Scale 1:1 (*Photographs copyright National Museums of Scotland*)

A remarkably close parallel to the ornament on this series of trefoil mounts is seen on the copper-alloy die from the hoard discovered at Mammen, Denmark in 1871 (Näsman 1991, 246, fig 33). On this die two Jellinge-style, S-shaped, ribbon animals are positioned to either side of a central bar. They have spiral joints set within angularly framed bodies, with a small semicircular 'bite' at the junction where their forelegs emerge from upper scrolled hips. Their heads are open-mouthed and in profile, and their S-shaped bodies are interlaced by additional lappets emerging from both the head and tail. Despite the apparent absence of heads, the interlace scheme in each of the above trefoils' arms has all the above characteristics. It is even conceivable that the inner spiral joints on each arm double as eyes in profile for both of the bodies in adjacent arms, positioned as they are above a splayed opening not unlike that of the open-jawed heads on the Mammen die. However, there is no clear anatomical logic to the interlace on the trefoil mounts, and it seems likely that this ambiguity, and the absence of definitive zoomorphic attributes, was the intention of the craftsman. Despite this absence, the close parallel with the Mammen die identifies this design with the Jellinge style, making a date in the first half of the 10th century likely (Näsman 1991, 247).

There is a possibility that the ornament on the trefoil mount series was copied and in the process lost some of its original meaning through a misunderstanding of the highly stylised zoomorphic motif. If copied from a die, such as the Mammen die, this could provide a technical explanation for the truncated appearance of the individual strands of interlace. Moreover, it could explain why the interlace lacks the double-contouring and internal body hatching so

characteristic of the Jellinge style, since filigree and granulation borders and fillers were applied to repoussé artefacts after being pressed, as with the Ödeshög brooch, which is the final product of a die similar to the Mammen example (Näsman 1991, 247, fig 34). However, this flat truncated interlace is also a characteristic of some 10th-century Insular stone carving, such as the broad-stranded interlace on a cross-shaft at Hovingham, East Yorkshire (Lang 1991, 144–5, illus 486–9), and the distinctive two-dimensional appearance on this trefoil series may simply be a stylistic attribute, rather than a technical one. Although, the design may have been copied and adapted to the trefoil form, it was clearly executed by a competent craftsman, since it maintains a balance and harmony which show an understanding of the rhythms of interlace, despite the absence of specifically zoomorphic features.

Both zoomorphic and non-zoomorphic ornament are applied to trefoil brooches, but the above design is only known from this trefoil mount series (Iben Skibsted Klæsøe, pers comm). However, the central linking triquetra is a motif commonly applied to the centre of trefoil brooches, a fine example being a self-contained triquetra on that from Grave 738 Birka, Sweden (Arbman 1940, Taf 75:1). Such devices are not restricted to small metalwork objects, and a similar means for linking interlace between arms appears on some of the Manx cross shafts (Kermode 1907, 41, fig 26). Eldjárn (1956, 308) in his study of the two Icelandic trefoil mounts belonging to the above series attributed them an origin in the Irish Sea province on account of their unusual, non-zoomorphic interlace. He cited Jellinge-style characteristics on Gaut Bjarnarson's Manx crosses, which have panels of the so-called tendril motif (Bailey 1980, 219, fig 61). This interlace bifurcates into curling tendrils, the junction of the offshoots being marked by a semicircular nick, as on the trefoil mounts. Semicircular nicks and spiral joints are also features of the lightly sketched creatures decorating the Skaill penannular brooches, which have also been closely paralleled with ornament on some of the Manx crosses, and are thought to have been made on the Isle of Man or by a craftsman trained there (Graham-Campbell 1995a, 41–3). Although the ornament on the Skaill brooches has been attributed to the supposedly later Mammen-style (*ibid*, 41), it is probably more expedient to regard it as a reflection of the Jellinge/Mammen transitional phase, since recent dendrochronological results from the sites from which these two styles take their names have shown the chronological gap between them to be little more than a decade, thereby raising the question whether this stylistic division is real or perceived (Jansson 1991, 284).

#### FUNCTION

The pair of perforated cast lugs on the reverse of each arm suggests these trefoils were not designed to function as brooches, since the back of a standard trefoil brooch has only one pin attachment lug, a catch-plate and a single perforated lug to which additional chains could be attached. It seems more likely that they were intended as strap-distributors, with straps being fastened to each of the three arms in the manner of Carolingian trefoil-shaped baldric mounts, which have pairs of perforated lugs on the reverse of each arm (Graham-Campbell 1980, 93, no 327). The triangular protrusions at the junctions of the arms of these trefoil mounts are a reminder of the rivets that helped secure Carolingian baldric mounts. They were reduced to skeuomorphs of rivets on Viking-Age brooches, from which this series of trefoil mounts appears to have been directly derived, despite the apparent return to functioning as distributors. Strap-distributors are rare in Anglo-Saxon contexts (Wilson 1964, 52) and, by this period, sword harness-mounts were no longer worn. However, it is possible that these 10th-century strap-distributors were designed as bridle fittings, their popularity in Hiberno-Norse contexts being

attested by the composite tripartite distributors known from pagan Norse grave assemblages at Ballateare and Cronk Moar on the Isle of Man (Bersu & Wilson 1966, pl XIV:A; pl XVI:A) and at Kiloran Bay, Colonsay, Scotland (Anderson 1907, 446, fig 9).

None of the trefoil mounts belonging to this series has survived in a context which provides an explanation for the arrangement of double lugs on all three arms, together with the riveted central perforation. This form is unlike that of trefoil brooches, as already noted for the Icelandic examples by Eldjárn (1956, 307). Although superficially they resemble brooches, they are flat, whereas most trefoil brooches are slightly raised in the centre. Moreover, their central perforations would be unusual for small brooches of this quality, although very fine trefoil brooches occasionally have an additional decorative stud in the centre, such as the Mosnæs brooch, Norway (Graham-Campbell 1980, 129, no 438). However, such studs are ornamental and never just a functional iron rivet, as on the mount from Skipton-on-Swale.

Ironically, the trefoil mount from Hafurbjarnarstaðir, Iceland, was recovered from a pagan burial in which it was clearly worn in typical Scandinavian fashion as a brooch, with textile surviving attached to the lugs on its back (Eldjárn 1956, 74, fig 21; Ólafsson, pers comm). However, it seems reasonable to suggest that this was a secondary usage, its owner having been attracted by some familiar elements in its appearance, simply adapting the lug arrangement on the reverse. This Icelandic example also has an additional perforation through one of its arms, which may suggest that the trefoil was worn as a pendant at some stage.

#### METALLIC COMPOSITION

##### Katherine Eremin

The three Insular finds were analysed by energy dispersive X-ray fluorescence (XRF) and by scanning electron microscopy (SEM). Details of the methods and a fuller discussion of the results can be found in Eremin (1996). As all three finds had corroded surfaces, analyses will not correspond to the composition of the original alloy. An estimate of the original composition was obtained by analysing carefully abraded areas and/or areas with existing scratches.

The analyses indicated that all three trefoils were composed of leaded brass, with surface enhancement of lead and iron and depletion of copper and zinc due to corrosion. The copper to zinc ratio also increased with corrosion, indicating preferential removal of zinc at the surface. Analyses of abraded or scratched areas indicated that all three strap-distributors had low to moderate levels of zinc and lead, and traces of silver and iron, but the original composition of all three mounts was similar. Tin was absent except on the front of the Skipton-on-Swale and Ewerby finds, where high levels were recorded on areas of white metal. This indicated that these two trefoils probably had tinned decorative fronts.

It was hoped that the metallic composition of the trefoils might assist with provenancing their probable place of manufacture. Ten years ago Tylecote (1986, 39) noted 'there is an almost complete absence of analytical information regarding pre-Conquest medieval material'. It is interesting, nevertheless, to compare the trefoil analyses with the existing data, particularly as this suggests a gap in the use of brass and the predominance of mixed alloys from the end of the Roman period until the Late Saxon and Viking periods in Britain and the Continent (Bayley 1990, 22).

Comparative data on Insular and Scandinavian finds from the Viking Age is gradually increasing and includes work on the non-ferrous metalwork at Coppergate, York (Bayley 1992, 809–10), Viking Age ringed pins from Dublin (Mullarkey 1994, 122) and ongoing work on the oval brooch collection within the National Museums of Scotland (Eremin, in preparation). These studies indicate the importance of brass in the 10th century in Scandinavia and at Viking Age sites within Britain and Ireland. This contrasts with the relative rarity of brass and the predominance of bronzes and gunmetals, both leaded and unleaded in earlier Irish and Anglo-Saxon contexts (Mortimer *et al* 1986, 36–41; Wilthew 1996, 66–73; Oddy 1983, 945–61;

Craddock 1989, 170). The increased use of brass in the Late Saxon and Viking period may be as a result of contact with Scandinavia, although analyses of more Viking Age copper-alloys, both within Scandinavia and outside, is essential in order to establish the pattern of metal use in this period.

## DISCUSSION

Eldjárn proposed that the Icelandic mounts both shared a common master (1956, 307), later extending this to include the Jarlshof example (1961, 34). A comparison between the ornament, form and dimensions of the trefoil strap-distributors from Jarlshof, Skipton-on-Swale and Ewerby, together with the two examples from Iceland, suggests strongly that all five mounts emanate from the same master. During the Viking Age many objects were mass-produced, but it is interesting to note that there are no known examples of this type of trefoil mount from the Scandinavian homelands (Iben Skibsted Klæsøe, pers comm). This is notable when the series clearly reflects Scandinavian influence in its ornament, form, metallic composition and distribution, yet Eldjárn (1956, 308) was probably correct when he ascribed an Insular origin to the only two examples known to him in 1956, namely those from Hafurbjarnarstaðir and Höll in Iceland.

As strap-distributors, the function of this small series of trefoil-shaped artefacts is different from that of the Scandinavian trefoil brooches, from which they undoubtedly took their form. The popularity of trefoil-shaped brooches and fittings in the 10th-century was primarily a Scandinavian phenomenon; however, the trefoil strap-distributors would seem on account of their ornament and distribution to owe their form to trefoil brooches present in scandinavianized areas of the British Isles. Trefoil brooches within the British Isles are uncommon finds, but in recent years metal-detecting has increased the corpus known from the Danelaw. There are fine examples, such as that from Stallingborough, Lincolnshire (Kevin Leahy, pers comm), which belong to the standard Scandinavian series of mass-produced types and were probably manufactured in the Scandinavian homelands (Petersen 1928, 93–114). There is also a growing corpus of smaller, more modest brooches, decorated with stylized acanthus ornament (Margeson 1982), which also have parallels within Scandinavia. Finally, there are occasional oddities, such as the trefoil mould fragments from Blake Street, York (Graham-Campbell 1980, 283, no 437). These mould fragments clearly indicate the manufacture of this trefoil form in York, but the negative impression of the design comprises a pair of facing birds, positioned above an *en-face* animal head, typical of the Anglo-Saxon Winchester style. These mould fragments therefore reflect the application of a native art style to a Scandinavian trefoil-shaped artefact, whether a brooch or a strap-mount (Richardson 1993, 62–4). It is this same cultural interaction and adaptation that is reflected in the form and ornament of the Jarlshof mount series.

The above adaptations to form and ornament have implications with regard to where this trefoil strap-distributor series is likely to have been made. Clearly, it is likely to have been within an area of the British Isles with an influential Scandinavian presence. The two recent finds from the Danelaw might suggest a place of manufacture in the east of England, particularly given the presence of other trefoils in this area, including evidence for their production. However, cross-Pennine communications between the kingdoms of York and Dublin are well attested in historical, archaeological and place-name studies (Graham-Campbell 1995b, 74–5), and a fragment of a probable trefoil brooch has also been recovered from Fishamble Street, Dublin (Nat Mus Ireland E141:293). The suggestion of Eldjárn (1956, 309), based on stylistic grounds, that the Irish Sea area could be the source for this series of trefoil mounts is also a possibility, particularly as the Hafurbjarnarstaðir trefoil mount was found together with a ringed pin of Irish origin. Without direct evidence for the production of these mounts, such as mould fragments,

their origin will remain uncertain. However, their find locations to some extent parallel those of a series of miniature bells (Batey 1988), and provide an intriguing reflection of Viking-Age contacts between the Danelaw, the Northern Isles and Iceland.

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