carving (e.g. Graham-Campbell 1980, nos 174, 488). Other materials were also moving in the Norse trading system: analysis by the author of a finger ring from Andersminde, Jutland, Denmark (Stummann Hansen 1982, 33-4) indicated it was lignite, while Plahter's (2011) analysis of the Kaupang (Norway) finds showed only two of the 23 finds analysed were jet, the remainder being shale, lignite and cannel coal; this included lumps of raw material imported for working on-site. Analysis of Scottish Norse finds indicated that jet was rarely used there, with only one single jet find (a bead from Eigg) among the 28 artefacts analysed (Hunter 2008). Most are of more local raw materials such as cannel coal or lignite. Irish sites, especially Dublin, have also produced large quantities of jet-like material. These have not yet been analysed; visual inspection by the author indicates that a range of materials are present, including some jet, but with most apparently lignite or cannel coal. Jet was absent among the six finds from the Viking site of Woodstown, Co. Waterford, where lignite, cannel coal and oil shale were used (Hunter & Sheridan forthcoming).

The Toftanes fragment is thus a useful indicator of contacts to Yorkshire, but a wider programme of analysis is required to distinguish the extent of this east-British trade in jet as opposed to the north- and west-British and Irish trade in cannel coal and lignite.

5.4. METALWORK

The composition of the deposits at Viking Age Toftanes has only to a very limited degree provided conditions for the preservation of metalwork. Thus only a few very poorly preserved fragments of iron are preserved. The conditions seem to have been better for the preservation of items of copper alloys and bronze which is reflected in a small assemblage of well-preserved objects.

5.4.1. CIRCULAR BROOCH

One of these objects is a small circular brooch with a diameter of 26 mm. On the surface, the brooch has been furnished with an ornament of three animal heads in Borre Style [Fig. 79]. The brooch is a typical example of Jansson's type II D (Jansson 1984, 58-74), a form of Scandinavian brooches "distinguished not only by their convex profile, but also by a peculiar lug arrangement on their back, comprising a double pin attachment positioned at right angles to the rim, as is the catchplate oppo-



Fig. 79. Circular bronze brooch from Toftanes. Scale 1:1. Drawing: Aage Andersen; Photo: Føroya Fornminnissavn.



Fig. 80. Circular brooch from Novgorod, facial and reverse. Scale 1:1. Photo: Courtesy State Hermitage Museum, St. Petersburg.

site. In addition there is usually a third attachment loop, the function of which is debatable, though examples have been recovered with chains or strings of beads attached" (Paterson 2002, 268). The brooch displays three en-face animal heads, with the zoomorphic element being subordinate to the geometric ornament. The geometric ornament "comprises a central element of concentric circles which splays into an irregular triangular figure. Interposed between the triangle's terminals are small, stylized zoomorphic heads which face outwards touching the border with their snouts. The whole design is decorated with cast beaded borders in imitation of granulation" (Richardson 1993, 22). Copyright of Acta Archaeologica is the property of Wiley-Blackwell and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.