

Chapter 7

The non-numismatic objects of the Watlington hoard

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At first glance, the non-numismatic contents of the Watlington Hoard are not as eye-catching as the large assemblage of rare, late 9th-century Anglo-Saxon and Carolingian coins. The material is comprised predominantly of silver ingots of standard Viking-Age type, together with simple, largely unadorned, arm-rings. Yet these apparently unassuming artefacts were deposited in southern Oxfordshire at a key, transitional phase of Viking activity in England: following a period of raiding in the south-west in the 870s, but before settlement in the Danelaw region of the north and east from the early 880s. Indeed, the items may have been deposited *en-route*, as the Viking army made its way from Cirencester (Gloucestershire) to East Anglia, along old Roman roads and ancient routeways running straight through the Watlington area (Williams and Naylor 2016: 29–30; see Naylor, Chapter 9). Close study of the Watlington Hoard artefacts — their origins, life-span and use-history — can, then, provide unique insight into the background and cultural affiliations of Scandinavians active in southern England at this critical time. Characteristics, such as their weight and degree of fragmentation, also provide insights into the development of the Scandinavian bullion economy, in which weighed silver operated alongside coinage as a means of exchange.

The non-numismatic contents of the Watlington Hoard include 15 complete silver ingots, together with two complete and two fragmentary silver arm-rings, two fragments from two different silver neck-rings, one fragment from a hooked tag and a small piece of cut gold rod (Figure 7.1). In what follows, I review the origins of each object type in turn, before discussing the collective evidence for the function and significance of the assemblage as a whole. I argue that, with the exception of the hooked tag, which is a 9th-century Anglo-Saxon product, the items have a Scandinavian background, with strong connections to southern Scandinavia (Viking-Age Denmark, including northern Germany, southern Norway and southern Sweden) in particular. I argue further that the objects functioned primarily as high-value currency, and were not new when deposited. Instead, they had seen active circulation, within Scandinavia, England or elsewhere, potentially over decades. While it is unlikely we can ever know precisely who buried the hoard, or why, the character of the deposited artefacts is consistent with the view that the hoard was deposited by members or associates of the Viking Great Army, as it moved from Cirencester through the south Oxfordshire area to East Anglia in 879.



Figure 7.1. The non-numismatic objects of the Watlington Hoard.

INGOTS

Cast bar ingots can be defined as ‘worked metal stored for whatever eventual purpose in a form without function as an ornament’ and were made by casting molten silver into open soapstone or clay moulds (Kruse 1988: 288; Kruse and Graham-Campbell 2011: 73). In the Scandinavian bullion economy, ingots were a convenient means of storing and transporting silver wealth, and could easily be worked up into ornaments such as arm- and neck-rings. Ingots are a common feature of Viking-Age silver hoards, from both the Baltic and Scandinavia, and from Britain and Ireland (Hårdh 2007: 104). They form the major component of the Watlington Hoard: 15 are included, all with characteristic cigar-shaped form, rounded ends and consistent oval, triangular or D-shaped cross-sections (*cat.* 1.1–1.15). Many of the ingot surfaces are ‘pitted’, an effect of the silver being cast in sandstone moulds (Kruse *et al.* 1988: 90).

Ingots can appear in complete or deliberately cut forms, but the notable feature of the Watlington Hoard ingots is that they are all complete. This allows insights into the question of weight units (discussed below) and also sheds light on the function of the hoard. It could, in principle, be a sign that the ingots had not been in circulation for long and were recently cast, serving principally as a store of newly acquired silver. However, the ingots have been heavily ‘nicked’, that is, they have been cut with a knife or chisel to check that their core metal was not plated debased metal (copper or lead-alloy) and/ or that it had not been subject to deliberate surface enrichment techniques that cause debased silver to appear fine on the surface (Söderberg 2011: 22; Merkel 2016: 28). Six ingots are nicked (Figure 7.2; Plates 1.1–1.2), with the number of nicks ranging from one to nine (**cat. 1.1, 1.2, 1.5, 1.9, 1.11 and 1.13**). Nicking is most often interpreted as an indication that the item has changed hands in a commercial environment, with the number of nicks broadly reflecting the frequency of transactions (although this is debated, for a discussion see Kershaw 2019: 242). It is clear, then, that the ingots saw active circulation as (high value) bullion and, as a group, were not ‘new’ when the hoard was concealed. It is difficult to know where ingots were produced. They are found across the Scandinavian Viking-Age territories, are relatively easy to cast (e.g. by casting into wet sand), and, of course, to transport. Nonetheless, it has been noted that silver ingots from Schleswig-Holstein (now modern Germany but was part of southern Scandinavia in the Viking Age), most commonly have a D-shaped or triangular section (Wiechmann 1996: 65–67, karte 76). Conversely, at Kaupang (Norway) ingots with rectangular sections were most common, a pattern that hints



Figure 7.2. Silver ingot (cat. 1.2) exhibiting nick marks along two edges.

at regional variation in ingot form (Hårdh 2007: 108). If this regional framework is valid, the ingots in the Watlington Hoard could be assigned to a southern Scandinavian group, but such association must be considered tentative at present. Notably, most other ingots from hoards in Britain and Ireland possess a similar D-shaped form, including the three intact ingots from the ‘purely Danish’ silver hoard of Scandinavian character from Croydon (Surrey) deposited a few years before the Watlington Hoard in c. 872 (Brooks and Graham-Campbell 2000: 73, 76).

RINGS

Ring-money

A complete, undecorated arm-ring is made of a lozenge-sectioned rod. It is penannular in form, the rod tapering to blunt, lightly worked terminals; it carries a single ‘nick’ opposite the aperture (opening) (Figure 7.3; **cat. 1.16**). At first glance, this piece represents something of a conundrum. It appears to be a classic form of ‘ring-money’: a term given to a specific form of penannular silver rod arm-ring believed to have circulated as a form of currency in Scotland and the Irish Sea region from c. 950 to c. 1050 (Graham-Campbell 1995: 30, 38–40, 57–59; Graham-Campbell and Sheehan 2007: 536–38; Critch 2015). Indeed, so similar is this piece to ‘ring-money’ in terms of its defined lozenge-shaped cross-section, the thickness of its rod and the width of its aperture that, if dropped into the classic ‘ring-money’ hoard from Skail (Orkney) (*tpq* 950–70) it would disappear (Graham-Campbell 1995: 38–40). It is thus not surprising that it is linked in the earlier Watlington Hoard publication to rings from northern England, Scotland and the Isle of Man (Williams and Naylor 2016: 10). Yet Hiberno-Scottish ‘ring-money’ is a development of the mid-10th century. Thus, neither the early date of the Watlington Hoard, nor its location in southern England, fit easily with current understanding of this artefact type.

In fact, as Ralph Wiechmann (1996: 45) was first to point out, Hiberno-Scottish ‘ring-money’ was preceded by an earlier, yet long-lived, group of plain, lozenge-sectioned rod penannular rings, with a distribution centred on the Baltic island of Gotland (Sweden) (Wiechmann’s Type II 14; Wiechmann 1996: Karte 53). Here, the ring form appears in several 9th-century hoards, for instance, from Asarve, Hemse (no *tpq*) and Spillings, Othem (*tpq* 870s). However, the earliest occurrences are further east, and may indicate an origin for the ring type in Russia (Wiechmann 1996: 544, Liste 4, Nr. 1, 18; Table 7.1). The suggestion is strengthened by the fact that, in hoards from Scandinavia, this ring form is commonly associated with Permian arm-rings and Islamic dirhams, both of which likely reached the Baltic by way of Russia (Table 7.1). Weighing 59.86g, the Watlington ring fits comfortably into the weight range exhibited by this eastern 9th-century group, and is notably close in weight to two complete rings from Norrbys, Väte, Gotland (weighing 59.04g and 57.97g; Stenberger 1947–58: vol. II, 243, Fund Nr. 601, Abb. 23). However, the weight range of complete rings of this type appears to be broad (Table 7.1) and it is perhaps best to wait until the individual weights of the 45+ rings of this type from the enormous hoard from Spillings, Gotland, are made available, before commenting further on the possible existence of weight units among this ring group (Thunmark-Nylén 2006: 703).



Figure 7.3. Silver arm-ring (cat. 1.16) showing small nick on one edge (magnified).

A Gotlandic/eastern origin for this ring group is thus likely, but it is possible that the Watlington ring reached England via southern Scandinavia. A hoard from Rantrum, Schleswig-Holstein, deposited after 873 and composed largely of silver objects from Gotland, contains a ring fragment of this type (Wiechmann 1996: Kat. Nr. 33 A 6). A complete ring is also known from a coinless hoard from Torvik, Møre and Romsdal (Norway) a hoard which, John Sheehan has suggested, may have been an import from southern Scandinavia, given its inclusion of a broad-band arm-ring of southern Scandinavian type (Bøe 1927: No. 58, m; Sheehan 2011: 97). Given the distance that the Watlington ring has almost certainly travelled, it is notable that it reached England as a complete ring, with only a single nick.

Table 7.1. Hoards with plain, lozenge-sectioned rod penannular rings, dated to the 9th century.

Hoard	Tp_q	No. of rings	Weight of complete rings (g)	Permian ring	Dirhams
Ugodice, Rostovsky, Yaroslavl (Russia)	812/13	1 (complete)	unknown	–	X
Prerow, Mecklenburg Vorpommern (Germany)	814	1 (complete) + 1 (fragment)	43.6	–	X
Kettilstorp, Önum, Västergötland (Sweden)	850	1 (fragment)	–	X	X
Spillings, Othem, Gotland (Sweden)	870/71	20 (complete) + 25 (fragments)	unknown	X	X
Rantrum, Schleswig- Holstein (Germany)	873	1 (fragment)	–	X	X
Watlington, Oxfordshire	879/80	1 (complete)	59.86	–	–
Asarve, Hemse, Gotland (Sweden)	875/6?	14 (complete)	96.57, 74.78, 50, 58.92, 50.04, 46.89, 48.98, 28.14, 41.87, 37.52, 109.75, 73.47, 29.84, 44.43	X	X
Alvara, Böda, Öland (Sweden)	–	c. 8–10? (complete)	unknown	X	–
Norrbys, Väte, Gotland (Sweden)	–	2 (complete)	57.97, 59.04	–	–

The Watlington Hoard is the earliest occurrence of this ring-type in England, although a single fragmentary find from North Yorkshire may belong to the same group (DCMS 2006: 64; Kershaw 2020: plate 8). More broadly, this group of rings can be considered alongside a much larger corpus of lozenge- and polygonal-sectioned single-rod rings of various forms and decoration, known from early 10th-century hoards from both England and Ireland, for instance, from Cuerdale (Lancashire) (Graham-Campbell 2011: 102–04) and from Tynan and ‘near Raphoe’ (Ireland) (both coinless). Its precise relationship to later Hiberno-Scottish ‘ring-money’ remains a topic for future work.

Broad-band arm-ring fragment

This is a rectangular silver sheet fragment from a parallel-sided broad-band arm-ring, roughly broken at both ends (Figure 7.4; **cat. 1.17**). It is decorated with a median line of stamped dots, flanked by two rows of interlocking dagger-shaped stamps with forked handles. Short, tongue-shaped notches decorate each long side. Broad-band arm-rings are fairly common Scandinavian finds: they can be annular or penannular in form, made of cast or sheet silver, and occur both unornamented and with stamped-decoration (Hårdh 1976: 60–62). The Watlington piece belongs to a particular sub-group with ornament that ‘completely covers the outer face of the band with two horizontal rows of cast or stamped decoration, with a zig-zag appearance, on either side of a median line (plain or decorated)’ (Graham-Campbell 2011: 91–92).

The best parallel for the piece is a complete ring from a hoard from Hørdum, Jutland (Denmark) covered with similar dagger-shaped stamps, in this case with pellets. This ring was found together with two other broad-band arm-ring types and, while it lacks coins, the Hørdum assemblage is dated on typological grounds to the later 9th-century (Skovmand 1942: 29–30, figure 2). Parallels for the ornamental layout, though not the ring form, can also be found on copper-alloy band arm-rings, for instance, from Prestegården, Vestfold (Norway) (Petersen 1928: 154, figure 188). A similar ornamental design, of staggered hourglass-shaped stamps positioned on either side of a median band, also appears on rings of 10th-century Gotlandic origin: Stenberger's 'Typ Ab 4' — examples of which can be found in the Granhagsmyr, Lärbro, and Kvie, Bro, hoards, among others (Stenberger 1947–58: vol. I, 114–15, fig. 15). Given its early date, and particular links with the Hørdum ring, a southern Scandinavian origin seems likely for the Watlington piece.



Figure 7.4. Silver broad-band arm-ring fragment (cat 1.17).

Scandinavian broad-band rings provided the inspiration for Insular 'ribbon-bracelets': a simplified version of the Scandinavian rings, made from thin sheet metal, sometimes with convex sections. The close relationship between the two artefact groups is demonstrated by a 'ribbon-bracelet' from the Bossall/Flaxton (North Yorkshire) hoard (*tpq* c. 927), with forked-dagger stamps that match the stamping found on the Watlington piece (Graham-Campbell 2011: fig. 1.7). 'Ribbon-bracelets' were produced in Hiberno-Scandinavian contexts from the late 9th century to c. 950; thus, an artefact type from southern Scandinavia seems to have been the inspiration for a silver ring series most likely centred on Dublin (Sheehan 1998: 180). Notably, the only other 9th-century Scandinavian silver hoard from England, from Croydon, also contains a Danish prototype for a later Hiberno-Scandinavian arm-ring series (the Hiberno-Scandinavian broad-band arm-ring) (Brooks and Graham-Campbell 2000: 76–77; Sheehan 1998: 177–80). Not only does this reinforce the relationship between 9th-century silver from Viking-Age Denmark and Hiberno-Scandinavian silver products, it also suggests that one of the routes by which silver from southern Scandinavia reached Ireland in the 9th century was via southern England, in all likelihood in the hands of Viking Great Army members themselves.

Two single-rod arm-rings

Two complete single-rod arm-rings are included in the hoard. They are distinguished from each other by the section of their rods, as well as by the decoration on their outer faces. The first ring has a circular section and tapering ends which are twisted once round each other; it has a plain outer surface (Figure 7.5; **cat. 1.18**). Single rod arm-rings are fairly common in Scandinavia, where they appear in both gold (for instance, in the 9th-century Hoen hoard, Norway) and, more commonly, in silver (Graham-Campbell 2006: 79–80). Typically, the tapering terminals are wound round the opposite side, as would have originally been the case here, although spiral knots are also encountered (Sheehan 1992: 213).

Silver rings of this type occur in southern Sweden, on Gotland (as Stenberger's type 'Ar 1') and in Denmark (Stenberger 1947–58: vol. I, 96–99, fig. 8; Hårdh 1976: 55–58, 'Typ I.A'). However, John Sheehan has argued that single rod arm-rings of circular section originated in Norway in the 9th century, becoming popular throughout the rest of Scandinavia only from c. 950 (Sheehan 1998: 190–92). Indeed, the earliest coin-dated deposits containing rings of this type all occur in southern Norway (Sheehan 1991/92: 47, table 4). Notably, a single-rod arm-ring of circular section also forms part of the coinless hoard from Torvik, Møre and Romsdal, although it is absent from the only published illustration of the hoard (Bøe 1927: no. 58, with illustration). Sheehan (2011: 97) has suggested that this hoard may have been imported from Denmark. This raises the possibility that single-rod arm-rings had a broader, southern Scandinavian distribution, although it is possible that the Torvik ring was added to an existing assemblage in Norway.



Figure 7.5. Silver single-rod arm-ring with circular section and tapered, twisted terminals (cat. 1.18).

The inclusion of six complete and 16+ fragmentary examples of this ring type in the Cuerdale Hoard (*tpq* 905–10), in addition to several specimens in the Silverdale (Lancashire) Hoard (*tpq* 900–15), demonstrates that this arm-ring type was among the pool of silver circulating in the Irish Sea region in the late 9th and early 10th century. The example from the Watlington Hoard is the earliest coin-dated example of this ring type in silver in a western Viking context.

The second rod arm-ring in the Watlington Hoard has a lozenge, rather than circular, section, tapering rods which twist around each other and an outer face decorated with punched, linked apex-to-apex triangles each containing three pellets (Figure 7.6; **cat. 1.19**). Rings of this type can likewise be joined either by ends wound around each other or by a spiral knot. They are often plain, but can carry stamped decoration on their outer faces. Examples are known in both silver and gold (cf. the gold example in a hoard from Vulu, Sør-Trøndelag (Norway); Fuglesang and Wilson 2006: 79, plate 35B). John Sheehan has remarked that arm-rings of this type ‘appear to have developed in the region of southern Scandinavia and the Baltic, for examples occur in the enormous Spillings hoard, on Gotland. ... though they also occur in Norway, as in the early 10th-century hoard from Grimestad’ (Sheehan pers. comm. 2018). A further example, to which an 8th-century dirham was hooked, comes from Bronderup, Skåne (Sweden). The association of this object type with a dirham reinforces the eastern/ Baltic association of the type, which nonetheless appears to have had an early presence in southern Scandinavia (Hårdh 1976: No. 38, Taf. 23:II).

Rod arm-rings with lozenge sections are relatively rare in Britain and Ireland, but a number of recent discoveries indicate that they circulated among members of the Viking Great Army. A fragment of one such ring comes from Torksey (Lincolnshire), the site of their overwintering in 872/3 (Graham-Campbell 2011: 109, note 22), while two similar fragments have been recorded at a comparable site dating to the mid-to-late 870s at Aldwark (North Yorkshire) (Williams 2020). The complete ring in the Watlington Hoard can thus be understood in this context. Like the rod arm-rings with circular sections discussed above, these also circulated within the Irish Sea region in the late 9th to early 10th century. Examples are recorded in the hoards from Galloway (Kirkcudbrightshire), Cuerdale, Silverdale and Warton near Carnforth (all Lancashire). In Ireland, complete specimens appear in three, coinless hoards (‘Ireland no. 1’, Tynan and ‘near Raphoe’), where the ‘main associated material....comprises penannular single-rod arm-rings of lozenge section and broad-band arm-rings’ (John Sheehan pers. comm. 2018). The stamped decoration carried on the Watlington piece, consisting of apex-to-apex triangles, is part of the common stock of Viking-Age stamped motifs. Such decoration occurs, for instance, on a fragment of a rod arm-ring, of circular section, from the Cuerdale Hoard (Graham-Campbell 2011: 146–47, row 9, cat. no. 1:184).

Figure 7.6. Silver single-rod arm-ring with lozenge-shaped section and tapered, twisted terminals (cat. 1.19).



Two neck-ring fragments

The Watlington Hoard includes two fragments belonging to two distinct neck-rings, both of which belongs to Hårdh's Type 6, featuring a narrow end-rod (**cat. 1.20 and 1.21**). This is a common form of construction throughout Scandinavia, but in Norway is largely 'confined to the southern parts of the country' and in Sweden 'has a strong presence in the south-east' (Hårdh 1996: 50). On mainland Denmark, it is the most common type, with a particular focus on Jutland (Hårdh 1996: 45, fig. 4, 50). Neck-rings of Type 6 'are closed either with two hooks or with a hook and a loop', and have a western and eastern focus respectively: this feature is, however, missing on the first of the Watlington pieces (Figure 7.7; **cat. 1.20**; Hårdh 1996: 50). This ring has a ring body formed of twisted rods in pairs (Hårdh's type III). This is the dominant ring body type in Denmark, southern Norway and southern Sweden (Hårdh 1996: 55–56, tab. 7, fig. 14). A southern Scandinavian origin for this neck-ring fragment thus seems likely.



Figure 7.7. Fragment of a silver neck-ring of Hårdh's Type 6 (cat. 1.20).

The second neck-ring fragment is likewise made of three pairs of twisted rods, twisted together, which have been hammered together into a long, tapering lozenge-sectioned terminal with an open hook and scrolled end (Figure 7.8; cat. 1.21). It has three nicks: two on the angle on the terminal rod and one on the hook. Both the end-rod and the construction of the body are mirrored in the neck-ring fragment above. This ring, does, however, preserve a hook, which assigns it to Hårdh's clasp group 'a' (rings closed with two hooks) (Hårdh 1996: 50–51, fig. 10). This clasp group has a western Scandinavian focus. Neck-rings of this type 'have a strong representation in western Scandinavia, in Norway, along the Swedish west coast and in Denmark', as well as in southern Sweden (Hårdh 1996: 50–52, tab. 3). The combination of features again points to a southern/ south-western Scandinavian origin for the Watlington Hoard piece.



Figure 7.8. Fragment of a silver neck-ring of Hårdh's Type 6 (cat. 1.21).

Within southern and western Scandinavia, the earliest coin-dated hoards to contain neck-rings of Type 6 date to the early 10th century, making the Watlington Hoard items notably early examples (Hårdh 1996: 68–71, tab. 9). Yet there is an acknowledged difficulty in dating neck-rings, which often occur alone or in coinless hoards, or in coin-dated hoards in fragmentary form, suggesting a period of circulation before deposition (Hårdh 1996: 65). Certainly, the inclusion of a fragmentary twisted-rod neck-ring in the Rantrum Hoard, Schleswig, deposited after 873 and most likely by 900, attests their circulation in the second half of the 9th century, as does the inclusion of a neck-ring formed of three pairs of twisted rods in the Westerklijf I Hoard (the Netherlands) (*tpq* c. 850) (Wiechmann 1996: 128–129, Kat -Nr 33, 3; Besteman 1999). That such rings must have also circulated in Britain and Ireland at this date is indicated by the Watlington Hoard finds, and the inclusion of two fragmentary Type 6 neck-rings (one plaited-rod and one twisted-rod) in the Bedale Hoard (North Yorkshire), most likely deposited around 900 (PAS YORYM-CEE620), and of multiple Type 6 neck-rings, in both complete and fragmentary forms, in the Cuerdale hoard (*tpq* 905–10) (Graham-Campbell 2011: 90).

HOOKED TAG

In the initial publication of the hoard, reference was made to an apparent halfpenny, potentially in the name of Alfred, although its poor state of preservation meant that it could not be identified with certainty (Williams and Naylor 2016: 9, figure 15). Following cleaning and conservation, several details emerged encouraging a reassessment of the piece, and the ‘halfpenny’ was subsequently identified as a fragment of an Anglo-Saxon hooked tag with decoration in the Trewhiddle style (**cat. 1.22**; Figure 7.9; see Baldwin, section 2.4).

The small fragment represents around a third of a flat, disc plate, roughly broken at each end. Disc-shaped hooked tags are distinguished by the presence of protruding, attachment (*stich*) lugs or perforations at their uppermost end, as well as by a downward-facing hook: the Watlington piece lacks both features, but this is likely to be due to the position of the breaks, which means only a segment of the disc survives. The back is plain, while the front is decorated with a hatched border, giving the effect of beading. The same pattern fills two surviving arms and a central junction: these divide the surface into two sub-triangular fields, each containing incised linear ornament. This ornament is roughly executed, and in a poor state of preservation, making it difficult to discern. Comparing the ornament to similar, better preserved items, it is possible that one field carries a crude Trewhiddle-style animal, lying with legs bent under the body, with its head turned to look backwards. Such an arrangement occurs, in a more refined manner, on a hooked tag from Thaxted (Essex) (Eleanor Standley pers. comm. 2020; Figure 7.10). The field with two accidental perforations has curved lines in what appears to be a foliate pattern, or it may be a similar animal-form. All the ornament is executed in deep relief. It is likely that the grooves originally contained niello (black silver sulphide), although none now survives.

The Watlington hooked tag therefore belongs to a group of silver hooked tags ornamented in the 9th- to early 10th-century Anglo-Saxon Trewhiddle style, so-called after a late 9th-century hoard (*tpq* c. 868) with ornament of this type, discovered in Trewhiddle (Cornwall) in 1774. The use of beaded borders to divide the surface into multiple, small fields is a key feature of this art style, as is the use of niello inlay against a silver background. Playful, semi-naturalistic animals are typical features of the style, as are leaf and scroll motifs, the speckling of borders and individual motifs (Wilson 1964: 21–35; 1984: 95–105; Webster 2012: 150). Indeed, the foliate identified in the ornamental field on the Watlington fragment has parallels with that on a silver box-like object in the hoard from Trewhiddle itself (Wilson 1964: 183, fig. 39). Notwithstanding the poor condition of the Watlington Hoard hooked tag, the ornament is fairly degenerate: this is not uncommon on 9th-century Trewhiddle-ornamental metalwork, but is less frequently found on silver objects than on objects of copper-alloy (Wilson 1964: 28).

Parallels for the Watlington piece are widespread in southern England, and show that the panels could be divided in various ways, for instance, into roughly equal quarters by means of a cross; into two larger and two smaller subtriangular fields by means of a saltire, or into three fields by means of a Y-shaped line (see, for instance, Graham-Campbell 1982; Farley 1991). The surviving detail on the Watlington piece, which includes the stub of a third ‘arm’, suggests it originally displayed a cross. A particularly close parallel, in all but size, comes from the Cote area of Oxfordshire (PAS BUC-0A7E39); while recent finds from Bressingham (Norfolk), and Kingston



Figure 7.9. Fragment of a silver hooked tag (cat. 1.22).



Figure 7.10. Silver hooked-tag from Thaxted (Essex; PAS LON-585A83). Scale 2:1.

Deverill (Wiltshire), are analogous examples in copper-alloy (PAS NMS-B62A2C and WILT-3BBB2C). The Watlington Hoard item is notably smaller than these examples — but its small size is not without parallel, as demonstrated by other recent discoveries of Trehiddle-style hooked tags from Oxfordshire, including one unfinished item which may have been produced locally (PAS WILT-7A7D62; PAS WMID-8F3272). As these items demonstrate, Trehiddle-style hooked tags were in circulation in Wessex, including the Oxfordshire area, during the Great Army campaigns of the 870s. Whether it entered the hoard along with the parcel of coinage, or independently, either before or after the coins were added, is an open question. Whatever the case, as an object of Anglo-Saxon manufacture, it was most likely added to the hoard in England (see also Naylor, Chapter 9).

The function of the tag is unclear. Hooked tags are relatively common fasteners throughout the Middle and Late Anglo-Saxon periods, and may have been used for a variety of purposes (Graham-Campbell 1982: 145–48). Pairs of Anglo-Saxon hooked tags appear in two 10th-century hoards: from Tetney (Lincolnshire) and the Forum at Rome (Italy) (Wilson 1964: nos 86 and 87; Graham-Campbell *et al.* 1991). In both of these cases, the hooked tags form the only non-numismatic contents of the hoard, leading to the suggestion that they were used to close the bag or purse containing the hoard (Graham-Campbell *et al.* 1991: 223; Naismith and Tinti 2016: 49 fig. 29, 293). This is a possibility for the Watlington Hoard hooked tag, although its very small size means that it cannot have been placed under much strain, and it is more likely that it was included in the hoard solely for its bullion value.

GOLD ROD

Alongside these silver items, the Watlington Hoard contains a small fragment of twisted gold rod, cut across both ends, with no nicks (Figure 7.11; **cat. 1.23**). The fragment may have originally derived from an arm- or neck-ring — most likely, given its small size, from the tapering end of a rod. Twisted rods form part of gold rings of late 9th- and early 10th-century date, including an arm- and neck-ring from the Hoen Hoard (Norway) and arm-rings in the Slemmedal, Aust-Agder (Norway) Hoard, deposited c. 925 (Fuglesang and Wilson 2006: pl. 35A). Such gold arm-rings also occur in western Viking contexts. A composite gold arm-ring, made up of a pair of twisted rods crudely linked via a short, looped rod to a cut piece from a plain annular arm-ring, comes from Shotton Hall, near Sunderland (Co. Durham) (Graham-Campbell 2011: 242, cat. no. 6), while a single find of a twisted-rod gold arm-ring, with one nick, comes from the York area (North Yorkshire) (DCMS 2006, 63–64).

These items are single finds, and are not independently dated, but the use of gold in presumed economic contexts seems to be a feature of the 9th century in particular (Blackburn 2007a: 78–79). A number of finds from the camp at Torksey indicate the use of hack-gold by the Viking Great Army. To date, there are 18 items of hack-gold from the site, including cut gold ingots and rods (Blackburn 2011: 233; Kershaw 2019). The comparable camp site at Aldwark has yielded two equivalent items of hack-gold, both cut fragments of round-sectioned rod (Williams 2020). Additional single finds of hack-gold from England are presumed to be Scandinavian losses of the late 9th- and early 10th-century (Blackburn 2007a: 75).

The source of this gold is unclear, and extant gold objects from Late Anglo-Saxon England are incredibly rare (Blackburn 2007a; see also Lavelle, Chapter 4, for gold smithing and a gold ingot from East Hendred, Oxfordshire). However, documentary sources do hint at gold sources, including ransom payments made to Viking armies (Naismith 2012a). Thus, in

872, immediately prior to the occupation of Torksey, the bishop of Worcester sold land for ‘20 *mancuses* of tested gold’ to meet a ransom payment (Whitelock 1996: no. 94; on the *mancus*, see Blackburn 2007a: 57–59). Famously, an inscription contained in the Gospel Book known as the *Codex Aureus* describes how an Anglo-Saxon Ealdorman and his wife paid ‘pure money, that was with pure gold’ in order to recover the book from the clutches of a Viking army (Whitelock 1996: no. 98). Remarkably, it was on this same Ealdorman’s estate, in south London, that the Croydon hoard was discovered (Brooks and Graham-Campbell 2000). It was deposited, perhaps by a member of the Great Army, in c. 871/2, just a few years prior to the deposition of the Watlington Hoard.



Figure 7.11. Fragment of a twisted gold rod (cat. 1.23).

DISCUSSION

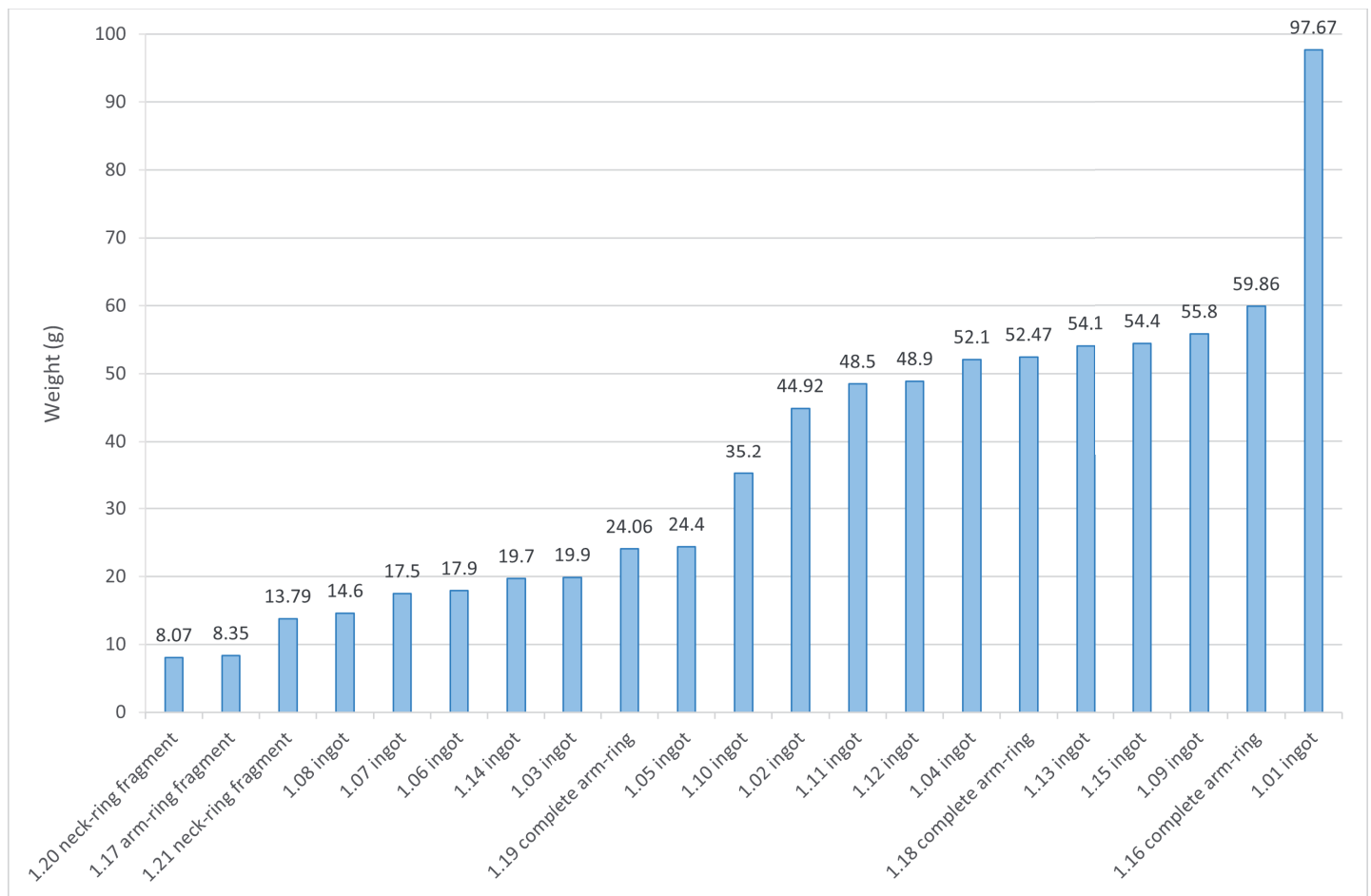
Function

The individual object types contained in the Watlington Hoard represent a broad spectrum of silver artefacts dating to the second half of the 9th century. This was a period of profound change in the use of silver within Scandinavia, as an earlier ‘display’ economy, based on the public show of wealth, increasingly operated alongside a bullion economy, in which cut and tested silver served as a means of exchange (Graham-Campbell *et al.* 2011). The Watlington Hoard contains both complete and fragmentary ingots and jewellery. What function, then, did the non-numismatic items serve?

There are several indications that the Watlington Hoard was a currency hoard, its silver intended for use primarily (though not necessarily exclusively) within the Viking bullion economy. At first sight, this is not immediately apparent. All the ingots and some of the rings are complete, with the complete rings still able to function as jewellery, as indeed they might have done. The Viking metal-weight economy was versatile, however, and items of jewellery also functioned as stores of metal bullion to be cut up and used when required. Indeed, three of the rings and the gold rod have been deliberately cut and can thus be described as hack-metal. It should be noted that the fragment from the hooked tag is broken, rather than cut, and it is thus unclear if its fragmentation was deliberate or not.

Moreover, there is evidence that the complete objects were manufactured to the Scandinavian ounce or *øre*, a weight unit of c. 25g – a feature which indicates that they served as a form of ‘money in large units’. The existence of weight-units in the Viking Age is a thorny topic, but a number of studies of complete ingots and rings suggest clustering in weights around a 24–26g unit – a unit which, however, is usually described as ‘fuzzy’ rather than precise (for example, Kruse 1988: 295–97; Hårdh 2007: 104–07; Besteman 1999: 257; Sheehan 2009: 67). This description is apt for the Watlington Hoard weights (Figure 7.12). The ingots, all of which are complete, group loosely around a 25g unit, with clustering at 25g, 50g and 100g. The weights of the three complete rings, made by hammering out ingots to the desired shape and thickness, conform to this grouping. The clustering at 50g is especially significant, as previous studies of ingots from England and Wales have noted an absence of peaks at 50g and 100g (Kruse 1988: 293, fig. 3; Hårdh 2007: 106). By contrast, ‘ingots in Danish and Norwegian hoards seem to concentrate around 50g’ (Hårdh 2007: 107) a pattern which may point to a Scandinavian origin for the majority of ingots and the complete rings in the Watlington Hoard. Whether deliberately cut items were cut to conform to specific weight units is an open question. Here, it is worth noting that one of the neck-ring fragments and one arm-ring fragment each weight c. 8g, roughly one third of a Scandinavian ounce.

Figure 7.12. *Weights of the silver objects in the Watlington Hoard (labelled with catalogue numbers).*



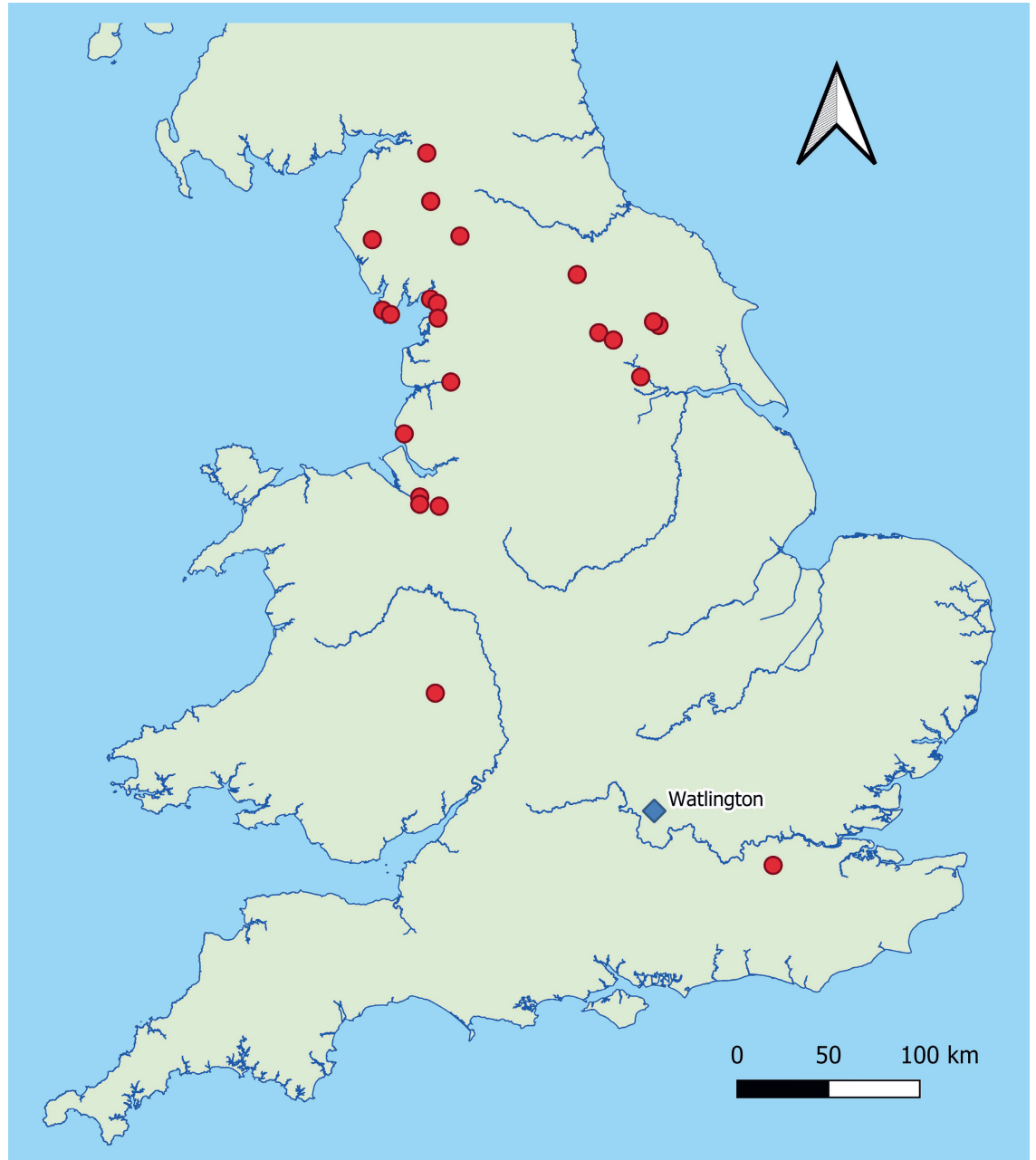
In addition to evidence for weight adjustment, the Watlington Hoard silver has been tested for its content by nicking. The Watlington Hoard ingots have a reasonably high incidence of nicking; six out of 15 ingots, all three complete arm-rings and one of the fragmentary neck-ring pieces, are nicked. This pattern of nicking suggests that these items saw active circulation as (high value) bullion — indeed the more extensively nicked items were likely in circulation for some time, potentially decades, before they were deposited in or after 879/80. Tested silver deposited in a hoard can be considered to have ‘passed the test’, indicating that it likely had a high silver content, and was not debased with lead or copper. XRF surface analysis carried out on a selection of the objects from the hoard by the British Museum during the Treasure Process, suggests that this was the case: reported surface silver contents were in the 94–98% range, in keeping for silver contained in Viking-Age hoards (see Catalogue 1, Table 10.1 this volume).

It is not only silver that appears to have been used as weighed currency by the Vikings. Traditionally, gold and silver have been viewed as occupying distinct circulatory spheres, with gold items preserved for display/ritual purposes, and silver items taking on an economic role (see discussion in Kershaw 2019). Yet a number of finds in recent years suggest that gold too had an economic role within the Viking metal weight economy. This is especially true of the early period of Viking activity in Britain (i.e. the 9th century), when Viking raids brought increased access to gold sources in Western Europe (Blackburn 2007a; Kershaw 2019: 245). One gold *solidus* of Louis the Pious, together with three imitation gold *solidi* — in both complete and fragmented forms — are recorded from the winter camp at Torksey, alongside a lead trial piece bearing an impression of a die used to strike imitation coins; it is possible that imitation *solidi* were produced in Viking contexts (Coupland 2016; Woods 2020). Multiple finds of hack-gold have been recovered from the Viking winter camps of Torksey and Aldwark as discussed above. Torksey has also yielded three items of fake hack-gold: an ingot and two rods with copper cores and gilded surfaces. Since it is unlikely such counterfeit gold had a role in metalworking, this treatment points to a role for gold in economic transactions. To these we can add further single finds of tested gold ingots and rings, in addition to finds of gold alongside silver in what have been interpreted as currency hoards (Kershaw 2019). The find of a small gold cut rod in the Watlington Hoard fits into this wider context. In sum, despite the completeness of the ingots and some of the jewellery items, the silver was most likely not new when deposited, but bears the physical signs of active circulation as monetary currency.

Context and Value

In the context of other Viking-Age silver hoards from England, the Watlington Hoard stands out for two reasons. The first is its southern location, which differs from the northern, predominantly north-western, location of most other hoards of Scandinavian character (Figure 7.13). The second is its early date, most other hoards were being deposited in the 10th century. There are, in fact, just two parallels for the Watlington Hoard, the first of which is that from Croydon (Surrey; deposited c. 872), mentioned several times above. Like Watlington, the Croydon Hoard contains a mix of silver ingots and hack-silver originating in Denmark, together with a small parcel of foreign coin including at least seven Carolingian deniers and three Islamic (Abbasid) dirhams (Brooks and

Figure 7.13. Map showing the locations of Viking-Age hoards of Scandinavian character found in England.



Graham-Campbell 2000). Like Watlington, the Croydon Hoard items were brought together with a much larger assemblage of Anglo-Saxon coins drawn from the areas the Vikings are known to have moved between in the three years or so before the hoard was deposited (i.e. East Anglia, Mercia and Wessex). The date of the coins suggest that the Croydon hoard was deposited in 872, the very year that the Viking Army was camped out in London and, although located somewhat to the south of London, the hoard is generally seen as being deposited by ‘a Danish soldier of the great army’ at that time (Brooks and Graham-Campbell 2000: 91). The other hoard was found near Leominster, Herefordshire (*tpq* 879–80; Hoverd *et al.* 2020). A mixed hoard of coinage and other objects, it is discussed further below (Naylor, Chapter 9).

In the context of other Viking-Age hoards from England, the Watlington Hoard can be considered a small- to medium-sized hoard (see further discussion in Naylor, Chapter 9). The overall weight of the Watlington Hoard's non-numismatic contents is 773.83g. With a total coin weight of just over 212g, the coins and objects together weigh around 985g. This is roughly 1/40 of the size of the largest silver hoard in the western Viking world from Cuerdale (at 42.6kg), interpreted as a potential accumulated 'army pay-chest' (Graham-Campbell 1992: 114); and 1/3 the weight of the Bedale hoard, likely deposited in the late 9th or early 10th century, from North Yorkshire (weighing 3345g). It is, however, roughly twice the weight of the Croydon Hoard (weighing around 515g in total). In this context, it seems plausible that the Watlington Hoard represents the accumulated wealth of one or two individuals.

Concluding remarks

Who, then, buried the hoard and why? While a specific answer is impossible, it is feasible to suggest likely historical contexts for the deposition of the Watlington Hoard. It is clear, for instance, that the material is overwhelmingly Scandinavian in character. With the exception of the Anglo-Saxon hooked tag, all items can be considered culturally Scandinavian: most are representative of the pool of silver circulating in 9th-century southern Scandinavia, even if some have origins further east. The physical treatment of the silver (the testing and fragmentation), in addition to the evidence for weight adjustment, also points to circulation in Scandinavian cultural spheres. More broadly, the mix of ingots, jewellery and hack-silver with foreign and domestic coin, is characteristic of other Viking-Age hoards of Scandinavian character from England. While the Vikings did not have a monopoly on the practice of hoarding (see, for instance, discussion of the Plumpton Hoard (Sussex) in Thomas 2013), I think it highly likely that the silver was in Scandinavian hands at or shortly before deposition. The similarities to the Croydon Hoard — interpreted as the wealth belonging to a member of a Danish Viking army — were noted above. The southern Scandinavian make-up of the Watlington Hoard's non-numismatic contents, coupled with its local, Wessex and Mercia coin inclusions, and its location in southern Oxfordshire, is compelling evidence that it belongs to the same context of Viking Great Army activity in England in the 870s/ early 880s. It likely represents the wealth of one or two enriched, but not necessarily high-status, Viking Great Army members — predominantly wealth brought to England from southern Scandinavia, and supplemented with more recent acquisitions, as the army engaged in battle against, and potentially negotiations with, Alfred of Wessex.

Acknowledgements

With thanks to John Sheehan for information about the finds from Tynan and 'near Raphoe' (Ireland) discussed in this chapter.