

IRELAND'S EARLY VIKING-AGE SILVER HOARDS

Components, Structure, and Classification

by

J S

INTRODUCTION

The political, social and economic conditions which the Scandinavians encountered in Ireland were quite different from those which pertained elsewhere in the West and the North Atlantic during the Viking-age. As a result of this the nature of Scandinavian activity and settlement in Ireland was distinctive, and ultimately the establishment of a commercially orientated urban economy formed part of the Scandinavian's response to Irish conditions. As silver was the principal medium of exchange throughout the Viking world, it is consequently not surprising that a remarkably large amount of this precious commodity has been found in Ireland. Ireland's Viking-age silver hoards represent a concentration of wealth which is not equalled elsewhere in the West or, indeed, in many regions of Scandinavia itself.

If it is accepted that the Viking-age in Ireland extended to as late as 1170, when Dublin was captured by the Anglo-Norman invaders, then the total number of its silver hoards exceeds one hundred and thirty finds. The vast bulk of the wealth that these finds represent in terms of their bullion value, however, clearly belongs to the ninth and tenth centuries. Some one hundred and eight hoards, well over half of which contain ingots, ornaments or hack-silver, may be assigned to this period (listed in Sheehan 1998a, Appendix 1). It is primarily issues concerning these sixty-six hoards and their non-numismatic contents which will be considered in this paper.

It seems appropriate, for a number of reasons, to

confine the discussion mainly to the non-numismatic contents of these ninth- and tenth-century hoards. Firstly, it was within this period that the Hiberno-Viking non-numismatic silver-working tradition originated and developed to become the dominant one of the Viking West. Secondly, during the second half of the tenth century the practice of coin-hoarding greatly increased in significance in Ireland, culminating in the establishment of a mint in Dublin in c. 997; thus, by the turn of the millennium the deposition of characteristic Scandinavian-type silver hoards – composed of ingots, ornaments or hack-silver, or combinations of these, with or without coins – had practically ceased in Ireland. Finally, it was during these two centuries that true urban centres were first founded in Ireland. While excavation, particularly in the case of Viking Dublin, has revealed much about the economy and commerce of these towns (Wallace 1987) it is also clear that the study of silver hoards can yield further evidence on both the nature and the scale of the Scandinavian economy in Ireland.

This paper, therefore, is primarily concerned with the non-numismatic contents of Ireland's ninth- and tenth-century silver hoards of Scandinavian character. It outlines their main components and briefly deals with issues of dating, distribution and ownership. The occurrence of material belonging to the Hiberno-Viking silver-working tradition in Scandinavia and Britain is also considered. Finally, some preliminary thoughts are offered on the classification and structure of the Irish hoards which, it is hoped, will lead

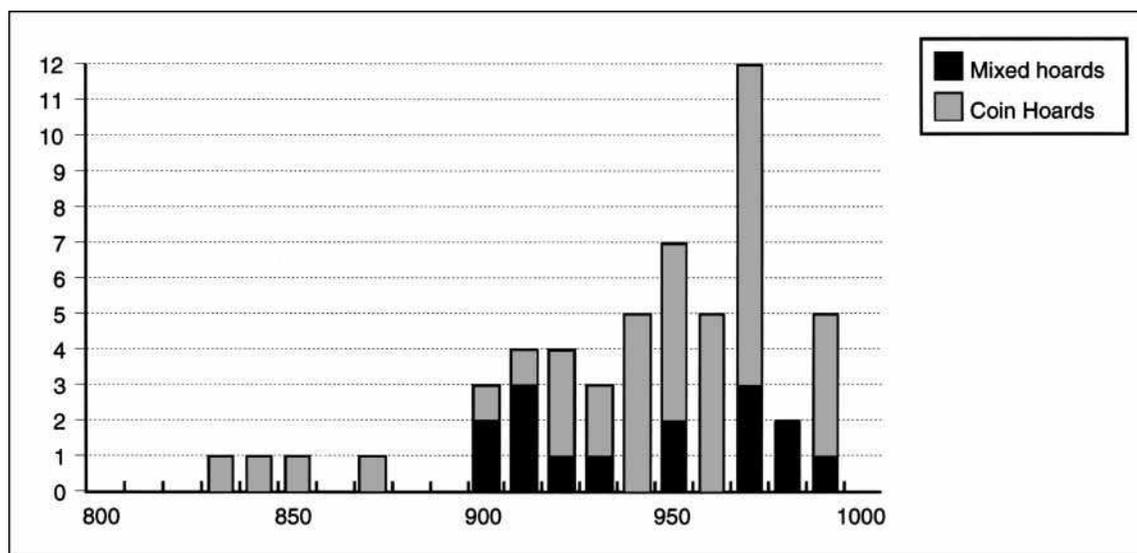


Fig. 1. Deposition of Viking-age coin hoards and mixed hoards from Ireland (800–1000), by decades.

towards a more developed understanding of the social and economic issues of the period.

HOARD CLASSIFICATION, COMPONENTS AND DATING

Ireland's Viking-age silver hoards, like those from the Scandinavian homelands, may be divided into three categories: coinless hoards (those consisting exclusively of non-numismatic material and ranging in composition from complete ornaments and/or ingots to hack-silver – the cut-up fragments of ornaments or ingots); mixed hoards (those consisting of coins combined with non-numismatic material); and coin hoards (those consisting exclusively of coins).

Some fifty-two of the hoards under consideration here fall into the coinless category, while there are fifteen mixed hoards on record. The latter were all deposited during the tenth century (1) and most contain ingots or ingot fragments in addition to the coins.

1. The dates given in this paper for the deposition of mixed and coin hoards, as well as the data used for Figure 1, are mainly taken from Blackburn, M., and Pagan, H., A revised check-list of coin hoards from the British Isles, c. 500–1100, 291ff. in Blackburn, M.A.S., (ed.), *Anglo-Saxon monetary history: Essays in memory of Michael Dolley*, Leicester, 1986. A number of revisions and additions, however, are listed in Sheehan 1998a, fn. 17.

A small number, however, also features ornaments of Hiberno-Viking type (or hack-silver derived from such ornaments) as does a large proportion of the coinless hoards. In fact, if ingots – most of which are neither regionally nor culturally diagnostic – are excluded from the coinless hoards it becomes apparent that Hiberno-Viking material dominates their components. The particular types of Hiberno-Viking ornaments in question, mostly of the arming variety, also occur in an important series of Viking-age mixed hoards from Britain and Norway and date to the century between c. 850 and c. 950. Excepting a small quantity of native Irish silver objects, most of the remaining diagnostic non-numismatic material from the Irish hoards consists of examples of 'ring-money' from Scandinavian Scotland and imports from Scandinavia and the Baltic region.

Prior to detailing some of these coinless and mixed hoards, attention must be turned briefly to the third category of hoard – which it is not intended to discuss further here – comprising those composed exclusively of coins. A total of forty-one ninth- and tenth-century examples are on record, seventy-five percent of which were deposited after c. 940 (Fig. 1). The types of coins which occur in these hoards are predominantly Anglo-Saxon, though Arabic issues as well as those of the Viking rulers of East Anglia and Northumbria are

also represented. The majority of the coin hoards are rather small in size, and in bullion terms they certainly do not represent a significant amount of the overall silver wealth of the period (Kenny 1987, 517). The evidence of the coin hoards thus serves to emphasize the importance of non-numismatic silver for the study of the Early Viking-age economy in Ireland.

A high proportion of the non-numismatic components of the silver hoards are diagnostic in form, and consequently it is possible to suggest regional or cultural attributions for these. Most of the material is of Hiberno-Viking or Irish Sea origin, though, as stated above, there are also some Scandinavian, Baltic, Scotto-Norse and native Irish elements represented. On the basis of the evidence of the hoard-associated material, combined with that of the coin-dated mixed hoards from Britain and Scandinavia as well as from Ireland itself, it is possible to assign general date-ranges to these groups of objects in Ireland.

The main components of the hoards under review consist of armrings attributable to Hiberno-Viking workmanship. Several different classes have been identified, by far the most important of which in numerical terms is the broad-band type (Graham-Campbell 1976, 51–53; Sheehan 1998a, 178–180). Over one hundred individual examples are on record from Ireland and the type is also found in over a dozen hoards from Britain and Norway. The occurrence of broad-band armrings in a number of coin-dated hoards in Scandinavia, as well as in the West, indicates that the type developed in Ireland during the later ninth century – where it was probably inspired by Danish prototypes – and continued in general circulation until c. 930–940 (Brooks and Graham-Campbell 1986, 96–98; Graham-Campbell and Sheehan 1995, 776–777). There is some metrological evidence to suggest that these rings were manufactured by hammering out ingots for the storage and circulation of silver (Sheehan 1984, 57–65), though it is likely that they also served as status objects. Other armrings of Hiberno-Viking manufacture represented in the hoards from Ireland include those belonging to the ‘coiled’ and ‘ribbon’ classes (Sheehan 1991–92, 41–52; Graham-Campbell 1993, 81–83). Like the broad-band armrings these are also occasionally found in hoards from Britain and Scandinavia, and date to the period between c. 850 and c. 950.

Other categories of ornaments of Hiberno-Viking manufacture represented in the Irish hoard material include a small number of brooches of the bossed- and ball-types, also datable to between c. 850 and c. 950. It is generally agreed, however, that most of these brooches found in Ireland belong to the native Irish silver-working tradition. Nonetheless, a few are demonstrably of Hiberno-Viking manufacture while the remainder may be regarded, in part at least, as products of the increased availability of silver which resulted from the activities of the Scandinavians in Ireland.

Alongside the various types of Hiberno-Viking armrings noted above, the principal component of Ireland's Viking-age hoards are ingots (Kruse 1993, 188–189). Unlike ornaments, however, ingots are generally neither culturally nor regionally diagnostic and it is consequently not possible to declare in most cases whether the ingots from Ireland are of Hiberno-Viking manufacture or not. Nevertheless, there is a reasonable possibility that the majority of them are, especially when it is considered that Hiberno-Viking material forms part of twelve out of the seventeen hoards in which ingots and ornaments occur together (Sheehan 1998a, 183). Classic examples in this regard include the finds from near Raphoe, Co. Donegal (Fig. 2), Creaghduff, Co. Westmeath, and Carraig Aille, Co. Limerick (Fig. 3). While these and other putative Hiberno-Viking ingots probably date to no later than c. 950, it must be noted – on the basis of the evidence of the deposition dates of the mixed hoards (Sheehan 1998a, Table 6:1) – that ingots continued in use as a popular form of storing bullion throughout the rest of the tenth century. Therefore hoards composed exclusively of ingots, such as the one from Blackcastle, Co. Wexford (Bøe 1940, 107), could date to any time between the mid-ninth century and the close of the millennium.

Most of the remainder of the components of Ireland's silver hoards comprises imported material from Scandinavia and Scandinavian Scotland. The latter is represented in particular by examples of ‘ring-money’, which occur in at least four hoards (Sheehan 1982, 102–103). The deposition of that from Knockmaon, Co. Waterford (Jennings 1912, 162–167), is coin-dated to c. 1000, and it is very likely that the other hoards containing material of this kind were



Fig. 2. Coinless silver hoard from near Raphoe, Co. Donegal (courtesy of Sotheby's, London).



Fig. 3. Coinless hoard from Carraig Aille, Co. Limerick (courtesy of the National Museum of Ireland).

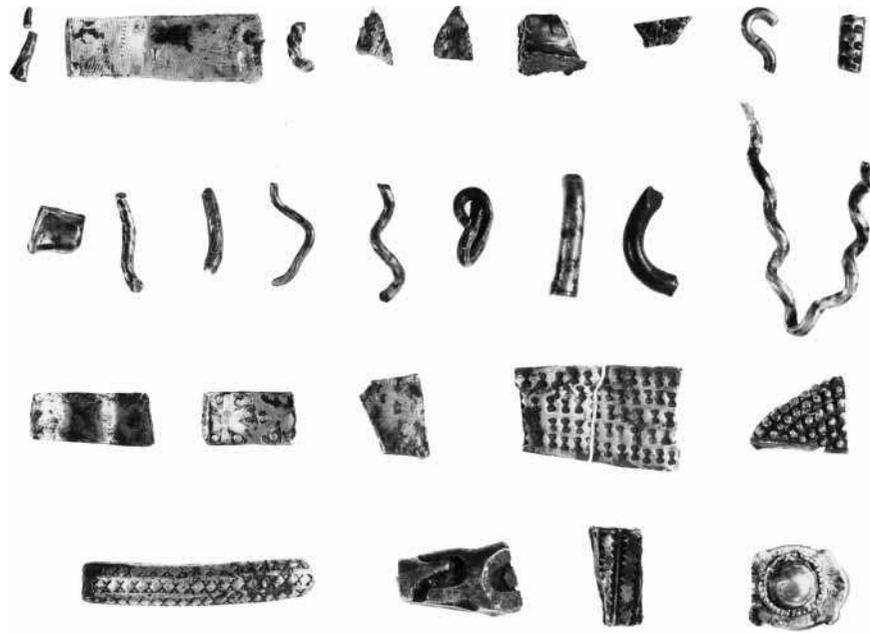


Fig. 4. Selection of hack-silver from the Dysart Island, Co. Westmeath, hoard (courtesy of the National Museum of Ireland). Scale 2:3.

also deposited after the mid-point of the tenth century. These, therefore, date to the period when the typical types of Viking-age hoards in Ireland were declining in significance.

Unlike the 'ring-money' from Scotland, the imported objects of Baltic and Scandinavian origin appear to date, in the main, to between c. 850 and c. 950. This material has recently been discussed elsewhere by the author (Sheehan 1998a, 184–194) and will only be treated of briefly here. A rather limited quantity of it is identifiable in the hoards, where it usually occurs in hack-silver form. These hoards include those from Loughcrew, Co. Meath, Dysart Island, Co. Westmeath, and Co. Dublin, the latter two with coin-dated depositions of c. 907 and c. 935 respectively. The Dublin find consisted of an ingot and two fragments of spiral-rings, such as those known from southern Scandinavian and Baltic finds, while a brooch fragment in the Loughcrew hoard is probably derived from a Norse variant of the Baltic brooch tradition. Both Baltic and Norse material are represented together in the Dysart Island hoard (Fig. 4), including fragments of a Baltic cast arming and a Norse trefoil-headed pin.

When measured as a proportion of the total

amount of Viking-age silver known from Ireland the quantity of material of Baltic and Scandinavian origin appears somewhat insignificant (and some of the simpler pieces may well be local copies). The individual pieces, however, should be regarded as being representative of a much larger volume of imported material, most of which was presumably consigned to the melting-pot – along with coined silver from the Arabic world, Anglo-Saxon England and elsewhere – to provide the sources for the Hiberno-Viking silver-working tradition. It is probable that much of this non-numismatic material travelled to the West from the Baltic region along with Kufic coins. These latter have been found in twenty-one hoards in Britain and Ireland, mostly from the Irish Sea region, nearly all of which were deposited before the 940s (Sheehan 1998a, Table 6:2) (Fig. 5).

It is usually not possible to be precise about the dates of deposition of Viking-age coinless hoards. Nevertheless, it is evident on the basis of their composition and on the coin-dated evidence of the related mixed hoards that by far the majority of the coinless examples from Ireland were buried during the century between c. 850 and c. 950. It is also clear that just under half of the mixed hoards from Ireland were

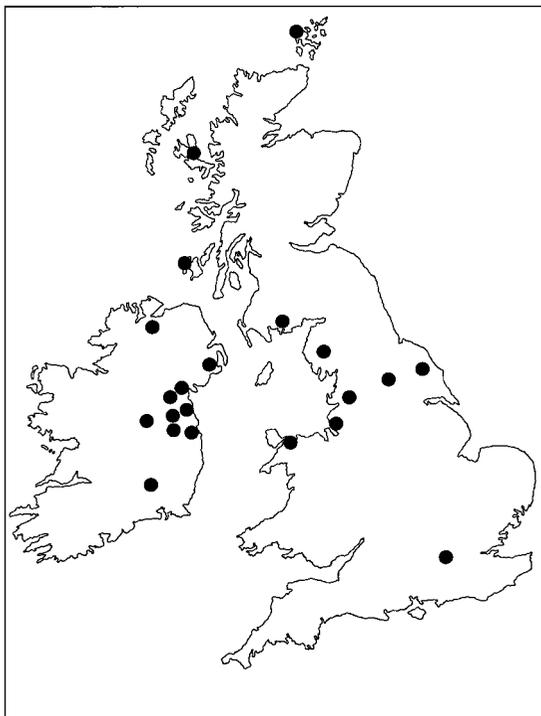


Fig. 5. Distribution of silver hoards in Britain and Ireland which contain Kufic coins.

deposited during the second half of this period. The depositions of only eleven of the sixty-six hoards under discussion, of both the coinless and mixed variety, clearly date to after the mid-point of the tenth century and these are mainly composed of either 'ring-money' from Scandinavian Scotland or ingots accompanied by coins. On the other hand, it can be strongly argued that at least forty of these hoards were deposited before c. 950 (and the minimal status of this figure is underlined when the likelihood of some of the ingot-only hoards also being deposited during this time is considered). Therefore, the period encompassing the second half of the ninth and the first half of the tenth century – during which Ireland's Viking-age hoards are usually composed of Hiberno-Viking ornaments, with, occasionally, ingots and native Irish elements as well as some imported objects from Scandinavia and the Baltic – clearly serves to bracket a core era for the study of Scandinavian activity in Ireland and the West.

DISTRIBUTION AND OWNERSHIP

The geographical distribution of Ireland's Early Viking-age hoards reveals a number of interesting patterns (Fig. 9a). There are relatively few findspots in the west of the country, which underlines the importance of the Irish Sea as the primary trade route during this period. The distribution of the coinless hoards, most of which date to between c. 850 and c. 950, is fairly even throughout the northern and southern parts of the country while there is a pronounced concentration in the central midlands. In contrast, however, the coin and mixed hoards – mostly of tenth-century date – tend to be found in the midlands and north Leinster regions (Kenny 1987, 511–516). Thus, the distributional patterns of these particular types of hoards contrast, to some extent, both chronologically and spatially. The most striking conclusion to be drawn from the overall distribution, however, is that – with the exception of a group of finds from around Dublin – most of the hoards from Ireland were deposited in regions of the country which were never controlled by the Scandinavians. In other words, a very considerable amount of Ireland's Viking-age silver wealth ended up in Irish ownership.

This conclusion is reinforced by considering certain developments in the native Irish silver brooch tradition during the second half of the ninth century, alluded to above, which may be attributable in large part to the fact that significant quantities of silver became available to native craftsmen for the first time as a result of Scandinavian activity (Graham-Campbell 1976, 53). Irish ownership and control of silver may also be evidenced by the non-Scandinavian character of the ingots in some of the large hoards from around Lough Ennell, Co. Westmeath (Ryan *et al.* 1984, 364). The local find-contexts of many of the finds also point towards the same conclusion, as a significant number of those hoards which have details of their provenance on record were found on ringforts and crannógs – native Irish settlement types. Others were found at ecclesiastical sites. In fact, with the exception of two recently discovered late tenth-century coin-hoards from Dublin, there are no silver hoards on record from unequivocally Scandinavian contexts in Ireland at all.

The means and processes by which the Irish acquired a large proportion of the Viking-age silver on

record from Ireland are unclear. Some hoards may represent the outcome of raids on Scandinavian settlements by the Irish, but it is more likely that these finds evidence trade and tribute. Concerning the former, it has been suggested that the Irish were involved with the Scandinavians in the lucrative slave trade and shared in its profits (Kenny 1987, 518; Sheehan 1998a, 175–176). Silver was probably also obtained by the Irish in return for trading with the Scandinavians in more mundane commodities, and the occurrence of hoards in some ecclesiastical centres – which were developing market functions at this time (Doherty 1980, 81–84) – may also attest to this. Indeed, the nature of several of the tenth-century hoards from ecclesiastical sites – which tend to be composed of coins and ingots rather than ornaments – is suggestive of economic links with the Scandinavian towns, where silver hoards may have usually been of this structural composition (Ó Floinn 1998, 161).

The acquisition of silver by the Irish may also be explained, in part, by the custom of tribute. It is known from the historical sources that the Irish formed military and other alliances with the Scandinavians from as early as the mid-ninth century (Sawyer 1982, 360) and it is likely that tribute and gift-exchange formed part of the process of forming such bonds. The fact that a large proportion of the Viking-age silver from Ireland occurs in the form of armrings may serve to reinforce this hypothesis, for, as is suggested below, these ornaments may have primarily served as status objects in native Irish milieux.

HIBERNO-VIKING SILVER ABROAD

Given that a vigorous and innovative silver-working tradition was established in Ireland by the Hiberno-Norse during the later ninth century, it is not surprising to find that the majority of Viking-age hoards known from Ireland contain objects produced by it. The strength and scale of this tradition, however, is also attested to by the occurrence of examples of these products in hoards of both British and Scandinavian (particularly Norwegian) provenance, some of which are largely or wholly Hiberno-Viking in composition. The value of these hoards towards developing our understanding of the relationships that existed between the Scandinavians in Ireland and those in parts

of Britain and the home countries is obvious, and this value is enhanced by the fact that the depositions of several of these finds are coin-dated. This latter factor, apart from being highly relevant for the chronology of the various Hiberno-Viking object-types, occasionally allows some of these hoards to be tenuously related to certain historical events and trends which are known to have involved Scandinavians from Dublin.

At least ten silver hoards from Britain contain silver objects of Hiberno-Viking manufacture. These include the coin-dated examples from Cuerdale, Lancashire, deposited c. 905, Goldsborough, Yorkshire, deposited c. 920, Bossall/Flaxton, Yorkshire, deposited c. 927, Bangor, Caernarvonshire, deposited c. 925, Storr Rock, Skye, deposited c. 935–40, and Skail, Orkney, deposited c. 950–70 (Graham-Campbell 1992, 112–114 and refs. therein). The foremost of these is the massive Cuerdale hoard, a major portion of which is comprised of Hiberno-Viking silver. It has been reasonably proposed that this part represents wealth that was carried away from Dublin during the period of unrest surrounding the defeat and expulsion of the Scandinavians from there in 902. The deposition of other hoards on the eastern side of the Irish Sea, such as the coinless example from Red Wharf Bay, Anglesey, might also be related to the events of 902. This fine hoard, which comprises five complete Hiberno-Viking armrings (Boon 1986, 99–102), could well be connected with the unsuccessful attempt by Ingimundr and his followers – refugees from Dublin – to conquer Anglesey in that year. While the danger of correlating the deposition of hoards with particular historical events is acknowledged, it is at least clear that the Cuerdale hoard demonstrates the exceptional levels of wealth which were generated in ninth-century Dublin.

Two mixed hoards from Yorkshire, those from Goldsborough and Bossall/Flaxton, both feature Hiberno-Viking elements in their composition and may testify to the political links that existed between York and Dublin in the 920s. The absence of any locally minted coins from the Goldsborough hoard, for instance, combined with the fact that much of its non-numismatic silver clearly originated in Ireland, suggests that it may have been deposited by one of Sihtric's followers from Dublin (Graham-Campbell 1992, 112). Its date of deposition, c. 920, coincides with the



Fig. 6. Coinless silver hoard containing Hiberno-Viking broad-band armrings from Osnes, Hordaland, Norway (courtesy of Historisk Museum, Universitetet i Bergen).

establishment of Sihtric as king of York. Several other hoards from north-west England also feature Hiberno-Viking and/or native Irish silver components, including such examples as those from Orton Scar (Edwards 1992, 50) and Scotby (Kruse 1986, 79–83), both in Cumbria. The Irish Sea nature of these finds, alongside other archaeological evidence (Edwards 1992), clearly testifies to Hiberno-Norse involvement in the largely undocumented Scandinavian settlement of this part of England.

Hiberno-Viking silver is also found in a number of hoards from Scotland (Graham-Campbell and Sheehan 1995, 771–78), particularly those which were deposited up to the mid-point of the tenth century. In fact, an impressive proportion of the non-numismatic contents of these early hoards is demonstrably of Irish Sea origin, with native Irish and/or Hiberno-Viking material being represented in them. A classic example in this regard is the hack-silver find from Storr Rock, Skye, which was deposited in c. 935–40, for in addition to its bossed brooch and ‘ribbon bracelet’ fragment it contains ingot material, a spiral-ring fragment and coins of both Anglo-Saxon and Arabic type. This particular combination of hack-silver and coins is representative of the pool of silver current in the Irish Sea region at this time (Graham-Campbell 1995, 28). The nature of this and of the other early hoards from Scotland serves to reinforce Wilson’s observation that Scandinavian Scotland ‘grew in wealth as a result of the presence of Dublin’ (1976, 111). Metcalf has re-

cently suggested that this economic growth – which was very modest in scale compared to that of Ireland – may have resulted from ‘transit trade’ (in Graham-Campbell 1995, 17).

The distribution patterns of Hiberno-Viking silver objects also encompass Scandinavia, and Norway in particular. Broad-band armrings, for instance, form part of the coinless hoards from Vestre Rom, Vest-Agder, Osnes, Hordaland (Fig. 6), and Bøstrand, Nordland (Grieg 1929, 239–240; 246; 258–260), and also occur in the mixed hoards from Grimestad, Vestfold, and Slemmedal, Aust-Agder (Blindheim 1981, 17–18), both of which were deposited during the 920s. Indeed, the number of findspots of Hiberno-Viking material in Norway exceeds fifteen when single-finds are included. Most of this material is provenanced to the Oslofjord region and the south-west of the country where, interestingly, it overlaps both chronologically and spatially with the ninth-century distribution of Insular metalwork. In fact, both Hiberno-Viking armrings and decorated Insular metalwork occur together in the grave-find from Gausel, Rogaland (Wamers 1985, 90–100; Sheehan 1991–92, 51). In overall terms the distribution of this material might be taken as reinforcing the evidence for the identification of the Oslofjord region and south-western Norway as the places of origin of many of the Norse who were involved in Irish affairs, as well as demonstrating that contact was maintained between both areas well beyond the end of the ninth century.

CLASS	COMPOSITION	COINLESS	MIXED	OVERALL
1	Ornaments	26(50%)	1(6.5%)	27(40%)
2	Ingots	6(11.5%)	5(33%)	11(6.5%)
3	Ornaments and ingots	2(4%)	1(6.5%)	3(4.5%)
4	Ornaments and/or ingots with hack-silver	14(27%)	4(27%)	18(27%)
5	Hack-silver	4(7.5%)	4(27%)	8(12%)
TOTAL		52	15	67

Fig. 7. Classification by composition of Viking-age coinless and mixed silver hoards of ninth- and tenth-century date from Ireland.

COMPOSITIONAL STRUCTURE OF THE HOARDS

It was noted in the introduction to this paper that Ireland's Viking-age silver hoards of the ninth and tenth centuries may be divided into three categories: coinless hoards (fifty-two examples), mixed hoards (fifteen examples) and coin hoards (forty-one examples). Moreover, as the coin hoards represent only an insignificant amount of the overall silver wealth of the period, the importance of the finds containing non-numismatic material for the study of the Viking-age economy and related matters was emphasised. Towards this end these coinless and mixed hoards may be analysed in a number of different ways, the results of which may either serve to emphasise or alter the impressions gained from straightforward location-distribution studies.

There are problems and limitations involved, however, in conducting detailed analyses of the Irish hoards. This is largely due to the fact that most of these were discovered during the nineteenth century, when there were few museums or permanent collections in existence in the country. Consequently, many of the individual hoard components were lost or melted down. In the province of Munster, for instance, less than half of the non-numismatic objects contained in the eleven coinless and mixed hoards discovered prior to 1880 are known to be still extant (Sheehan 1998b, 150). On a more positive note, however, discoveries of intrinsically valuable metals tended to generate reasonably detailed records within Irish antiquarian circles. Consequently, finds such as silver hoards tend to retain their provenances (all but

six of Ireland's coinless and mixed hoards have at least a county provenance) and this lends confidence to the validity of their overall distributional patterns. Equally important is the fact that antiquarian records of now-lost hoards frequently include valuable information, such as descriptive notes and sketches, on their actual contents. This greatly facilitates the identification of these objects, thereby making it possible to categorise and assess in a general way the various types of hoard compositions.

Keeping in mind the limitations imposed by the sources, a general and provisional system of classification for Ireland's Viking-age coinless and mixed hoards, which is based on their compositional structure, is proposed here. The occurrence, absence or combination together of the three principle non-numismatic object-categories in the hoards, namely ornaments, ingots and hack-silver, forms the basis for the classification. A fivefold division of hoard structure is advanced in which the shared non-numismatic characteristics of each of the classes of hoards, whether of the coinless or mixed categories, are stressed (Fig. 7). The system is capable of accommodating further sub-classification for the purposes of more detailed analyses, as with the case of the hoards which contain hack-silver (Fig. 8). While it transcends the somewhat segregational nature of the coinless hoard/mixed hoard categorisation, this classificatory system is also flexible enough to be superimposed upon it. When this is done the results lay emphasis on the compositional similarities, rather than the differences, of the coinless and mixed hoards.

The proposed classificatory system facilitates the

CLASS	COMPOSITION	COINLESS	MIXED	OVERALL
4a	Ornaments with ornament hack-silver	6 (43%)	-	6 (33%)
4b	Ornaments with ingot hack-silver	-	-	-
4c	Ornaments with mixed hack-silver	-	-	-
4d	Ingots with ingot hack-silver	2 (14%)	-	2 (11%)
4e	Ingots with ornament hack-silver	1 (7%)	1 (25%)	2 (11%)
4f	Ingots with mixed hack-silver	3 (22%)	1 (25%)	4 (22%)
4g	Ornaments and ingots with ornament hack-silver	1 (7%)	1 (25%)	2 (11%)
4h	Ornaments and ingots with ingot hack-silver	-	-	-
4i	Ornaments and ingots with mixed hack-silver	1 (7%)	1 (25%)	2 (11%)
TOTAL		14	4	18
5a	Ornament hack-silver	-	1(25%)	1 (13%)
5b	Ingot hack-silver	1 (25%)	2 (50%)	3 (37%)
5c	Mixed hack-silver	3 (75%)	1 (25%)	4 (50%)
TOTAL		4	4	8

Fig. 8. Sub-division of Class 4 and Class 5 Viking-age coinless and mixed silver hoards of ninth- and tenth-century date from Ireland.

examination of the various roles, social as well as economic, that Viking-age silver hoards and their components played in both Hiberno-Norse and Irish society. The presence or absence of coins in a hoard should not be the principal basis of assigning it a particular economic role or status, as coins were variously regarded as bullion or money at different places and times throughout the Viking Age. Similarly, silver armrings may have been viewed either as 'currency rings' or status objects in different economic and social contexts. Ingots and hack-silver represent other scenarios which are more likely to be economic in focus, and require separate interpretation. This new analysis of the silver hoards on the basis of their structural composition, therefore, allied with consideration of their broader contextual attributes, such as chronology, distribution and find contexts, should facilitate the development of a better understanding of this material as an indicator of various forms of Scandinavian activity in Ireland.

Splendid examples of Viking-age hoards from Ire-

land include those from Cushalogurt, Co. Mayo (Hall 1973) and from near Raphoe, Co. Donegal (Graham-Campbell 1988). These consist of combinations of armrings and hack-silver with, in the case of the latter example, a number of ingots (Fig. 2). However, neither the large size nor the compositional structures of these finds are representative of the majority of Irish hoards. The non-numismatic element of the typical Irish Viking-age hoard, Class 1, which accounts for some 40% of the total number, contains neither ingots nor hack-silver, being composed exclusively of complete ornaments. In most cases these ornaments are of armring type and they usually vary in number from only two to four examples per hoard. Typical examples of the small- to medium-sized hoards of this type include those from Rooskey, Co. Donegal, with its four armrings (Raftery 1969), and Rathmooley, Co. Tipperary, which consists of only two armrings (Sheehan 1992). Only one of the twenty-seven hoards which comprise Class 1 – a poorly recorded nineteenth-century find, deposited c. 970, from the west

LEGEND

- coinless hoard
- ◐ mixed hoard
- ◌ coin hoard

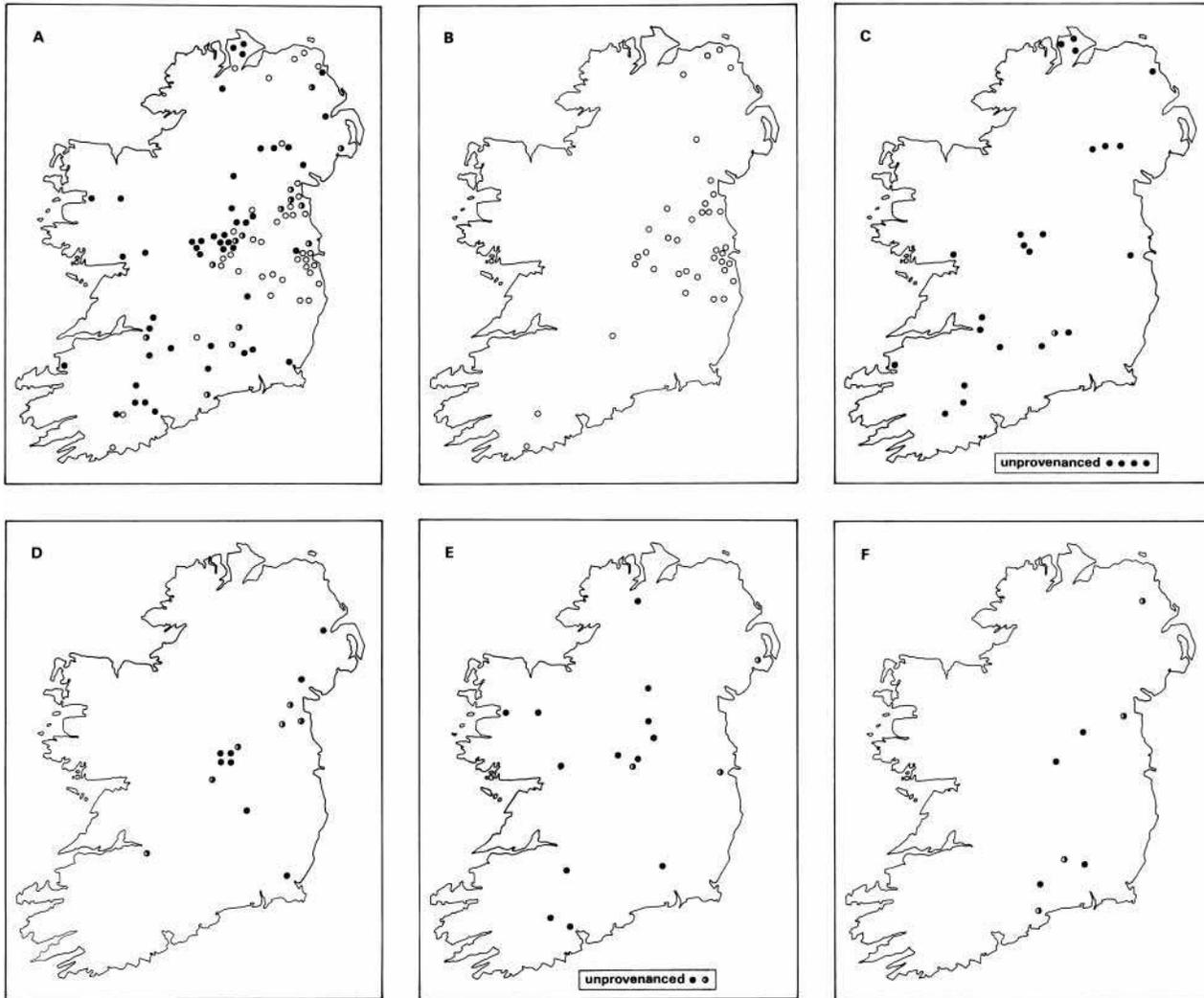


Fig. 9. a, Distribution of Early Viking-age silver hoards, coinless, mixed and coin hoards; b, Coin hoards only; c, Class 1 hoards only; d, Class 2 and 3 hoards only; e, Class 4 hoards only; f, Class 5 hoards only.

of Co. Kilkenny – contains coins in addition to ornaments.

The Class 1 ornament finds require some comment, forming, as they do, the most frequently occurring type of Viking-age hoard from Ireland. A clear majority of them – at least eighteen (three of the exceptions comprising hoards of Scoto-Norse ‘ring-money’) – are composed in whole or in part of arm-

rings of Hiberno-Viking type. This would suggest that, in the main, Class 1 hoards belong to the period between c. 850 and c. 950, the dating brackets for the Hiberno-Viking silver-working tradition (Sheehan 1998a, 177–183). In terms of their distribution these hoards are well scattered throughout the country (Fig. 9c), though few of them occur in the north-west (which is practically devoid of hoards of all classes) or

in the central midlands/north Leinster region. This latter gap is of particular interest for it is here that a very large proportion of the coin hoards is concentrated (Fig. 9b). The margin of overlap between the respective distributions of these coin hoards and the Class 1 hoards is minimal.

Kenny interpreted these two distinct distribution patterns in economic terms, suggesting that they indicated 'substantial regional differences in trading practices among the Irish, which may have been caused either by different rates of economic development or by differences in the level of trading contacts with the Vikings' (1987, 518). The chronological differences that exist between most examples of these two very different groups of silver hoards (for most of the coin hoards were deposited after c. 940 – see Fig. 1) are not taken into consideration in this interpretation. More importantly, however, it is probably inappropriate to interpret the Class 1 hoards in economic terms alone. Given their nature as finds which consist exclusively of complete ornaments (excepting the Kilkenny example, noted above), they are clearly to be distinguished from those hoards which contain hack-silver and/or ingots (Classes 2–5). The latter obviously should be interpreted economically, having the characteristics of silver used as a means of payment in exchange and trade.

Ornament-only hoards are best interpreted in social terms. Coinless hoards of the Class 1 kind have been classified as 'passive' in commercial terms by Graham-Campbell, who recognises that the contents of such hoards were 'clearly not intended for everyday circulation, having been converted into artefacts that conferred status, whether to patron, donor or recipient' (1989, 54). More recently Hårdh has interpreted the occurrence of a group of ornament hoards in Western Norway, which is rather unusual in the Scandinavian context, as reflecting 'a system where silver ... had a social function ... Here the precious metals are important as a means for giving gifts and forming alliances, to build up social positions in areas with politically unclear conditions' (1996, 178).

Hårdh's interpretation of this group of Scandinavian finds may also be applied to the Class 1 hoards from Ireland, while Graham-Campbell correctly emphasises their non-commercial nature. In this light these hoards should probably be viewed to some extent as archaeological reflections of the various alliances – testi-

fied to in the historical sources – that were formed between the Scandinavians and the Irish from the middle of the ninth century onwards. The fact that some types of Hiberno-Viking armrings, which comprise recurring features of these hoards, were manufactured for the storage and circulation of silver as a form of currency need not be taken as evidence which militates against this broad interpretation. In Irish hands, removed from the milieu in which they were produced, these armrings probably functioned primarily as status objects, just as they also appear to have done in some contexts outside of Ireland (Graham-Campbell and Sheehan 1995, 776–777).

Classes 2 and 3 of the proposed classificatory scheme for the Irish hoards, which for the purposes of this paper are dealt with together, comprise, respectively, finds containing complete ingots only and ones containing complete ingots combined with complete ornaments. These obviously share an important characteristic with the Class 1 hoards in that they also lack any hack-silver content. The presence of ingots in them, however, indicates that they should be clearly distinguished from these commercially 'passive' ornament hoards, as well as from the commercially 'active' hoards of Classes 4 and 5 (which contain hack-silver). These hoards may, therefore, be classified as 'potentially active' in commercial terms, for the silver in them – although probably converted into ingot form for commercial convenience – does not occur in the hack-silver form which is characteristic of truly 'active' hoards.

Hoards of Classes 2 and 3 together comprise fourteen finds, 21% of the total number under consideration. Eleven of these contain only ingots (Class 2) while the remaining three contain combinations of ingots with armrings (Class 3) and, in one case (the find from Marl Valley, Co. Westmeath), with silver pins and a gold finger-ring. Most of the Class 2 hoards contain less than five ingots, though some are exceptionally large. These latter include the find from Blackcastle, Co. Wexford, which contains seventeen examples, and the massive hoard from Carrick, Co. Westmeath, which comprises sixty large ingots weighing a total of just over thirty-one kilograms (Ryan *et al.* 1984, 335–336). With one early exception the coin-dated hoards of Classes 2 and 3 date to the second half of the tenth century, indicating, perhaps

some degree of chronological distinction between Class 1 and Class 2/3 hoards. The general impression is that hoards from Ireland containing ingots may date in the main to the tenth century, though the substantial ingot and ingot-derived hack-silver content of the Class 4 hoard from Dysart Island, Co. Westmeath, which was deposited c. 907, serves as a reminder that ingots were also in circulation during the later ninth century.

The distributional patterns of the Class 2 and 3 hoards (plotted together in Fig. 9d) are of some interest. There is little convergence with the Class 1 ornament hoards, as might be expected, but a significant degree of overlap occurs with the coin hoards – particularly along the northern fringes of the latter's distributional range. This suggests an economic correlation between the uses of coins and ingots, at least in this area. This is supported by the fact that a high proportion (43%) of Class 2 and 3 hoards themselves contains coins.

Class 4 hoards comprise eighteen finds, representing 27% of the total number, and are characterised by the presence of hack-silver alongside complete ornaments and/or ingots. Nine potential permutations and combinations exist for the compositional structures of these hoards (Fig. 8a–i) of which six are actually represented in the find evidence. Under Graham-Campbell's proposals such hoards should be viewed as 'active' in commercial terms, 'for silver bullion will have been so rendered for commercial purposes and not for reasons of status' (1989, 55). It is clear, however, that there are varying degrees of 'activity' discernible in these hoards. At one end of the scale, for instance, is the Class 4g hoard from near Raphoe which consists of six arm-rings, four ingots and only one, rather large, piece of ornament-derived hack-silver, while occupying the other end is the Class 4f find from Dysart Island, which comprises five small ingots, eighty pieces of ingot-derived hack-silver, twenty-nine pieces of ornament-derived hack-silver and forty-five coins (both complete and fragmentary). The Raphoe find, with its solitary fragment, represents a type of hack-silver hoard which is clearly at a considerable remove from the remarkable collection of highly-fragmented silver represented in the Dysart Island hoard, where most of the individual pieces weigh less than 5 grams each.

It is noteworthy, furthermore, that six (33%) of the Class 4 hoards are composed exclusively of orna-

ments combined with ornament-derived hack-silver. Examples of this sub-group, Class 4a, include the hoards from Kilbarry, Co. Cork (Sheehan 1998b, 155) and Cushalogurt, Co. Mayo (Hall 1973). Such composition suggests a likelihood that these finds represent 'passive' Class 1 hoards which were rendered commercially 'active' due to some economic necessity. (Whether these transformations occurred while the hoards were in Irish or Hiberno-Norse ownership is a matter for debate elsewhere). Significantly, as with all but one of the twenty-seven Class 1 finds, each of these hoards is coinless. One of the important points about this sub-group is that, if it is accepted that they are related to the Class 1 finds in terms of their original function (which, it is argued, was social rather than economic), then no less than 50% of the total number of Viking-age hoards from Ireland which contain non-numismatic material may be regarded as having been originally social in function and thereby 'passive' in commercial terms. It is not surprising, therefore, that 'true' hack-silver hoards – the classic manifestation of a developed metal-weight economy – are relatively rare in Ireland.

Various hypothesis may be advanced to interpret Class 4 hoards, with their varying degrees of commercial complexity. Each of them, however, may be regarded as evidence for the use of silver as a means of payment. It is noteworthy, though, that few of these finds may be classified as 'true' hack-silver hoards in the sense in which the term is understood in Scandinavia. Hårdh, for instance, has recently defined hack-silver hoards as finds 'where half or more of the objects are fragments, and where most of the objects weigh less than five grams' (1996, 33). Under these terms some Class 4 hoards, such as Raphoe, Cushalogurt and Kilbarry, are excluded from the definition. Similarly, some of the eight Class 5 hoards, which are composed exclusively of hack-silver pieces, fall outside its terms. This is mainly due to the low-weight limitation imposed by Hårdh's five gram stipulation, which is arrived at on the basis of the comprehensive degree of hack-silver fragmentation that is evident in some southern Scandinavian hoards. These are, however, in the main, chronologically later than the Irish hoards under consideration here. If this weight limitation is raised in the case of the hoards from Ireland, however, then out of the total of twenty-six finds

which contain hack-silver (Classes 4 and 5 combined) a little over half may be regarded as 'true' hack-silver hoards. This represents just over 20% of the total number of hoards from Ireland which contain non-numismatic material.

Hack-silver is usually interpreted as evidence for an intermediary stage of development between a bullion and a monetary economy, the fragmentation of silver ornaments or ingots indicating, perhaps, that the demand for a means of payment was greater than the supply of imported coins retained for use as weighed metal. As such, the phenomenon of highly-fragmented hack-silver may be regarded as the penultimate stage in this process, preceding the introduction of minting (see Hårdh 1996, 84–130, for a full discussion of hack-silver). The evidence from Ireland, however, does not fit neatly into this model. Firstly, there is a general lack of hack-silver hoards there, not least of the highly-fragmented variety. And, secondly, both the chronological and distributional evidence indicate that it may have been the retention and use of imported coins rather than the process of reducing ornaments to hack-silver that resulted in the late tenth-century development of indigenous minting in Ireland.

Dublin's mint was established c. 997, following a period of about fifty years during which large quantities of Anglo-Saxon coins were retained for circulation. Practically all of the coin hoards deposited during this period are found within those parts of the country centred on Dublin, the north Leinster and central midlands region (Fig. 9b; Kenny 1987, 511–514). On the other hand, the distribution patterns of hoards containing hack-silver as a component (Class 4) and of those composed exclusively of it (Class 5) are largely exclusive to this region, with only a marginal degree of overlap evident (Fig. 9e and f). However, these patterns broadly conform to those of the Class 1 hoards (Fig. 9c), suggesting a relationship between hack-silver and ornament hoards rather than with the coin hoards. The fact that only eight out of the total of twenty-six Class 4 and 5 hoards contain coins serve to further distinguish these from the coin hoards. Purely on the basis of the distributional evidence, therefore, it seems unlikely that hack-silver had an important role to play in the move towards monetization in later tenth-century Ireland.

The interpretation of the few hack-silver hoards in

Viking-age Ireland presents problems. Does their occurrence outside of the Dublin sphere of influence indicate that a fledgling hack-silver economy developed in parts of Ireland that were peripheral to the major Hiberno-Norse settlements? The hoards cannot demonstrate this independently, as it is not possible to ascertain whether the fragmentation of their components took place before or after they came into native ownership. If, on the other hand, hack-silver was a phenomenon associated with the economically more sophisticated Hiberno-Norse populations of the coastal towns and the native Irish in their vicinities, then why is there a virtual absence of it in the Dublin/north Leinster region?

Finally, there are the questions raised by the low frequency of occurrence of classic, economically 'active', Scandinavian-type hoards from Ireland. These are characterised by the presence of highly-fragmented hack-silver, ingots, a variety of coins and the absence of complete ornaments. Typically, however, the Scandinavian examples are later in date than the majority of the Irish hoards and, therefore, should not be used for comparative purposes. What is remarkable, however, is that a small number of hoards from Ireland, or with Hiberno-Norse connections, do fall within this category and date to a period in advance of when such hoards become common in Scandinavia. The classic examples in this regard are the finds from Dysart Island, Co. Westmeath, deposited c. 907, and Cuerdale, Lancashire, deposited c. 905 (with its large collection of hack-silver of Hiberno-Viking origin). These hoards, with their highly-fragmented and heavily-nicked hack-silver, may even indicate that Dublin was poised to commence minting during the early tenth century and might have done so were it not for the traumatic events of 902.

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REFERENCES

- Blindheim, C., 1981: Slemmedal-skatten. En liten orientering om et stort funn. *Viking* 45, 5ff.
- Boon, G.C., 1986: *Welsh Hoards 1979–1981*. Cardiff.
- Brooks, N.P. and Graham-Campbell, J.A., 1986: Reflections on the Viking-age silver hoard from Croydon, Surrey, 91ff. in Blackburn, M.A.S. (ed.), *Anglo-Saxon Monetary History: Essays in Memory of Michael Dolley*. Leicester.
- Bøe, J., 1940: *Norse Antiquities in Ireland*. Shetelig, H. (ed.), *Viking Antiquities in Great Britain and Ireland*, Part III. Oslo.
- Doherty, C., 1980: Exchange and trade in Early Medieval Ireland. *Journal of the Royal Society of Antiquaries of Ireland* 110, 67ff.
- Edwards, B.J.N., 1992: The Vikings in North-West England: the archaeological evidence, 43ff in Graham-Campbell, J. (ed.), *Viking Treasure from the North West: the Cuerdale Hoard in its Context*. Liverpool.
- Grieg, S., 1929: Vikingetidens skattefund. *Universitets Oldsaksamlings Skrifter* 2, 77ff.
- Graham-Campbell, J.A., 1976: The Viking-age silver hoards of Ireland, 39ff in Almqvist, B. and Greene, D. (eds.), *Proceedings of the Seventh Viking Congress*, Dublin 1973, Dublin.
- 1988: A Viking-age silver hoard from near Raphoe, Co. Donegal, 102 ff in Wallace, P. and Mac Niocaill, G. (eds.), *Keimelia: Studies in Medieval Archaeology and History in Memory of Tom Delaney*, Galway.
- 1989: The coinless hoard, 53ff in Clarke, H. and Schia, E. (eds.), *Coins and Archaeology. Medieval Archaeology Research Group: Proceedings of the First Meeting at Isegran, Norway 1988*: British Archaeological Reports, International Series, 556. Oxford.
- 1992: The Cuerdale hoard: comparisons and context, 107ff in Graham-Campbell, J. (ed.), *Viking Treasure from the North West: the Cuerdale Hoard in its Context*, Liverpool.
- 1993: A 'vital' Yorkshire Viking hoard revisited, 79ff in Carver, M. (ed.), *In Search of Cult: Archaeological Investigations in honour of Philip Rahtz*, Woodbridge.
- 1995: *The Viking-Age Gold and Silver of Scotland (AD 850–1100)*, Edinburgh.
- Graham-Campbell, J.A. and Sheehan, J., 1995: A hoard of Hiberno-Viking armrings, probably from Scotland. *Proceedings of the Society of Antiquaries of Scotland* 125, 771–778.
- Hall, R., 1973: A hoard of Viking silver bracelets from Cushalogurt, Co. Mayo. *Journal of the Royal Society of Antiquaries of Ireland* 103, 78ff.
- Hårdh, B., 1996: *Silver in the Viking Age: a regional economic study* (Acta Archaeologica Lundensia, 8, no. 25), Stockholm.
- Jennings, J.R.B., 1912: On some ancient coins found in west Waterford. *Journal of the Waterford and South-East of Ireland Archaeological Society* 15, 162ff.
- Kenny, M., 1987: The geographical distribution of Irish Viking-age coin hoards. *Proceedings of the Royal Irish Academy* 87c, 507ff.
- Kruse, S., 1986: The Viking silver hoard from Scotby: the non-numismatic elements. *Transactions of the Cumberland and Westmorland Antiquarian Archaeological Society* 86, 79ff.
- 1993: Silver storage and circulation in Viking-age Scotland, 185ff in Batey, C.E. et al. (eds.), *The Viking Age in Caithness, Orkney and the North Atlantic*. Edinburgh.
- Ó Floinn, R., 1998: The archaeology of the Early Viking Age in Ireland, 133ff in Clarke, H. et al. (eds.), *Scandinavian and Ireland in the Early Viking Age*, Dublin.
- Raftery, J., 1969: A hoard of Viking silver bracelets from Co. Donegal. *Journal of the Royal Society of Antiquaries of Ireland* 99, 133ff.
- Ryan, M., et al. 1984: Six silver finds of the Viking Period from the vicinity of Lough Ennell, Co. Westmeath. *Peritia* 3, 334ff.
- Sawyer, P., 1982: The Vikings and Ireland, 345ff in Whitelock, D. et al. (eds.), *Ireland in Early Medieval Europe: Studies in Memory of Kathleen Hughes*. Cambridge.
- Sheehan, J., 1982: A Viking-age silver hoard from the River Shannon, Co. Clare. *North Munster Antiquarian Journal* 24, 102ff.
- 1984: *Viking-Age Silver Armrings from Ireland*. MA thesis, (National University of Ireland). University College Galway.
- 1991–92: Coiled armrings: an Hiberno-Viking silver armring type. *Journal of Irish Archaeology* 6, 41ff.
- 1992: The Rathmooley hoard and other finds of Viking-age silver from Co. Tipperary, *Tipperary Historical Journal*, 210ff.
- 1998a: Early Viking-age silver hoards from Ireland and their Scandinavian elements, 166ff in Clarke, H. et al. (eds.), *Scandinavia and Ireland in the Early Viking Age*, Dublin.
- 1998b: Viking-age hoards from Munster: A Regional Tradition, 147ff in Monk, M.A. and Sheehan, J. (eds.), *Early Medieval Munster. Archaeology, History and Society*, Cork.
- Wallace, P.F., 1987: The economy and commerce of Viking-age Dublin, 200ff in Düwel, K., et al. (eds.), *Untersuchungen zu Handel und Verkehr der vor- und frühgeschichtlichen Zeit in Mittel- und Nordeuropa, IV. Der Handel der Karolinger- und Wikingerzeit*, Göttingen.
- Wamers, E., 1985: *Insularer Metallschmuck in wikingerzeitlichen Gräbern Nordeuropas*, Neumünster.
- Wilson, D.M., 1976: Scandinavian settlement in the north and west of the British Isles – an archaeological point of view. *Transactions of the Royal Historical Society* 26, 95ff.

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