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## The Form and Structure of Viking-Age Silver Hoards: The Evidence from Ireland

*John Sheehan*

In this chapter some thoughts are offered on those Viking-Age silver hoards which contain non-numismatic material, whether accompanied by coins or not, and on the potential for using the form, composition and structure of such hoards as classificatory criteria. This exercise is largely based on the results of a recent case-study of the hoards of early Viking-Age date from Ireland (Sheehan 2001a).<sup>1</sup> It is hoped that a classificatory approach of this kind, which need not be particular to the hoards from Ireland and which could be applied to hoards from anywhere within the Viking world, may lead towards a new system of categorising and analysing hoards and that, in turn, this may result in a more developed understanding of both the social and economic implications of the data. The chapter concludes with a brief consideration of the phenomenon of hack-silver in Ireland. Prior to outlining the proposed classificatory scheme, and to applying it within the context of the silver hoards from Ireland, it is necessary to provide a brief introduction to these hoards.

### IRELAND'S VIKING-AGE SILVER HOARDS

Ireland's Viking-Age silver hoards, like those from Scandinavia and elsewhere, may be classified along conventional lines into three categories: 'coinless' hoards (those consisting exclusively of non-numismatic material, ranging from complete ornaments and/or ingots to hack-silver); 'mixed' hoards (those consisting of coins combined with non-numismatic material) and coin hoards (those consisting exclusively of coins). Over 130 hoards are on record from Ireland of which a large proportion, comprising some 110 examples,<sup>2</sup> may be assigned to the ninth and tenth centuries and are thus of relevance to the focus of this chapter. Some 53 of these are coinless hoards, 16 fall into the mixed category and the remaining 41 comprise coin hoards.

Prior to considering the coinless and mixed categories some details of the coin hoards should be briefly noted. The types of coins that occur in these finds are predominantly Anglo-Saxon, though Arabic and continental issues as well as those of the Viking rulers of East Anglia and Northumbria are also represented. No less than 75 per cent of the total number of ninth- and tenth-century hoards were deposited after c 940. The majority of the finds are small in size and together they represent an insignificant amount of the overall silver wealth of the period in terms of their bullion value, as has been noted by Kenny (1987, 517). In this respect the evidence of the coin hoards serves to underline and

emphasise the significance of the hoards containing non-numismatic silver for the study of the early Viking Age in Ireland.

Excluding ingots, most of the components of the coinless hoards are diagnostic in form and it is thus possible to suggest regional or cultural attributions for them. When this is done it becomes evident that much of this ornament material is of Hiberno-Scandinavian or Irish Sea origin, with the most characteristic components being arm-rings of Hiberno-Scandinavian workmanship. Several different classes of such have been identified, but in numerical terms by far the most significant of these is the broad-band type (Graham-Campbell 1976, 51–53; Sheehan 1998a, 178–180). The Hiberno-Scandinavian silver-working tradition was centred on Dublin and, to a significantly lesser extent, the Munster towns (Sheehan 1998b, 154–156). In addition to its products, there are also Scandinavian, Baltic, Scotto-Norse and native Irish elements represented in the coinless hoards from Ireland (Sheehan 1998a, 177–194). In most cases these hoards are composed exclusively of complete objects, with hack-silver being present in 19 of the 53 finds of this type. On the basis of the hoard-associated material, combined with the evidence of the related mixed hoards, it is evident that a significant majority of Ireland's coinless hoards were deposited during the hundred years or so between c 850 and c 950.

All 16 examples of early Viking-Age mixed hoards from Ireland were deposited during the tenth century (Sheehan 1998a, Table 6.1).<sup>3</sup> Just over half of these contain hack-silver and most feature either ingots or ingot fragments in addition to the coins. These traits serve to distinguish these hoards from the typical types of coinless hoard, both in terms of their date-range and composition. Nevertheless, a few mixed hoards contain ornaments of Hiberno-Scandinavian type, or hack-silver derived from such ornaments, and this serves to link them to the majority of the coinless hoards.

It is interesting to note that the depositions of only a dozen of the 69 hoards under discussion, that is of the coinless and mixed varieties combined, are clearly datable to after the mid-point of the tenth century. These finds are mainly composed either of 'ring-money' from Scandinavian Scotland or of ingots accompanied by coins and, as such, are not characteristic of Ireland's ninth- and tenth-century hoards in terms of their composition. (It is also of interest that the most recently discovered mixed hoard from Ireland, that from Dunmore cave, Co Kilkenny, which was deposited in the 970s, is also of unusual composition and thus conforms in this sense to several other later tenth-century finds). It can be strongly argued, on the other hand, that at least 40 of these 69 hoards were deposited in the period before c 950, and the minimal nature of this figure is emphasised by the fact that some of the ingot-only hoards will also have been deposited during this period. It is clear, therefore, that the period encompassing the second half of the ninth and the first half of the tenth century is a critical one for the study of Scandinavian activity in Ireland.

This core period is one when Ireland's hoards were frequently composed of Hiberno-Scandinavian ornaments together with, occasionally, ingots and native Irish material, as well as some imported objects from Scandinavia and the Baltic. The latter types of material, however, appear to be insignificant in terms of their quantity when measured against the total amount of Viking-Age silver on record from Ireland, especially when it is recognised that some of the simpler pieces might well be local copies of the imported objects. These imports, however, should be regarded as being illustrative of a much larger volume of material that was presumably consigned to the melting-pot, along with Arabic, continental and Anglo-Saxon coins, to provide the raw material for the Hiberno-Scandinavian silver-working tradition (Sheehan 2001b, 54–57). It is probable that much

of this non-numismatic material arrived in Ireland from the Baltic region along with Kufic coins. These latter have been recognised in 21 hoards from Ireland and Britain, practically all of which were deposited prior to the 940s (Sheehan 1998a, Table 6.2). It appears, therefore, that the import of Arabic silver was predominantly a phenomenon associated with the core period noted above.

As the Viking Age in Ireland progressed, the composition and structure of its silver hoards changed. A gradual but steady transformation is evidenced from the bullion economy of the late ninth- and early tenth-century, as represented by the coinless hoards, towards a more sophisticated economy in which imported coin began to be retained. This transition towards a monetary economy may be represented by the mixed hoards, with their coins and hack-silver. Presumably the retention of coins was for commercial purposes, and it is tempting to associate the mixed hoards with the foundation of the Hiberno-Scandinavian towns in the early decades of the tenth century. From the mid-point of the tenth century onwards the deposition of coinless hoards appears to decline sharply, whereas mixed hoards continue to be deposited; on the other hand, the number of coin hoards rises steadily to predominate. Following the establishment of a mint in Dublin, in c 997, the transformation of Ireland's early Viking-Age bullion economy is largely complete.

## CLASSIFICATION AND CATEGORISATION

Silver hoards have frequently been categorised on the basis of whether or not they contain coins. Within such a system, as has been noted above in the context of the evidence from Ireland, hoards were categorised by Graham-Campbell as 'coin' hoards, 'coinless' hoards and 'mixed' hoards (1976, 46–51). One anomaly which may immediately be discerned with this system is that one of its three classes of find – the 'coinless' hoard – is defined in terms of the absence of a feature which hoards of this type cannot, by definition, actually exhibit. Another limitation in this approach is that it appears to give precedence to coined silver as a defining component of Viking-Age hoards, despite the fact that this is just one of the several types of component that may potentially occur in such hoards. It would be equally illogical to assign precedence to ingots, hack-silver or ornaments in such a manner, as this involves the conscious imposition of a form of value judgment on the material. Neither should the presence or absence of coins be the principal basis of assigning a hoard a particular economic role or status, as coins were variously regarded as bullion or money at different places and times throughout the Viking Age – just as silver arm-rings will have been viewed variously as 'currency rings' or status objects in different economic and social contexts.

The most likely reason for this skew towards coins in the context of hoard definition and classification is that until recent decades in Scandinavia, as well as in Ireland and Britain, it was numismatists who carried out most research on Viking-Age hoards. It could thus be argued that the dominant perspective on hoards and on hoard-related issues was for long a numismatic one. Such a perspective, naturally, will define other phenomena in relation to its own concerns. It is the author's contention that a more accurate impression of the degree of variation in those hoards which contain non-numismatic material, and which together comprise the clear majority of Ireland's Viking-Age hoards, may be arrived at through the application of more developed classificatory methods and, recently,

he has proposed a re-classification of those Viking-Age hoards from Ireland which contain non-numismatic material (Sheehan 2001a).

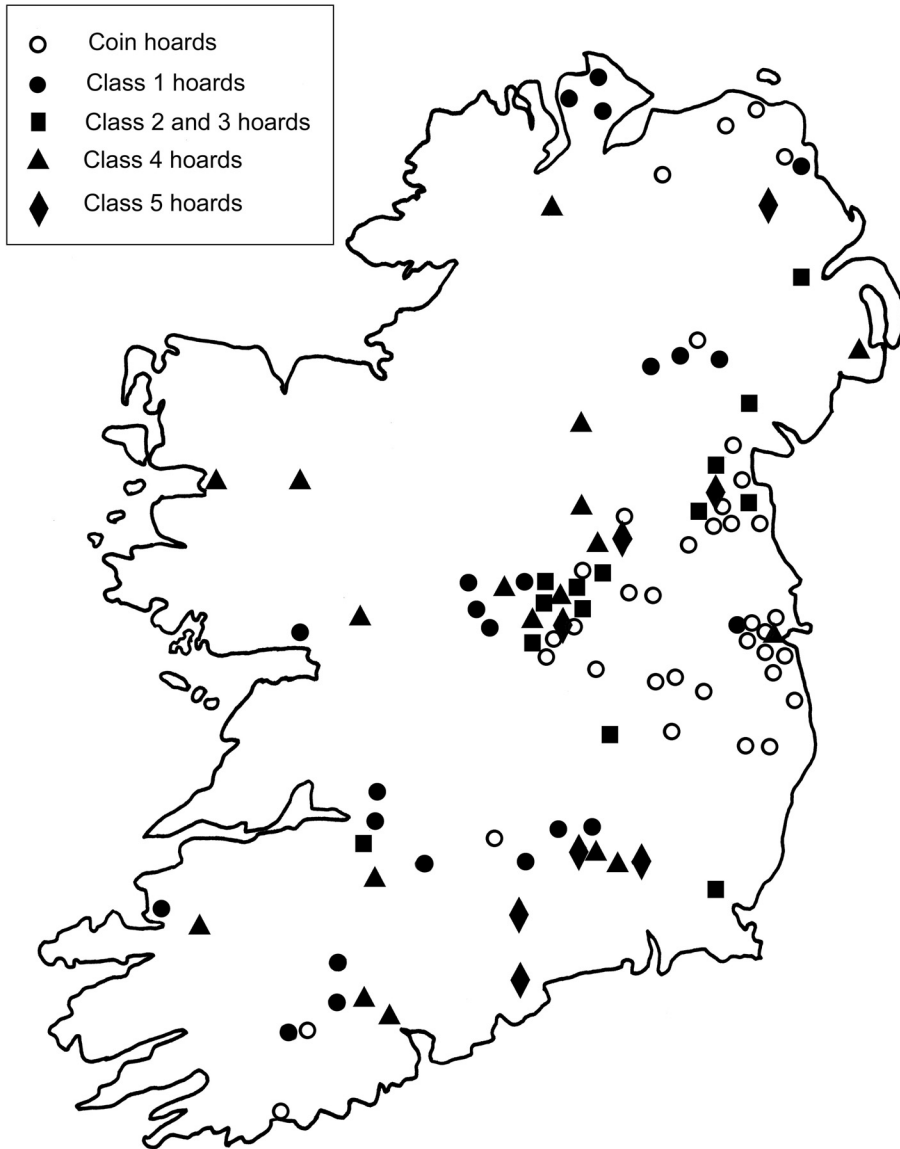
This scheme focuses primarily on the non-numismatic contents of the hoards because it is felt that such an approach allows the varying degrees of complexity present within the hoards to become more evident. The basis for the new classification is the actual composition of the hoards as reflected through the presence, absence or association of the three non-numismatic phenomena that may form part of Viking-Age hoards, namely ornaments, ingots and hack-silver. The presence or absence of coins is not deemed to be particularly significant in terms of this classificatory scheme, as coins could be variously regarded as bullion, ornaments or money during the Viking Age. Nonetheless, an inbuilt aspect of the system is that the conventional coinless/mixed hoard categorisation may be superimposed upon it. When this is done the results actually emphasise the compositional similarities rather than the differences between the coinless and mixed hoards. This, of course, undermines the value of the traditional categorisation and demonstrates how the numismatically driven approach, being focused on a single element, serves to separate what are clearly related phenomena.

It is recognised that there must be a meaning and a purpose, beyond the mere practice, of an empirically defined type of exercise such as that outlined here. And there is, as is indicated by the fact that the five principal hoard categories that emerge from this procedure – when it is applied to the evidence from Ireland – have particular and reasonably discrete distributional patterns (Figure 9.1). This may be taken as an indicator that these groupings are not merely creations of the classificatory process, but that they actually reflect a Viking-Age reality. Furthermore, when the broad contextual information pertaining to these hoards – such as chronology, distribution and find location – is added to their proposed classifications it becomes possible to identify and appreciate their social and economic significance more readily. Thus the proposed system facilitates the examination of the various roles that silver hoards and their components played in both Hiberno-Scandinavian and Irish society.

## THE CLASSIFICATORY SCHEME

This general system of classification focuses on the compositional structure of those hoards, which contain non-numismatic material. It is based on the occurrence, absence or combination of the three principle non-numismatic object-categories found in hoards, namely ornaments, ingots and hack-silver. A fivefold division of the hoards is advanced and the shared characteristics of each of these classes, whether they contain coins or not, are stressed. The non-numismatic components of Class 1 hoards consist of complete ornaments only; those of Class 2 hoards consist of complete ingots only; those of Class 3 hoards consist of a combination of complete ornaments and ingots only; those of Class 4 hoards consist of complete ornaments and/or ingots in association with hack-silver, while those of Class 5 hoards consist of hack-silver only. The principal classes in numerical terms are Classes 1, 2 and 4 (Figure 9.2), which together account for almost 84 per cent of the total number.

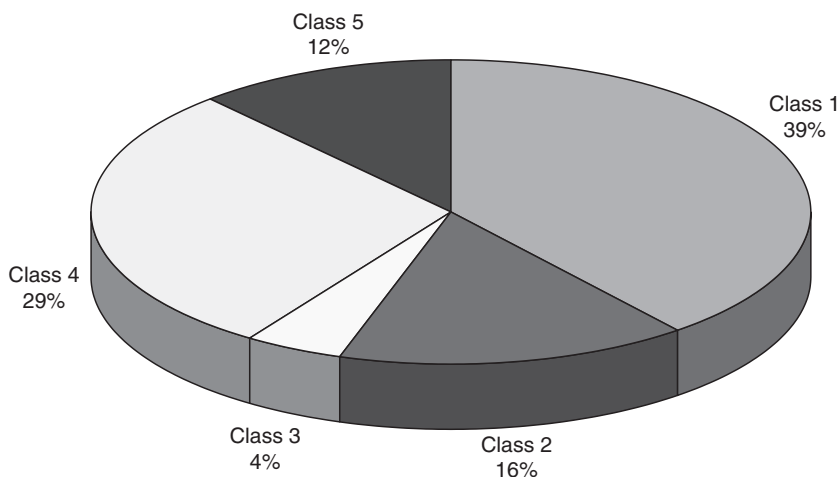
The classificatory system is capable of accommodating further levels of refinement for the purpose of more detailed analysis. Thus, for example, a hoard which contains hack-silver (ie a Class 4 or 5 hoard) may be sub-classified into one of 12 permutations and



**Figure 9.1** Distribution map of the early Viking-Age hoards from Ireland (Classes 1–5).

combinations on the basis of whether the hack-silver is derived from ornaments, from ingots or from both of these, combined with the form of its other non-numismatic contents, if any (Table 9.1). This number of potential permutations and combinations is doubled when coins are also present in the find.

A summary account of the five principal classes of hoards that emerge from this classification, as represented in the hoards from Ireland, is presented below where each



**Figure 9.2** Pie-chart showing the relative proportions of hoards of Classes 1–5 amongst the Viking-Age finds from Ireland.

**Table 9.1** Sub-division of Class 4 and 5 early Viking-Age hoards from Ireland (after Sheehan 2001a, with additions)

CLASS	COMPOSITION	COINLESS	MIXED	OVERALL
4a	Ornaments with ornament hack-silver	6	–	6
4b	Ornaments with ingot hack-silver	–	–	–
4c	Ornaments with mixed hack-silver	–	1	1
4d	Ingots with ingot hack-silver	2	–	2
4e	Ingots with ornament hack-silver	2	1	3
4f	Ingots with mixed hack-silver	3	1	4
4g	Ornaments and ingots with ornament hack-silver	1	1	2
4h	Ornaments and ingots with ingot hack-silver	–	–	–
4i	Ornaments and ingots with mixed hack-silver	1	1	2
5a	Ornament hack-silver	–	1	1
5b	Ingot hack-silver	1	2	3
5c	Mixed Hack-silver	3	1	4

group of hoards is briefly discussed and interpreted. A fuller discussion of the classificatory scheme and its results has been published elsewhere (Sheehan 2001a), and it is intended to publish a definitive account, with complete lists of the hoards and their details, in due course.

### Class 1 hoards

The non-numismatic element of the characteristic type of Viking-Age hoard from Ireland, Class 1, which accounts for some 39 per cent of the total number, is composed exclusively

of complete ornaments. In the majority of cases these ornaments are of arm-ring type and they usually vary in number from only two to four examples per hoard. Typical examples of finds of this type include those from Rooskey, Co Donegal (Raftery 1969), and Rathmooley, Co Tipperary (Sheehan 1992b). Interestingly, only one of the 27 hoards which comprise Class 1 – a poorly recorded find from the west of Co Kilkenny (Lindsay 1842, 125) – contains coins in addition to the ornaments. At least 18 of these hoards are composed in whole or in part of arm-rings of Hiberno-Scandinavian 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-Scandinavian silver-working tradition. In terms of their distribution these hoards are reasonably well scattered throughout the country (Figure 9.1), though few of them occur in the central midlands/north Leinster region where a very large proportion of the coin hoards is found.

The margins of overlap between the respective distributions of the coin hoards and the Class 1 hoards are minimal. Kenny interpreted these two contrasting distribution patterns in economic terms (Kenny 1987, 518). It is probably inappropriate, however, to interpret the Class 1 hoards in this manner. Given their character as finds which consist exclusively of complete ornaments (with the exception of the single example noted in the above paragraph), they are clearly to be distinguished from those hoards, which contain hack-silver and/or ingots (Classes 2–5). The latter should probably be interpreted economically, having the characteristics of silver used as a means of payment in exchange and trade, but ornament-only hoards seem best interpreted in social terms.

Coinless hoards of the general type represented by the Class 1 finds from Ireland have been classified as ‘passive’ in commercial terms by Graham-Campbell, who noted 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’ (Graham-Campbell 1989, 54). More recently Hårdh has interpreted the occurrence of a group of hoards in Western Norway 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’ (Hårdh 1996, 178). Similar interpretations may be applied to the Class 1 hoards from Ireland which may be viewed as archaeological reflections of the various political alliances, such as are testified to in the historical sources, that were formed between the Scandinavians and the Irish from the middle of the ninth century onwards.

### Class 2 and 3 hoards

The non-numismatic elements of Class 2 and 3 hoards, which for the purposes of this chapter are dealt with together, comprise, respectively, finds containing complete ingots only and complete ingots combined with complete ornaments only. Hoards of these two classes together comprise 14 finds, 20 per cent of the total number under consideration. Eleven of this total are Class 2 hoards and the remainder contains combinations of ingots with ornaments, mostly arm-rings. Most examples of Class 2 finds contain fewer than five ingots, although some are exceptionally large. The latter includes the unusual find from Carrick, Co Westmeath, which comprises 60 large ingots and weighs a total of just over 31 kg (Ryan *et al* 1984, 335–336).

In contrast with the Class 1 finds, a high proportion (43 per cent) of Class 2 and 3 hoards contain coins. With one exception the deposition of all of these hoards dates to



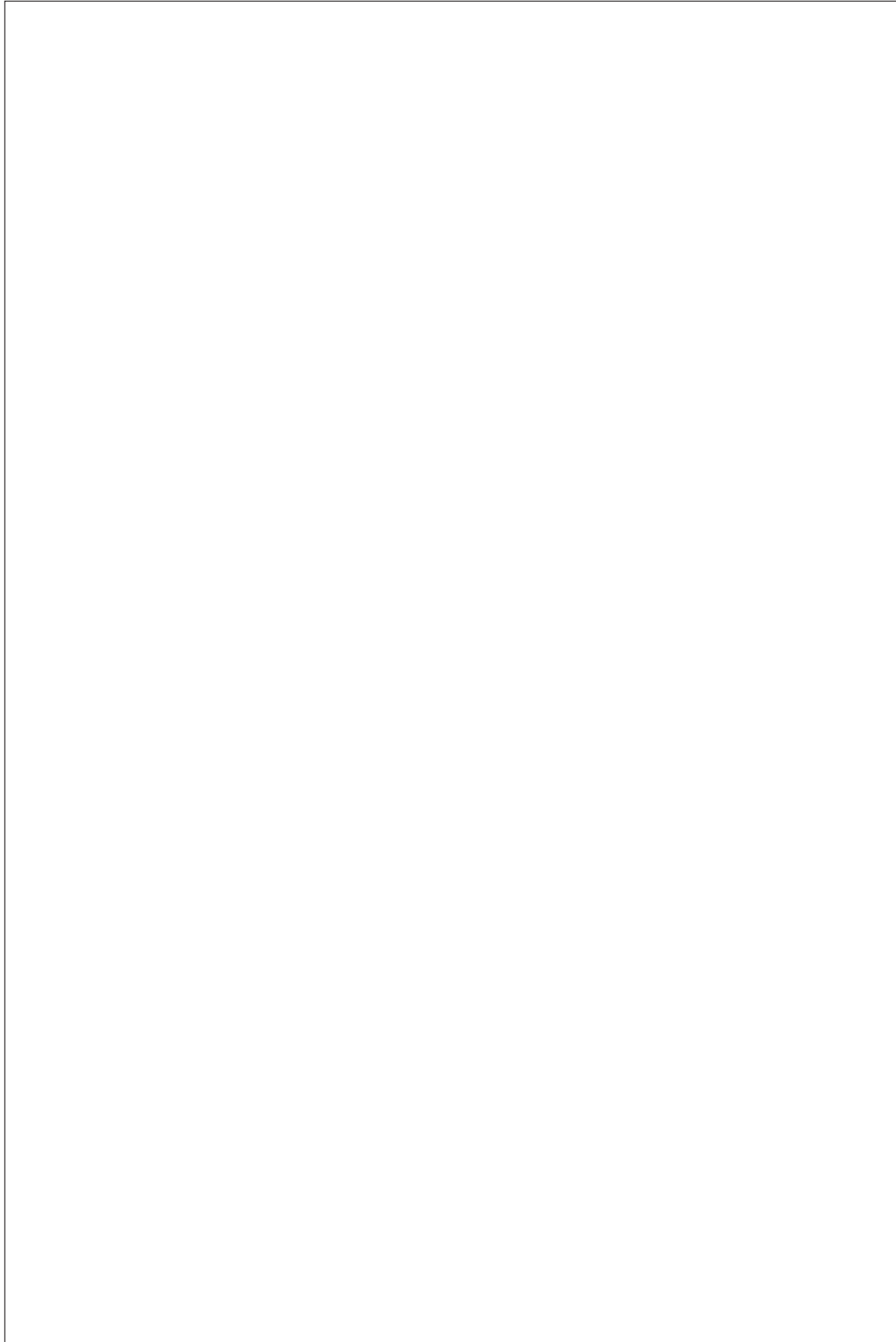
the second half of the tenth century, indicating the likelihood of there being a general degree of chronological distinction between the Class 1 and Class 2/3 finds. A distinction between these hoards is also clearly evident when the distributional patterns of their find spots are examined (Figure 9.1). There is no clear convergence between the Class 1 and Class 2/3 finds, as might be expected, but a significant degree of overlap exists between the geographical distribution of the latter finds and of the coin hoards, especially in north Leinster and the midlands region. This suggests that there may have been some degree of correlation between the use of coins and of ingots during the second half of the tenth century, especially in these areas. This is supported by the fact that, as has already been noted, a high proportion of Class 2 and 3 hoards themselves contain coins.

Class 2 and 3 hoards share an important characteristic with the Class 1 hoards, of course, in that they lack any hack-silver content. The presence of ingots in them, however, indicates that they should be distinguished from the commercially 'passive' ornament hoards as well as from the commercially 'active' hoards of Classes 4 and 5 (which both contain hack-silver). Class 2 and 3 hoards may, therefore, be classified as 'potentially active' in commercial terms as the silver in them, although possibly converted into ingot form for reasons of commercial convenience (or for the manufacture of ornaments), does not occur in the hack-silver form which is characteristic of truly 'active' hoards.

#### Class 4 hoards

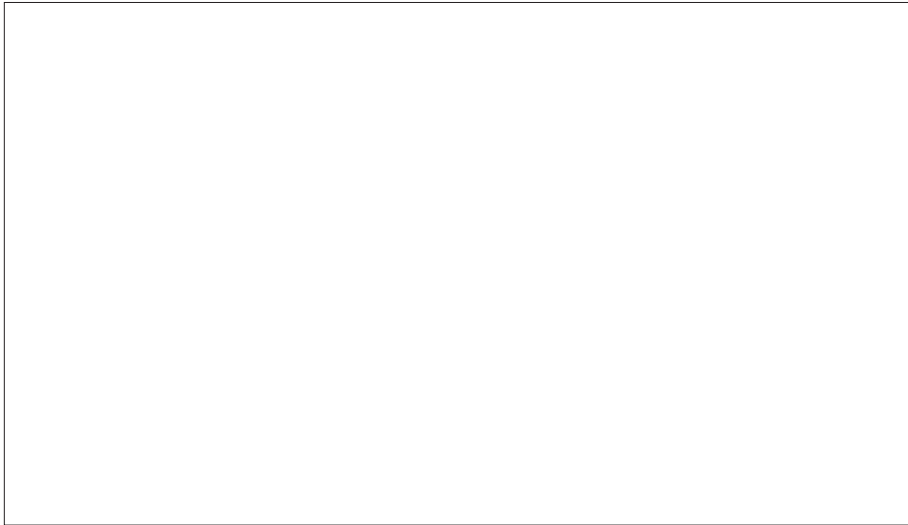
Class 4 hoards from Ireland comprise 20 finds, representing 29 per cent of the total number, and are characterised by the presence of hack-silver alongside complete ingots and/or ornaments. The recently discovered hoard from the excavations at Cloghermore cave, Co Kerry (Connolly and Coyne 2000, 17–18), which consists of two ingots and four pieces of ornament-derived hack-silver (Figure 9.3), is an example of this class. Nine potential permutations and combinations exist for the compositional structure of the non-numismatic elements of these hoards, of which seven are actually represented in the find evidence. Thus there is a good deal of variety evident within the composition of Class 4 hoards. The find from Raphoe, Co Donegal, for instance, with its arm-rings, ingots and a solitary and rather large fragment of hack-silver (Graham-Campbell 1988), represents a type of hoard that is clearly at a considerable remove in terms of its composition and nature from the remarkable collection of coins, ingots and highly fragmented ornament- and ingot-derived hack-silver contained in the Dysart Island (no 4) hoard (Ryan *et al* 1984, 339–356).

It is noteworthy that a sub-group, comprising almost one-third of the Class 4 hoards, consists of finds which are composed exclusively of ornaments combined with ornament-derived hack-silver. Examples of these hoards include those from Kilbarry, Co Cork (Sheehan 1998b, 155), and Cushalogurt, Co Mayo (Hall 1973). Such a distinctive composition suggests the likelihood that these finds represent 'passive' Class 1 hoards which were rendered commercially 'active' in response to some economic exigency. Significantly, as with all but one of the 27 Class 1 finds, each of these hoards is coinless. If it is accepted that these are related to the Class 1 finds in terms of their original function (which, it could be argued, was social rather than economic), then a large proportion 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.



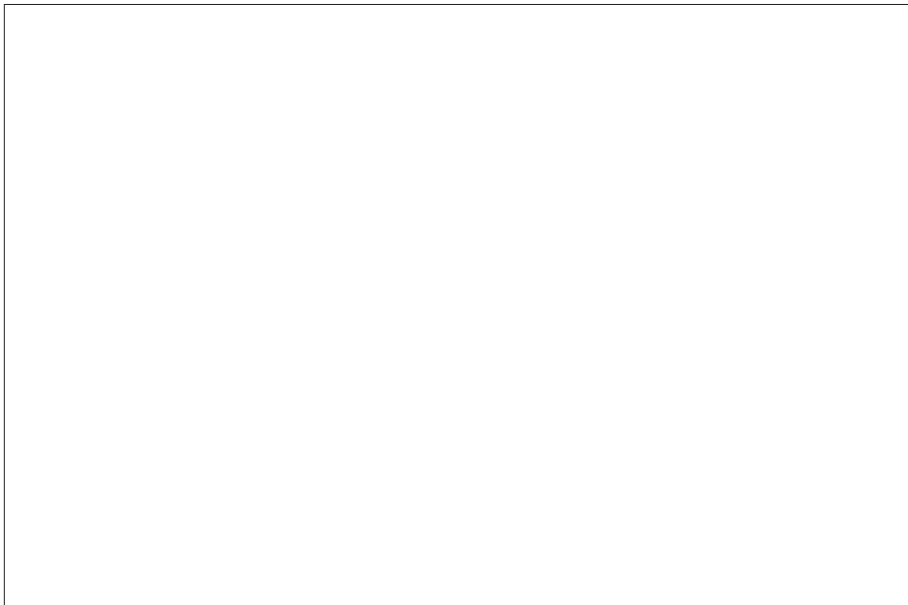
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**Figure 9.3** Viking-Age silver hoard of Class 4, from Cloghermore cave, Co Kerry (University College Cork Audio-Visual Services).



**Figure 9.4** Viking-Age silver hoard of Class 5 from Kilmaccomma, Co Waterford (© National Museum of Ireland).

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Figures 9.4  
and 9.5



**Figure 9.5** Viking-Age silver hoard of Class 5 from 'Co Antrim' (© Ulster Museum).

Various hypotheses may be advanced to interpret Class 4 hoards, with their varying degrees of commercial complexity. Each of them, however, may be regarded to some degree as evidence for the use of silver as a means of payment. 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' (Graham-Campbell 1989, 55). It is clear, however, that there are varying levels of 'activity' discernible in these hoards, as is evidenced by their variety of composition and structure. The fact that coins occur in only four of these 20 hoards is interesting, and may suggest that coined silver did not play an important part in the hack-silver economy. The association of ingots with the coins in each of these four cases may be taken as further evidence for the economic correlation between the uses of coins and ingots, which was noted above in the context of the Class 2 and 3 hoards.

### Class 5 hoards

The non-numismatic elements of Class 5 hoards consist exclusively of hack-silver. Such finds are of quite uncommon occurrence in Ireland, with only eight of the 69 relevant early Viking-Age finds belonging to this category. Seven of these contain ingot-derived hack-silver, some in association with ornament-derived hack-silver, and four of the total also feature coins in their composition. Examples of Class 5 hoards include that from Kilmacomma, Co Waterford, which consists of 10 ingot fragments, a rod fragment and an arm-ring fragment (Sheehan 1998b, 163; Figure 9.4), and the find provenanced only to 'Co Antrim', which is comprised of four arm-ring fragments, two ingot fragments and a single coin (Sheehan 1992a, 52; Graham-Campbell 1993, 80; Figure 9.5).

## HACK-SILVER AND IRELAND

Classic hack-silver hoards are of relatively rare occurrence in Ireland. In fact, it is noteworthy that few of the Class 4 finds may be classified as 'true' hack-silver hoards in the sense in which this phenomenon is understood in Scandinavia. Hårdh, for instance, has 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' (Hårdh 1996, 33). Under these terms many Class 4 hoards from Ireland, including those noted above from Raphoe, Cushalogurt, Kilbarry and Cloghermore, are excluded from the definition. Similarly, some of the Class 5 hack-silver hoards, such as the example provenanced to 'Co Antrim' (Figure 9.5), fall outside the terms of Hårdh's definition.

This exclusion is mainly due to the low-weight limitation imposed by Hårdh's maximum 5 g stipulation. It must be assumed that she arrived at this figure on the basis of the comprehensive degree of hack-silver fragmentation that is evident in some southern Scandinavian hoards. However, these hoards are generally later in date than the hoards under consideration here, and this may mean that the two bodies of evidence are not directly comparable to one other. If the minimum weight limitation in Hårdh's definition is doubled to 10 g in the case of the hoards from Ireland, then about half of the total of 28 finds that contain hack-silver (Classes 4 and 5 combined) may be regarded as 'true' hack-silver hoards. This represents just 20 per cent of the total number of hoards from Ireland that contains non-numismatic material.

Hack-silver may be interpreted in terms of ornaments and ingots being absorbed into commercial circulation because the available quantity of coined silver was insufficient to meet the needs of a metal-weight economy (Lundström 1973, 11). The phenomenon is usually interpreted as an intermediary form of development between a bullion and a monetary economy, with the fragmentation of silver indicating that the demand for a means of making small payments was greater than the current supply of imported coins for use as weighed metal (Hårdh 1996, 86). The occurrence 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).

Unfortunately, however, the evidence from Ireland does not readily conform to this model. First, there is a general lack of hack-silver hoards from amongst the corpus of silver finds and this is especially true of the highly fragmented variety of hack-silver hoard. Second, on the basis of both the chronological and distributional evidence it seems 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 50 years during which quantities of Anglo-Saxon coins were being retained and hoarded. The clear majority of the coin hoards deposited during this period is located within those parts of the country centered on Dublin, the north Leinster and central midlands regions (Kenny 1987, 511–514). On the other hand, the distributional patterns of those hoards which contain hack-silver as a component (Class 4) and of those composed exclusively of it (Class 5) are largely exclusive to these regions, with only marginal degrees of overlap evident (Figure 9.1). However, the patterns of hack-silver distribution generally conform to those of the Class 1 hoards, suggesting that there may have been some form of relationship between the hack-silver and the ornament hoards rather than between the hack-silver and the coin hoards. The fact that only nine out of the total of 28 Class 4 and 5 hoards contain coins serves to further distinguish these types of finds from the coin hoards (and, incidentally, serves to distinguish them even further from the hack-silver hoards from Scandinavia which are only rarely found without coins). Thus, it seems unlikely that hack-silver had a significant role to play in the move towards monetarisation that occurred in later tenth-century Ireland.

The interpretation of those few hack-silver hoards that are on record from Viking-Age Ireland is problematic. Could their occurrence outside of the Dublin sphere of influence indicate that a hack-silver economy began to develop and operate in parts of Ireland that were peripheral, both geographically and culturally, to the major Hiberno-Scandinavian settlements? The hoards cannot confirm this independently, for it is not possible to ascertain whether the fragmentation of their components took place before or after they came into native ownership. On the other hand, if hack-silver was a phenomenon normally associated with the economically more refined Hiberno-Scandinavian populations of the coastal towns, and with the native Irish in their vicinities, then why is there a virtual absence of it in the Dublin/north Leinster region?

Finally, there are questions relating to 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, examples of this type from Scandinavia are later in date than the majority of the Irish hoards and, therefore, should not be used

directly for comparative purposes. What is remarkable, however, is that a small number of Hiberno-Scandinavian hoards, from both Ireland and Britain, do fall within this category and date to a period well in advance of when such hoards become common in Scandinavia. The classic examples in this regard are the finds from Cuerdale, Lancashire, deposited c 905, with its exceptionally large collection of hack-silver of Hiberno-Scandinavian origin (see Graham-Campbell 1987, 339–340), and of Dysart Island (no. 4), Co Westmeath, deposited c 907.

These two classic hack-silver hoards, with their highly fragmented and heavily nicked components, may be interpreted – in accord with the Scandinavian model – as representing an intermediary stage of development between a bullion and a monetary economy. The implication of this is that the *longphort* settlement at Dublin may actually have been poised to commence minting, following York's example, during the early tenth century. Indeed, it might even have done so had it not been for the traumatic events of 902, when the combined forces of Leinster and Brega forced an exodus of the Dublin Scandinavians (AU 902).

## ACKNOWLEDGEMENTS

The author wishes to thank Michael Connolly for granting permission to refer to the hoard from Cloghermore, Denise Maher for preparing Table 9.1 and Maeve Sikora for preparing Figures 9.1 and 9.2.

## Notes

1. The 'early Viking Age' is defined in this context as comprising the ninth and tenth centuries.
2. This total is comprised of the 108 examples listed in Sheehan 1998a (Appendix 1) along with the recently discovered Class 4 examples from Dunmore cave, Co Kilkenny (Andy Halpin pers comm, National Museum of Ireland) and Cloghermore cave, Co Kerry (Connolly and Coyne 2000).
3. The second hoard from Dunmore cave, Co Kilkenny, should now be added to those listed in Sheehan 1998a (Table 6.1). It was deposited during the 970s (Andy Halpin pers comm, National Museum of Ireland). Some details of the find are contained in the *Sunday Times Magazine* (16 July 2000), 46–51.

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