VIKING AGE SILVER HOARDS IN IRELAND

Regional trade and cultural identity

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CHAPTER 1: INTRODUCTION

1.1 Aim of the study

Norse Vikings went to areas such as Scotland and Ireland and their presence led to interaction with the native population. This interaction is known from written sources and is characterized by particular material expressions that can be seen in the archaeological record; such as settlements, burials and hoards. During the Viking Age silver hoards were buried in different places around Ireland. They contain combinations of arm-rings, ingots, hack-silver derived from arm-rings or ingots; and different types of coins. Artefacts such as neck-rings and brooches have also been found in hoards. The geographical distribution of hoards varies and the contents differ. The hoards have been studied in terms of chronology and artefact groups but few studies have examined all Viking Age silver hoards together. My aim is thus to discuss the geographical variation and varying contents of the silver hoards in relation to exchange networks and cultural identity in Viking Age Ireland, c. AD 800 to 1169/70.

Many hoards have been found in association with settlements while others are non-site-specific. Hoards that have been found in association with settlements can be divided into three groups:

1. Ecclesiastical sites (monasteries and church sites)
2. Secular Irish sites (ring-forts and *crannóga*)
3. Hiberno-Norse towns and trading settlements

The hoards from the different contexts will be compared to examine whether there is a difference between the hoards found in Irish and Hiberno-Norse contexts and at the same time highlight the differences between secular and ecclesiastical Irish hoards.

The contents and distribution of the hoards indicate that silver circulated between different sites in Viking Age Ireland: which and what types of sites seem to have been relevant to trade and exchange of silver? Relevant to this are the routes of communication involved. The main focus of the analysis will be economic. However, since there were two distinct ethnic groups present in Ireland in the Viking Age, I am also interested in the social context of the silver artefacts and the exchange of these. The trade in and subsequent use and/or deposition of silver artefacts were elements in the cultural relationship between these to groups.

1.2   Layout of the thesis

The last chapter of the introduction (chapter 1.3) deals in detail with hoards as archaeological source material. Chapter 2.1 examines the research history of silver hoards in general and Irish Viking Age silver hoards in particular, while a summary of how researchers have viewed the relationship between the Irish and the Norse in the Viking Age is given in chapter 2.2. The hoards are described in chapter 3, starting with the historical background to the societies and people that deposited the hoards. The remaining sections of chapter 3 describe the geographical distribution of the hoards (chapter 3.2), the division of hoards based on association with settlements (chapter 3.3) and the artefacts in the hoards (chapter 3.4).

Chapter 4 contains the first part of the analysis, where the hoards are analysed within an economic framework which considers the likely arenas of silver exchange and the role of routes of communication. Chapter 5 provides a theoretical framework for an analysis of Irish Viking Age silver hoards in terms of theories of exchange, cultural identity and fragmentation of objects. Chapter 6 then analyses the Viking Age silver hoards based on the ideas presented in the preceding chapter. The catalogue of Irish Viking Age silver hoards (appendix 1), a list of coin and mixed hoards (appendix 2), and a list of non-site-specific hoards (appendix 3) are attached.

1.3   Hoards as source material

Source-critical aspects are important to consider when analysing hoards. The discovery and recording of hoards have a great impact on our understanding of them but they have nothing to do with the hoards and their role in Viking Age Ireland. Modern-day development such as the building of railways and roads tend to uncover hoards and this means that regional differences in development intensity will bias distribution maps of hoards (Gerriets 1985:122). At the same time many hoards in Ireland were discovered by antiquarians and these figures were not necessarily equally active in all parts of Ireland. Thus it is likely that more hoards will be discovered in the future. Even if development and antiquarian activity affect maps of the geographical distribution of hoards in counties and provinces, depositional differences could also explain this distribution. An example is the difference in number of hoards found in Carlow and Kildare; two neighbouring counties in the Leinster province. Five hoards have been found in Kildare while no hoards have been found in Carlow. I find it unlikely that development intensity has been fundamentally different in the two counties so the difference in hoard numbers almost certainly reflects Viking Age depositional activity. I

consider distribution maps to reflect the depositional pattern of Viking Age Ireland, although they do not present a complete image of this activity.

A hoard can be defined as a deposit of objects in a specific location, and at least two objects are necessary to constitute a hoard (Chapman 2000:5,112). Following this definition major hoards with hundreds or thousands of artefacts are grouped together with small assemblages of two artefacts and often given the same interpretation. This wide range in contents and size of hoards is evident in the Irish Viking Age hoards: they vary from depositions like the hoard from Knowth, Co. Meath containing 2 coins to the Carrick hoard from Co. Westmeath containing 60 ingots. Another issue is the distinction between two artefacts, by definition a hoard, and one artefact. To include single finds in my study would be too time-consuming, but it is important to highlight the somewhat artificial distinction between a small hoard and one single artefact (Chapman 2000:46).

Behind our attempts to interpret hoards is the idea that they must reflect deliberate practice. It is unlikely that gold and silver was lost or thrown away to such an extent, so there must be some conscious intention behind the deposition of such valuables. Evidence to support this is provided by the way in which the hoards were deposited in carefully chosen localities in the landscape, either in wetland areas or in other places in the landscape (Hedeager 1999:242; Ó Floinn 1998:155).

CHAPTER 2: RESEARCH HISTORY

2.1   Previous research on silver hoards

Viking Age hoards have in general been believed to be accumulated through trade (Thurborg 1988:302). The interpretation of hoards has had a wider focus since the 1950's, but the focus on hoards as economically significant is still very much present. Hack-silver and coins have been seen as treasure, while ornaments have been interpreted differently, and in this way the difference in contents of the hoards has been interpreted as reflecting economic conditions. An example is the occurrence of hack-silver in hoards; seen to represent a strong circulation of silver and an economy close to becoming a fully-fledged monetary economy (Hårdh 1996:84-86,91; Zachrisson 1998:18). This interpretation is evident also in research on Irish Viking Age silver hoards: "the nature of a vibrant *Gewichtsgeldwirthschaft* or bullion economy necessitated the regular reduction of ornaments to hack-silver" (Graham-Campbell and Sheehan 1995:777); "hack-silver consists of the cut-up fragments of ingots and ornaments, used as small change" (Graham-Campbell 1982:38). Hoards have also been interpreted in terms of "ritual" investments: as votive offerings not meant to be used again. These can be contrasted to the economic depositions, seen as temporary stores that could be retrieved. In the latter case, recovery of the artefacts was somehow prevented (R. Bradley 1988:249; Samson 1991:130).

More recent approaches to Viking Age hoards draw on theories of economic anthropology. Ross Samson (1991:131) sees the hoards as a part of competitive gift-giving. This means that the hoards were not permanent depositions but part of assembling wealth. Thus hoards of different sizes can be explained differently. Small hoards could be planned donations of important farmers or they could represent the initial stages of accumulation. Large hoards can be those of chieftains or petty kings. The hoards were buried to be kept secret and at the same time their owners would avoid gift requests. Another reason for why the hoards were not recovered could be that they were a means to preserve personal success in the afterlife, a theory that can be supported by the Norse sagas. There is no mentioning in these sagas of artefacts ever being recovered again. Instead the deposition of wealth seems to be a way to actually preserve it (Gaimster 1991:118).

The deposition of precious metals in the Viking Age has recently been linked to negotiation strategies between ethnic and cultural groups in certain areas: Northern Norwegian hoards have not been found within settlements and are rarely located in Norse or Sámi core areas. Instead, the hoards correspond with the proposed Sámi-Norse boundary. It is therefore likely that the hoards were deposited in possible meeting places for the two groups. The hoards contain a combination of western (Scandinavian) and eastern arm- and neck-rings (Olsen 2003:23), and thus it has been agreed that the hoards may have functioned as a symbolic signing of the agreed territorial rights (Olsen 2003:24; Spangen 2005:35). At the same time the hoards could reflect that the Norse population in the border areas had a strong desire to be associated with southern areas of Norway and at the same time show links with eastern areas. This view can be supported by the relative lack of hoards in Iceland, possibly indicating an unchallenged Norse identity in contrast to the border areas in northern Norway (Spangen 2005:87,88). In this way the deposition of hoards can be explained as part of the communication between groups and therefore a reflection of cultural identity. The situation in northern Norway is relevant for the Irish Viking Age in that both areas were populated by two distinct peoples and their cultures. This does not, however, imply that the communication between the groups would have been the same in the respective areas.

Up until 1976 the only available survey of Irish Viking Age silver hoards was that of Johs. Bøe (1940): he compiled lists of gold and silver artefacts believed to have been of Viking Age date such as arm-rings, ingots and penannular brooches. He also described a "treasure trove" from Carrowmore in Co. Donegal: a hoard that contained five arm-rings (Bøe 1940:122). Another central work is that of Michael Dolley (1966): a presentation of the Hiberno-Norse coins in the British Museum, including many coins from Irish Viking Age hoards. In 1976 the number of known hoards containing non-numismatic material was 36. Since 1976 more hoards have been added to the list, and the number of discovered Irish Viking Age hoards totals more than 130 from the entire Viking Age, c. AD 800-1170 according to Sheehan (1998a:167; 2001:52). Along with an increase in the number of hoards there has been an increase in number of artefacts from the hoards, an example is Hiberno-Norse arm-rings. Over 60 examples were known in 1976 (Graham-Campbell 1976:51), and 100 examples from 23 hoards were known in 1998 (Graham-Campbell and Sheehan 1995:776; Sheehan 1998a:178).

There have been many explanations for the depositions of Irish Viking Age silver hoards, and some researchers have tried to link particular hoards to historical events. An example is the

hoard of Carolingian coins from Mullaghboden, Co. Kildare, which has been seen in connection with Norse raids in France in the mid 9th century (Dolley 1960-61:57,60). This is an example of a general trend in hoard research where the focus is on the artefacts in the hoards rather than seeing the hoards in relation to settlement and society in Viking Age Ireland.

James Graham-Campbell has seen the hoards as evidence of the wealth of the Scandinavian settlements in Ireland. In his opinion the growing number of coin hoards from AD 920 onwards could either result from large quantities of silver being introduced by the Scandinavians or from coins being conserved by the Scandinavians for use in trade (Graham-Campbell 1976:52,54). In retrospect there is no reason why the two explanations should be mutually exclusive. The silver was introduced by the Norse coming to Ireland end even though many of the hoards most likely were deposited by the Irish there is no reason why some of them should not have resulted from trade. That many hoards result from Irish ownership has been argued by more recent researchers (Ó Floinn 1998:159; Sheehan 1998a:173). Michael Kenny (1991:115) has argued on the basis of the concentration of hoards in western Míde that the hoards result from trade links with Dublin in the Viking Age. He thinks it is likely that also the Irish used coins when necessary and in this respect he follows Marilyn Gerriets (1985:121,122), who also believes that the Irish used coins and claims that the Irish coin use has been downplayed by many researchers.

Irish Viking Age hoards have also been seen as a result of Irish raids on Dublin, but Gerriets (1985:122,133) rejects this idea on the basis that most hoards correlate poorly with such recorded raids. Some of the hoards could result from these raids but the majority of hoards found in Irish areas do not. Inter-Irish struggles are seen as a more likely explanation for many of the hoards found on Irish territory: for instance the rivalry over the kingship of the southern *Uí Néill* dynasty in the 950s could have resulted in hoards such as the one found at Knowth in Co. Meath (Gerriets 1985:130). This is an explanation that gives a clue to the actual deposition of the hoards rather than how the artefacts in the hoards were obtained.

All in all little research beyond examining the contents of the Irish Viking Age hoards and analysing them economically has been done. Harold Mytum (2003a:114-116) has postulated that current work on silver hoards can contribute to the largely unexplored question of how material culture operated in the definition and redefinition of ethnicity in early medieval

Ireland. According to Mytum (2003a:118) the research on hoards has had a focus on the hoards themselves, rather than the silver bullion and artefacts as active items of material culture. Norse-Irish interaction would have been mostly associated with economic interaction – an activity not often recorded in the documentary sources.

To sum up, the economic interpretations of Viking Age silver hoards have been dominant but "ritual" explanations of the hoards have also been presented. Later research has interpreted the hoards as resulting from gift-giving and assembling wealth and even as part of a negotiation strategy between different cultural groups. The Viking Age silver hoards in Ireland have been linked to known historical events, such as Norse raids in France or Irish raids on Norse settlements in Ireland. The latter explanation could be the cause of some hoards but does not explain all the hoards from Viking Age Ireland. Norse wealth has been seen as another major explanation factor but research has proved that many of the hoards were in fact deposited by members of Irish tribes. This calls for an assessment of the relationship between the Irish and the Norse.

2.2 Irish-Norse relations

As a field of research, ethnicity and cultural identity within and between groups in Viking Age Ireland is relatively undeveloped within archaeology (Mytum 2003a:114-116). There is therefore a need of a re-evaluation of the Viking and Irish relations (Kenny 1991:111) as the dominant position has been a focus on the devastating effects of Norse raids on Irish society. James F. Kenney (1979[1929]:7,8,9) argued that the Norse raids were a constant menace to Irish civilization. The effects were seen as especially negative for the Irish church since monasteries were objectives of attack: the written sources report that Armagh was attacked nine or ten times, Clonmacnoise ten or eleven times, Glendalough four times and Kildare sixteen or seventeen times. Many monasteries disappeared or declined drastically but others actually grew; Armagh, Clonmacnoise, Derry, and Lismore are good examples. Despite pointing out the struggle the Irish must have underwent during the Viking raids, Kenney acknowledged that the Vikings intrusions made Ireland part of international relations of trade and commerce. He also saw the monasteries as foci of population and wrote that some of the larger monasteries had thousands of inmates (Kenney 1979[1929]:293).

D. A. Binchy (1962:119) saw the Norse incursions as having a shattering effect on the Irish society. His article, "The Passing of the Old Order", is illustrative of his view of the Viking

influence. Binchy acknowledged that large ecclesiastical settlements had a certain degree of administration and an extensive population, but he saw urbanism as something brought by the Vikings (Binchy 1962:122). Ireland in the early medieval period might have looked geographically isolated, but this was not the case. There were already contacts with Roman Britain in the form of trade and commerce, resulting in new technology and ideas coming to Ireland in the Early Iron Age (Doherty 2001:30). A theory put forth by Binchy (1962:123,126-127) emphasized that the politically fragmented Ireland made it difficult for the Vikings to conquer large areas. The Vikings were forced to found small settlements along the coast and focus on trade, a trade that sparked off urbanism in Ireland. In recent research the Norse settlements are seen as dependant on production surplus from the surrounding areas: the towns were part of a network of supplies and redistribution (Downham 2004:89-90).

Irish pre-Viking society was previously seen as archaic, and there was a focus on the changes in life and society brought by the Norse, now the view on the Viking achievement has been somewhat adjusted. The Vikings did not transform Irish society, but they were a catalyst in this transformation (Doherty 2001:29,35). A key article on Irish-Norse relations and Norse settlement in particular is that of John Bradley (1988). Here he touches upon aspects such as Norse rural settlement and the relationship between the Hiberno-Norse towns and their surrounding hinterlands.

The ethnic and cultural relationship between the Irish and Norse people has been treated with little scholarly attention but early researchers were aware of the mixture of ethnic groups that took place in Viking Age Ireland. This is expressed in a race-conscious way by H. C. Lawlor, the excavator of the monastery at Nendrum in Co. Down (fig. 3), where Vikings were believed to have been present:

> *South of the church ruins were two circular mounds, slightly depressed in the centre ; on examination it transpired that these mounds were the remains of two heaps of skeletons […] all but two skulls were of the average type prevalent in ancient Ireland, at a period before the population had become to any great extent mixed with races differing from it in any marked craniological characteristic. […] The two skulls excepted from the rest […] were of decided Scandinavian or Nordic type, of large, strongly built men in the prime of life* (Lawlor 1925:73)

The Norse settlement in Ireland would have led to new cultural and ethnic relations but this is rarely touched upon in Viking Age research. John Bradley (1988:68) has divided the Irish

Viking Age into two phases of cultural identity but few other works go beyond the study of economic relations between the Irish and the Norse (see above: chapter 2.1). The cultural encounters in Viking Age Scotland and England, on the other hand, have been the subject of increasing interest (see Barrett 2004; Hadley and Richards 2000:3). It is hoped that also the cultural contact between the Irish and the Norse will be studied in the same way.

CHAPTER 3: IRISH VIKING AGE SILVER HOARDS

Fig. 1: Ireland's provinces and counties (after Edwards 1990:2)

3.1   Historical background to the material

The Norse Vikings who came to Ireland met a complex society both in terms of settlement and political relations. Thus, political organization in early medieval Ireland will form the first part of this section, followed by a survey of secular and ecclesiastic settlement. The latter will be emphasized as the monasteries were important in the early Irish economy.

Surviving documentary evidence from early medieval Ireland indicates a politically fragmented society. The basic territorial unit was the tribe and more than 150 petty kings probably ruled at a given time between the 5th and the 12th centuries. Some kings controlled three or more tribes while even greater kings controlled provinces. The kings were on top of

the social hierarchy and ruled over the nobles, *flaithi*; the non-noble freemen; and the *dóer*, those who did not enjoy independent social status (Kelly 1988:3,11,17-18,26-27; Ó Corráin 1972:28,42-43). The main gatherings/assemblies described in the law-texts are the *airecht*, a legal assembly, and the *óenach*, a regular assembly for political, social and perhaps commercial purposes (Binchy 1941:102, 1962:121-122; Doherty 1980:81; Kelly 1988:4). The above should make it clear that, despite beginning centralization, there was no Irish unity in terms of politics. This is an important factor for the distribution of hoards.

Early medieval Ireland was largely rural and besides the large monasteries the settlement pattern consisted of farmsteads and other non-nucleated settlements (Edwards 1990:6,9; Ó Corráin 1972:49). Typical early medieval Irish settlements were ring-forts and *crannóga*. A ring-fort was an enclosed homestead and these enclosed settlements have been associated with the land-owning members of a client-based society, groups that were likely to be involved in alliances, tribute and gift-exchange (Edwards 1990:11,12; Ó Corráin 1972:49; Warner 1988:50). Ring-forts are the most common field monuments in Ireland and must have been the most abundant settlement type (Edwards 1990:11,34; Fredengren 2002:4,12,214-215). 45 000 ring-forts are known in Ireland and they are concentrated in Sligo, Roscommon, Clare, Limerick and in a broad belt stretching from Lough Neagh in Ulster to Galway. Leinster has yielded few ring-forts in comparison (Stout and Stout 1997:47, see fig. 1). The *crannóg* is another settlement form and have been described as a man-made island or lake-dwelling. Like the ring-forts *crannóga* come in different types and sizes: some are high-status sites with a rich material culture while others are smaller and yield a less extravagant archaeological assemblage (Fredengren 2002:11). About 1000 *crannóga* have been found in Ireland; mostly in the northern half of Ireland (Stout and Stout 1997:49). Ring-forts and *crannóga* are often recorded while settlements with little or no sign of enclosures are much harder to detect. Many dispersed homesteads would have been in existence in the early medieval period and structures such as round houses and huts have been found in connection with field systems. It is possible that these open and partially-enclosed settlements were the homes of those who did not enjoy free status, in contrast to the inhabitants of ring-forts and *crannóga* (Edwards 1990:44-47; Ó Corráin 1972:50).
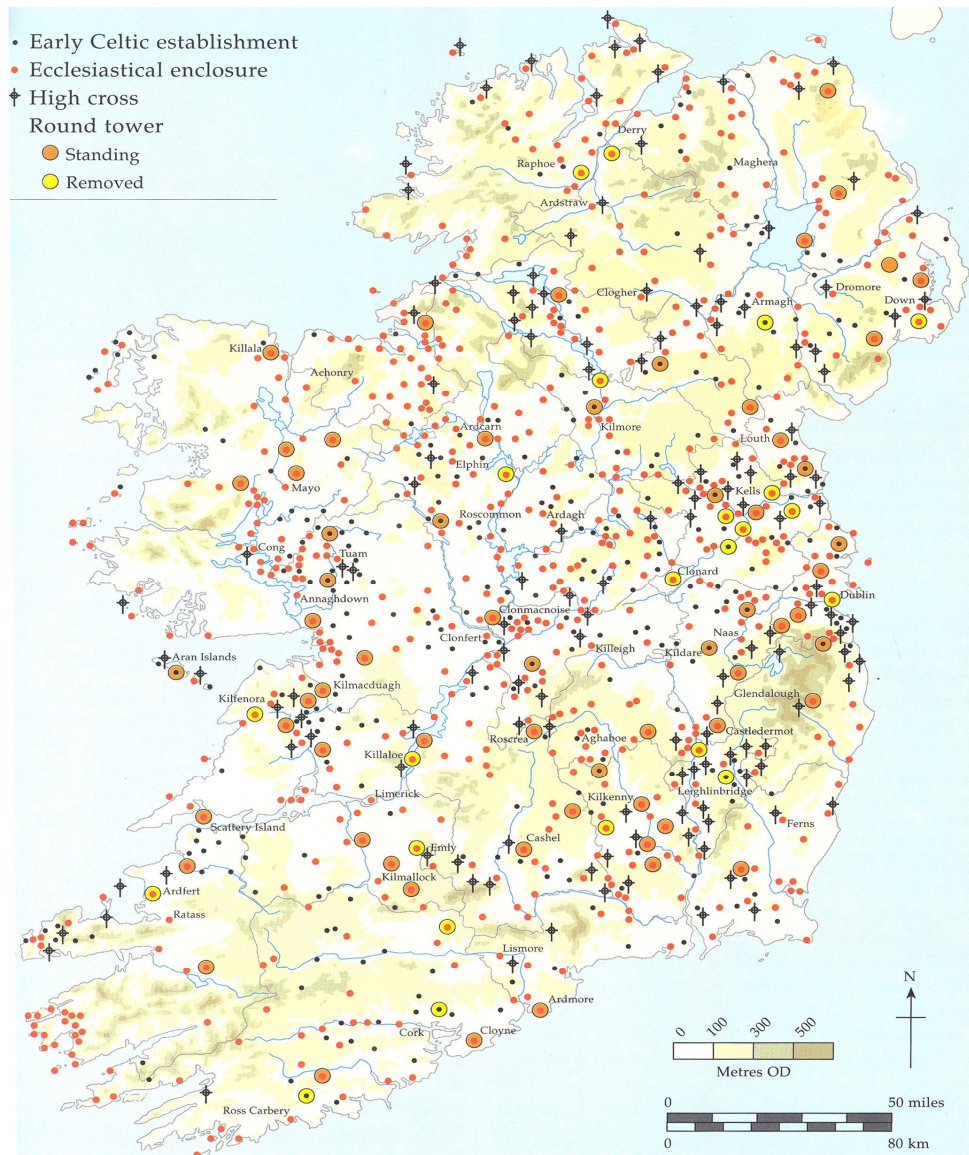
Fig. 2: Ecclesiastical sites in Early Christian Ireland (after Stout and Stout 1997:51)

The Christianization of Ireland had already begun in the 5th century and in subsequent centuries many monasteries and church sites were founded (fig. 2). The written sources indicate that by the 7th century churches and monasteries controlled literacy and man-power and used technical innovations like the heavy plough and the horizontal watermill. This made monastic settlements able to produce a surplus, especially of grain. The Church could even have been the <u>only</u> organization that could produce a surplus. This surplus could be produced because the populations in the monasteries had grown big and represented all grades of society (Doherty 1985:55; Ó Corráin 1972:87). The monasteries' roles as population foci should be emphasized and is important in the recognition of monastic markets: the presence of many people may have created a need for markets at these sites. The influx of various people stimulated local exchange and created a need for a market-place. *Óenach* (see above:

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this chapter) at monastic sites are mentioned in the written sources already from the late 8th century onwards and later on *margad*, markets are described as well. The word *margad* is an Old Norse loan-word that probably came into Irish in the 10th century (Doherty 1980:81, 1985:66-67). Many researchers refer to markets in the large Irish monasteries (de Paor 1976:31; Doherty 1980:81; Ó Corráin 1994:28; Sheehan 1998a:175,176), but since few monastic sites in Ireland have been excavated it is difficult to estimate the size and layout of these sites. Excavations and surveys at Clonmacnoise together with documentary evidence from Armagh and the excavation of a monastic site at Whithorn in Scotland provide the best evidence for the layout of ecclesiastical sites in Ireland (Bradley 1998a:43; Murphy 2003; Mytum 2003b).
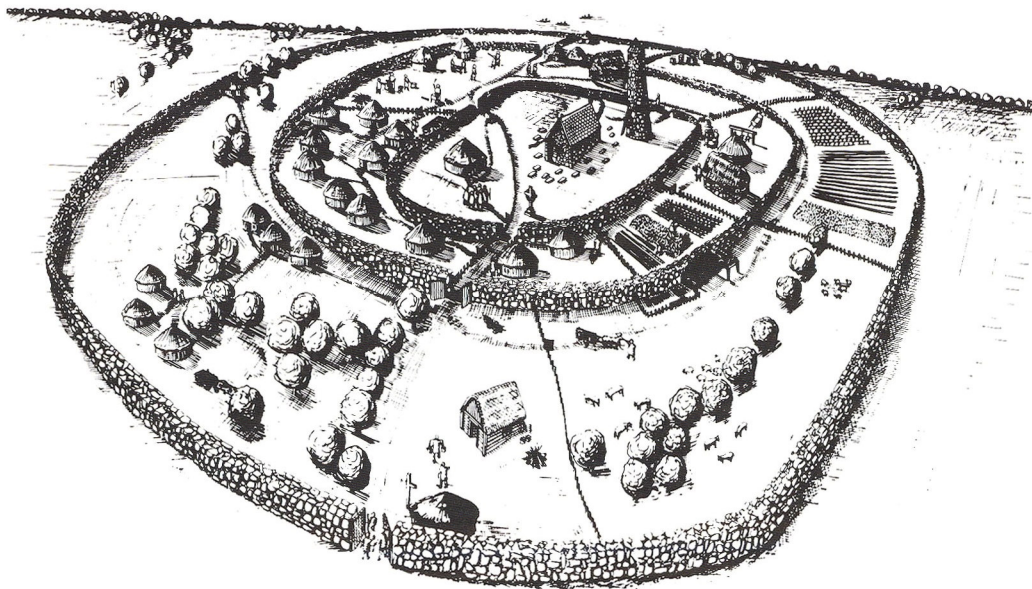
Fig. 3: Reconstruction of the monastery at Nendrum, Co. Down (after Mallory and McNeill 1991:206)
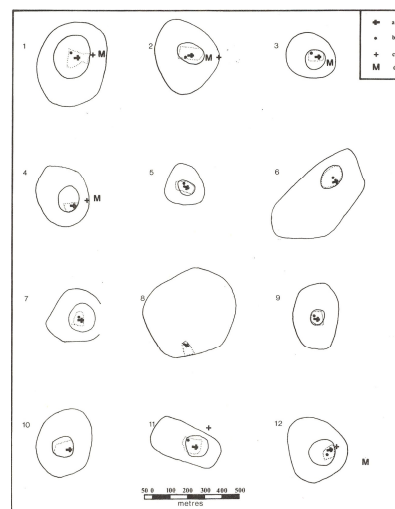
Fig. 4: Proposed enclosures of selected monastic sites (after Swan 1985:98)

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The layout of the ecclesiastical sites varied but they often had a double enclosure: one large outer enclosure and one smaller inner enclosure with churches, a burial ground, high-crosses, cross-slabs and cross-fragments (Swan 1985:77, see fig. 3 and 4). The enclosure was an attempt to separate the ecclesiastical and lay quarters of the complex (Henry 1970:35). The area surrounding the monastery was called the "suburbana" and was considered part of the monastery (Doherty 1985:59). In some cases the area around the entrance to the monastic enclosure in the east or southeast of the site became the site of a market-place. The cross marking the entrance to the monastery became identified as the market cross, and further development of the sites were often in this area (Swan 1985:98,99-100). Some high-crosses at monasteries are actually referred to as "market crosses" in the written sources in the Norman period (after AD 1170). The crosses themselves were made in the pre-Norman period, and the market places could also predate the Norman period, at least in major monasteries such as Armagh, Kells and Glendalough (Doherty 1980:83). No one monastery yields enough evidence to assign a proto-urban status to it, but the evidence from multiple sites put together suggest that sites like Armagh, Kells, Clonmacnoise, Derry, Clonard, Downpatrick and Kildare were proto-urban from the 10th century onwards (Doherty 1985:68). Not all researchers agree with the idea of "monastic towns" or market crosses (Swift 1998; Valante 1998), but I have included these concepts because they can explain pattern in the ecclesiastical hoards (see chapter 3.3.1 and 4.3.1).

The survey of early medieval Ireland that has been described above is an important backdrop to the Norse intrusions in the country. The first known Norse raids in Ireland took place in AD 795 and many raids were recorded in the early 9th century in the provinces of Leinster and Ulster (see fig. 1 and 5). The annals do not provide a complete picture of Norse raids and the written accounts were coloured by the understandable bias of the authors: they record conflict rather than more peaceful encounters that may have taken place alongside raids. Norse activity in other parts of Ireland increased in the 830s and their first known semi-permanent bases, *longphuirt* (sing. *longphort*), were established shortly afterwards (Downham 2004:74,87; Ó Cróinín 1995:234,236,238; Sheehan 2001:51). In many cases the Norse bases were set up in areas with an already existing settlement and that means that the camp could take on any shape, depending on the pre-existing site. This in turn means that a *longphort* can be hard to recognize. Certain elements could have constituted a *longphort* site such as defensive enclosures, graves in and around the site along with traces of crafts and dwellings, like post-holes or hearths. Many bases are mentioned in the written sources, such as Dublin;

Linn Dúachaill (Annagassan, Co. Louth); Cork; Limerick; Lough Ree (on the river Shannon); Indber Dee (Arklow or Wicklow, Co. Wicklow); Narrow Water (Co. Down); and Strangford Lough (Co. Down) (Ó Floinn 1998:162; Simpson 2005: 22-24). Few *longphuirt* have been excavated, but the archaeological investigations at Woodstown by the river Suir near Waterford have revealed a settlement that may have been a *longphort* (Downham 2004:77; Harrison 2007:46).

Fig. 5: Norse activity in the 9th and 10th centuries (after Duffy 2000:25)

One of the first permanent Norse bases was established in AD 841 in Dublin: written sources attest to Norse settlement here, as do burials and the excavations in and around Temple Bar in Dublin City Centre. The knowledge of the character of 9th century Dublin is far from complete, but excavations have revealed streets, houses and a large assemblage of artefactual evidence. The structures and the artefacts indicate that 9th century Dublin was a permanent settlement where market activity and manufacture took place – still the exact location of the *longphort* is debated (Harrison 2001:63; Simpson 1999). In AD 902 the Vikings were expelled from Dublin by the kings of Brega and Leinster but the Norse returned in AD 917 (Ó Corráin 2001:19,21-22). The archaeological material from the 10th century settlement in Dublin has resulted in knowledge of houses and other structures, diet, trade and commerce (Wallace 1985:103, 1987:200).
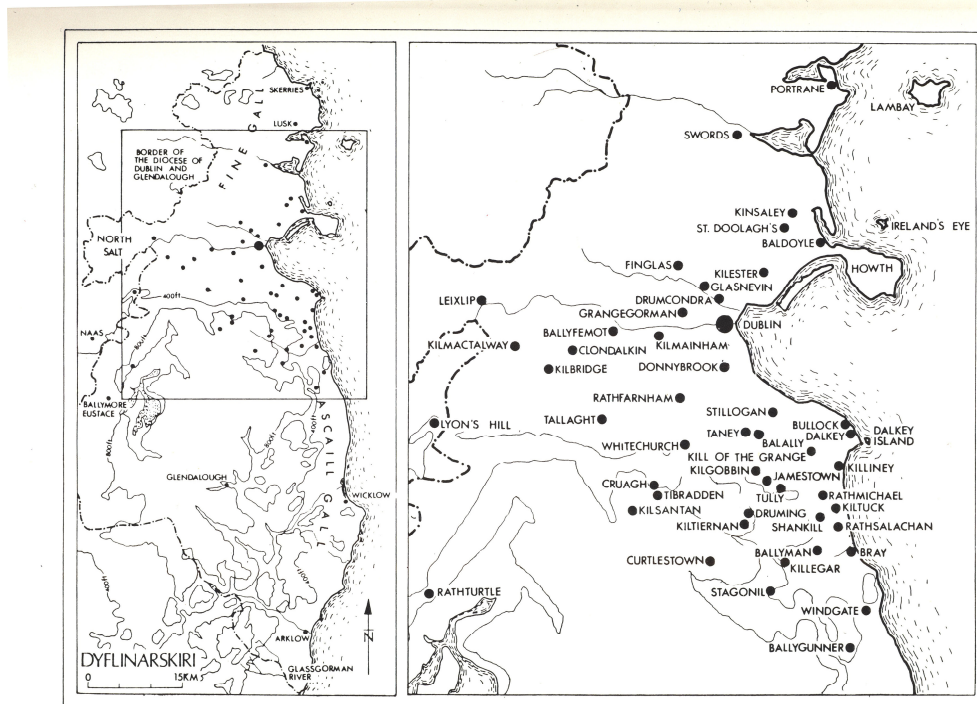
Fig. 6: Dyflinarskiri (after J. Bradley 1988:55)

Dublin stood at the centre of a wide exchange network consisting of both long-distance and local trade: the town exported some manufactured goods like ringed pins, but raw materials like agricultural products and slaves were more important (Valante 2000:69,81; Wallace 1987:202). Surrounding Dublin was its immediate hinterland, called *Dyflinarskiri* in the later Scandinavian sources (see fig. 6). In the 10th century this area probably included all of modern Co. Dublin and parts of Wicklow, north Wexford, Kildare and a strip of the coast between Arklow and the river Nanny. *Fine Gall*, the northern area under Dublin control stretched from the Liffey to north of Skerries, and corresponds to the northern part of today's Co. Dublin. The extent of this rural hinterland has been estimated using Irish and Anglo-Norman documentary sources along with place-name evidence (J. Bradley 1988:56,57,58,). This area provided Dublin with raw materials and agricultural foodstuffs and was under direct political influence (Geraghty 1996:63,65-66; Wallace 1987:204). Botanical evidence from Viking Age layers at Fishamble Street, Dublin along with the absence of quernstones indicate that the processing and distribution of cereals was of a commercial rather than domestic character (Geraghty 1996:49). This supports the theory that agricultural foodstuffs were brought into Dublin from the hinterland.

John Bradley has argued that the hinterland of Dublin was not farmed by the Irish, who could cut off supplies, but rather by Norse people who were part of the Dublin polity (J. Bradley 1988:51,52,53). This argument stands in contrast to Mary Valante, who argues that Norse control was strong enough for the goods to be extracted by relatively peaceful means from the Irish, who remained the dominant population group in the area (Valante 2000:69,75). In this respect an important distinction needs to be made between control and colonization. The Dublin Norse might have controlled parts of Meath and Kildare, but these areas were not necessarily settled by the Norse. The monasteries in *Dyflinarskiri* retained some or all of their lands during the Norse colonization, and this implies that the colonization of this hinterland was a complex process and not just a question of confiscation and resettlement. Even J. Bradley (1988:58-60) agrees that many of the inhabitants of *Dyflinarskiri* were Irish.

The Dublin Norse may have required more grain and other goods than *Dyflinarskiri* could supply them with and they would have had to go into Irish territory to obtain this. They therefore had regular dealings with a wider periphery zone that stretched out in a c. 100 km radius from Dublin (see fig. 7). The Norse had no political dominance in this area and raided and/or traded for the goods they needed. Their intrusions in this area were limited by Irish power and this peripheral zone was gradually reduced to a radius of c. 75 km (Valante 2000:69,74,76 - see fig. 8).
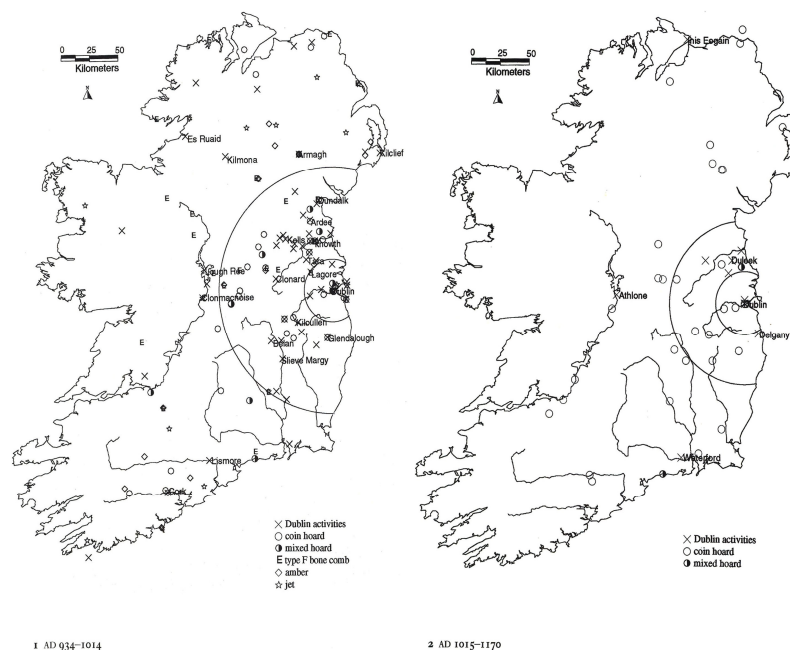
Fig. 7 (left): The hinterland and periphery of Dublin AD 934-1014 (after Valante 2000:72)
Fig. 8 (right): The hinterland and periphery of Dublin AD 1015-1170 (after Valante 2000:80)

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The other Hiberno-Norse towns became urban later than Dublin: a base was established in Limerick in the 830s/840s, the initial Norse settlement seems to have been established in the 920s but the site did not develop into a town until around AD 967. Waterford may have been urban from around AD 980 and Cork had evolved to be a town in the 12th century. The start of Wexford's urban phase is uncertain (Clarke 1998:366-368). These towns had their own rural hinterlands, later known as "the Cantreds of the Ostmen" and these areas surrounded Waterford, Cork, Limerick and Wexford. Even the Norse settlement at Annagassan would potentially have had associated settlements (J. Bradley 1988:62,65-66, see fig. 9). The monastery of Monasterboice was most likely under Norse political control since Irish attacks on this and other monastic settlements in AD 970 (or 968) caused Norse fatalities. The Norse inhabitants here had most likely become Christian. Monasterboice was in fact never attacked by the Norse (J. Bradley 1988:66; Lucas 1967:191; Ó Floinn 1998:164; Roe 2003:8-9).
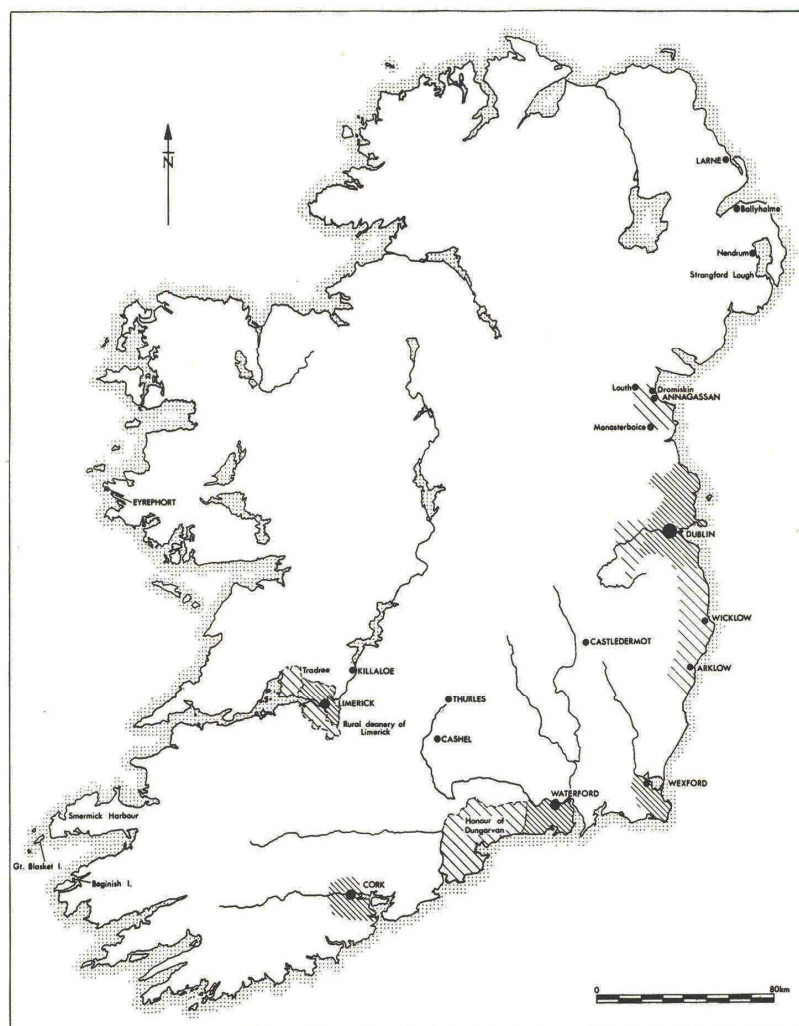
Fig. 9: "The Cantreds of the Ostmen" (after J. Bradley 1988:63)

The political history of the Viking Age and Norse urban settlement are relatively well attested to in the written sources and in the archaeological record respectively; Norse rural settlement on the other hand is less well-known. The notion that the Norse only settled in isolated areas around the coast is no longer valid (see chapter 2.2) but there is little evidence to suggest Norse settlement in rural areas except from the few scattered Norse graves around the coast (for the distribution of graves see Harrison 2001:6). One of the few excavated rural settlements with possible Norse affiliation is that from Cherrywood in Co. Dublin where a 9th century settlement was excavated. A structure resembling a Norse longhouse was excavated along with a possible grain drying-kiln. Objects such as fragments of whalebone plaque, bone comb(s) and ringed pins were found on site (Ó Néill 1999).

The core focus of Norse settlement seems to have been the Hiberno-Norse towns. This does not mean that the character of these towns was exclusively Norse, but that the Norse settlement was most dense here. The hinterlands of these settlements would have consisted of both Norse and Irish people, but the extent of Norse settlement here is uncertain, partly because of the lack of knowledge of Norse rural settlement. Beyond the towns and the hinterlands were the peripheral zones. These areas were most likely dominated by Irish tribes but the Norse did have influence also in these areas.

This chapter has provided an archaeological framework for Viking Age hoards from Ireland. Since the hoards have been found in different settlements and in extra-mural locations around Ireland it is important to outline the settlement pattern. Pre-Viking Ireland was politically fragmented with a diverse settlement pattern in both dry-land and wetland areas. Monasteries and church sites were focal points in society and some of them even had market-places. The Norse people that came to Ireland raided and later settled in areas around Ireland and encountered the diverse political and cultural groups that constituted the Irish polity. Evidence for the Hiberno-Norse towns, particularly Dublin and the surrounding *Dyflinarskiri*, is particularly good and these hinterland areas were settled by both Irish and Norse people. Thus there were multiple parts in Ireland where the Irish and the Norse interacted but this interaction would have differed depending on the distance from areas of Norse control, among other factors.

3.1.1   Manufacture of silver artefacts

The Hiberno-Norse silver-working tradition was apparently centred on Dublin and to some extent the Munster towns; Waterford, Cork and Limerick. The most characteristic products of this manufacture were the various arm-ring types (Sheehan 1998b:155-156, 2004:179). The idea that arm-rings were produced in a Hiberno-Norse context is based on finds of ingot moulds in Viking Age layers in Dublin and the knowledge that arm-rings were hammered into shape from ingots (Ó Floinn 1998:155). At the same time stray finds of ingot moulds have also been found in *crannóga*, ring-fort and monasteries (Mytum 1992:211,217; Ó Floinn 1998:155), which indicates that the Irish also produced ingots and other metal artefacts. The production of coins should also be mentioned briefly: The Hiberno-Norse coins minted in Dublin during the reign of *Sitric Silkenbeard* in AD 997 were the first minted on Irish soil (Ó Cróinín 1995:267; Sheehan 1998b:148).

Fig. 10: Silver bossed penannular brooch (after Mallory and McNeill 1991:228)
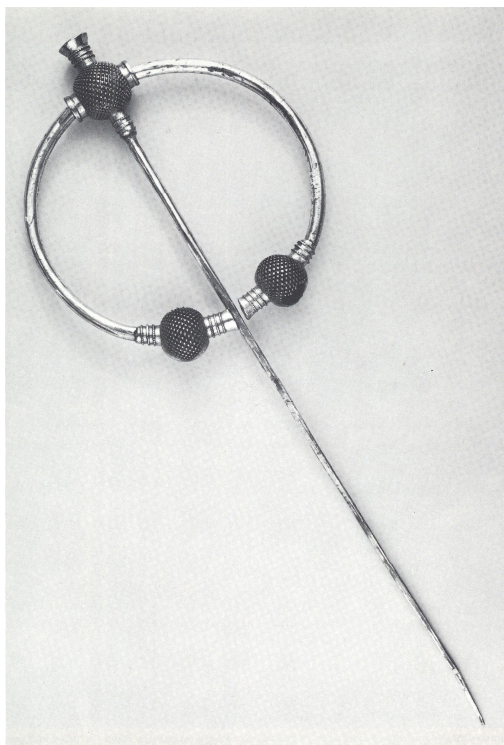
Fig. 11: Silver ball type penannular brooch from England (after Graham-Campbell 1982:plate 31; with courtesy of the British Museum)

Silver brooches were the most obvious product of the Irish tradition in the form of ball type and bossed penannular brooches. The former (fig. 11) most likely originated in an Irish context between AD 850 and 900. Ball type brooches were a fashion adopted by the Norse population and these artefacts spread to Norway and even Russia (Graham-Campbell 1975:46; Sheehan 1998a:182-183). The origin of the other type, the bossed penannular brooch (fig. 10), is

more difficult to place (Sheehan 1998a:181). Some researchers have seen them as originating in a Norse environment in Ireland (Michelli 1993:187), while others have seen them as products of Irish manufacture (Graham-Campbell 1975:42; Wallace 1987:207). What is certain however, is that the penannular brooch tradition flourished in parallel with Hiberno-Norse arm-ring manufacture, and that some degree of contact and interaction took place between the Irish and Hiberno-Norse traditions between AD 850 and 900 (Sheehan 1998a:182).

The types of silver artefacts that have been mentioned in this chapter have all been found in one or more Irish Viking Age hoards. Dublin and the other Hiberno-Norse towns were important in the production of silver artefacts, possibly along with *crannóga*, ring-forts and some monasteries. The Hiberno-Norse towns were also important in the import of foreign goods such as coins.

3.2   Geographical distribution

My complete catalogue consists of 120 localized hoards and 24 unlocalized hoards, a total of 144 hoards (appendix 1). The overall distribution of silver hoards according to province is presented here, including the hoards only localized to Ireland:
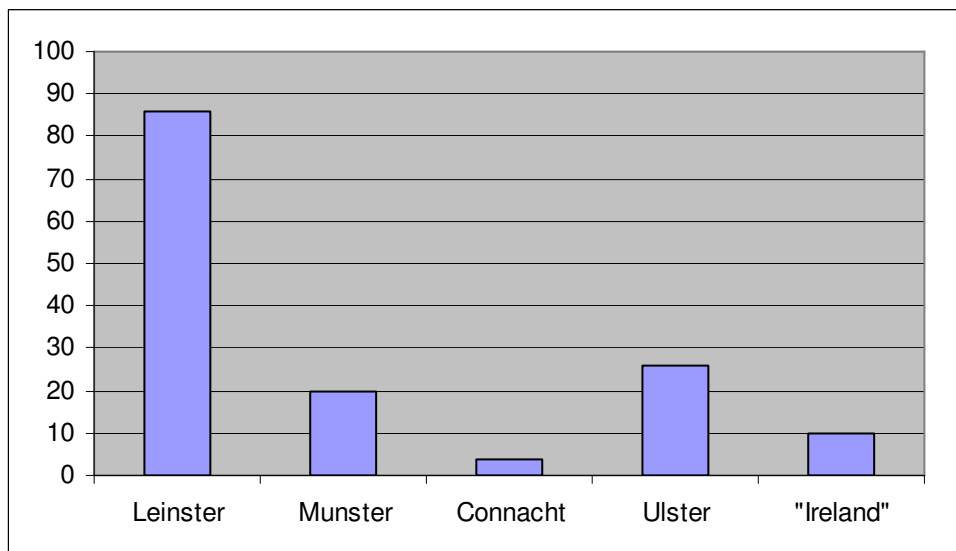
Fig. 12: Number of hoards according to province

The general distribution of hoards across the country can be seen in fig. 13, which presents the number of hoards found in each county. Although counties were not geographical units in

the Viking Age they represent the standard means by which Ireland is subdivided. In this way the hoards with county provenance only are included as well:
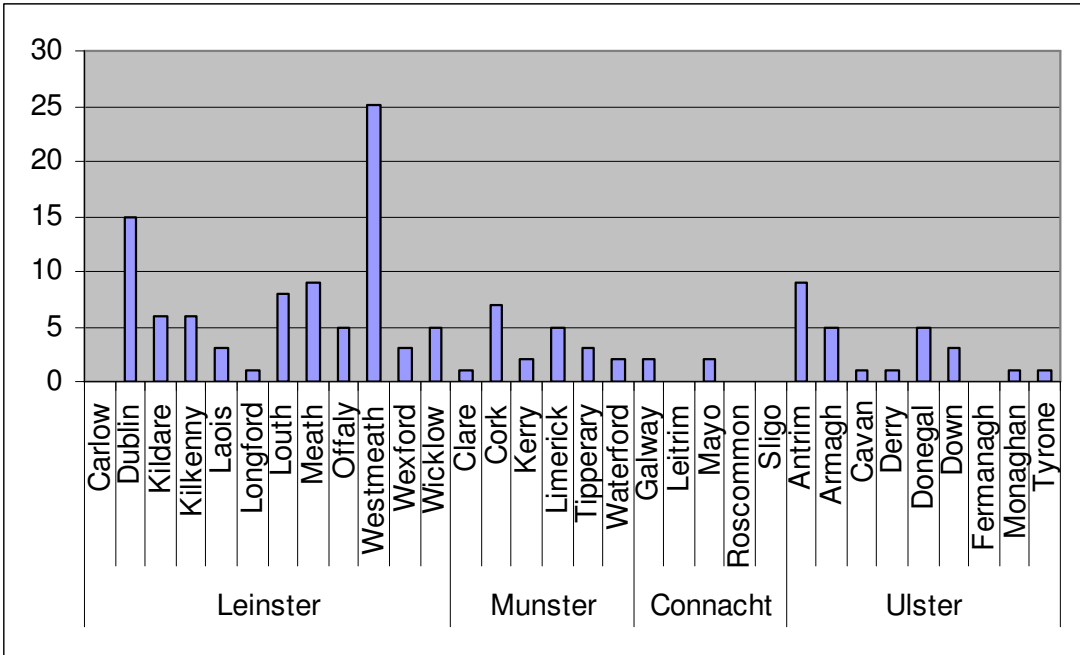
Fig. 13: Number of hoards according to county

Fig. 14 represents this information on a map of Ireland:
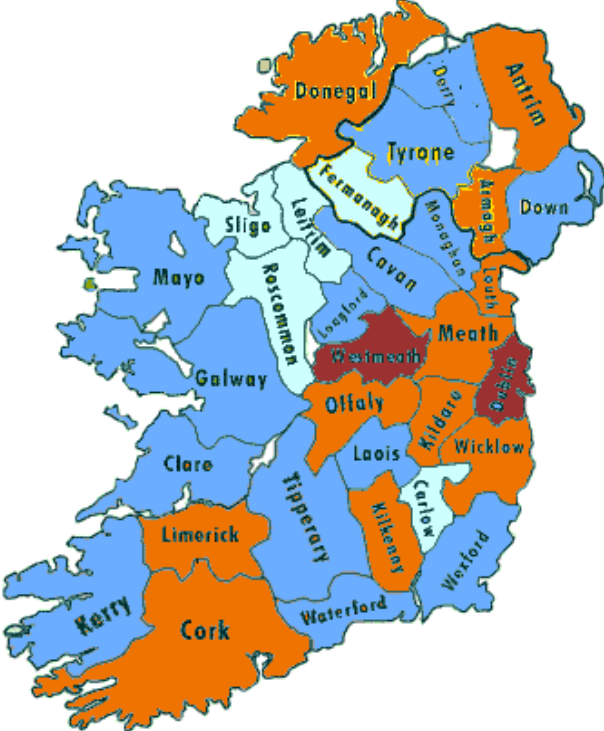
Fig. 14: Map of the distribution of hoards according to county

1) **counties with 0 hoards (light blue):**
   a) Leinster: Carlow
   b) Connacht: Leitrim, Roscommon, Sligo
   c) Ulster: Fermanagh
2) **counties with 1-4 hoards (dark blue):**
   a) Leinster: Laois, Longford, Wexford
   b) Munster: Clare, Kerry, Tipperary, Waterford
   c) Connacht: Galway, Mayo
   d) Ulster: Cavan, Derry, Down, Monaghan, Tyrone
3) **counties with 5-10 hoards (orange):**
   a) Leinster: Louth, Wicklow, Kildare, Kilkenny, Meath, Offaly
   b) Munster: Cork, Limerick
   c) Ulster: Antrim, Armagh, Donegal
4) **counties with 11 or more hoards (red):**
   a) Leinster: Dublin, Westmeath

This distribution should by no means be taken to represent a full picture of the distribution of Irish Viking Age Silver hoards. As seen in chapter 1.3 there are vital source-critical aspects to consider when studying hoards. Factors such as the extent of modern-day development and the recording of discovered hoards influence the distribution pattern, which does not necessarily mirror the actual depositional pattern in the Viking Age.

The greatest number of hoards is found in the province of Leinster; around Cork and Limerick; in Armagh; and along the coast of Antrim and Donegal. In Leinster the hoards are concentrated in the western part of the early medieval kingdom of Míde corresponding to today's Co. Westmeath. Interestingly there are at present more hoards from Co. Westmeath than from Co. Dublin (see fig. 13 and 14). Coinless hoards have been found in a wider area than those containing coins, including west and northwest Ireland – areas where no hoards containing coins are found (Graham-Campbell 1976:42; Ó Floinn 1998:158, fig. 15).
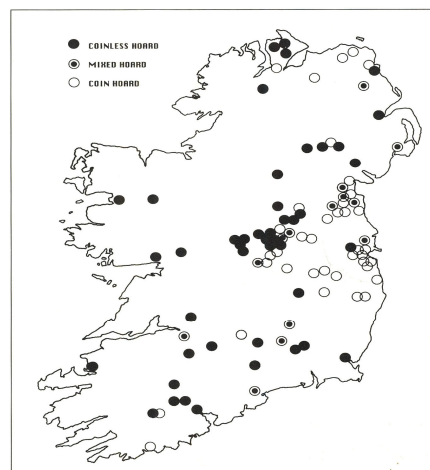
Fig. 15: The distribution of 9th and 10th century hoards (after Sheehan 1998a:174)

3.3   Categorizing the material

Ireland's Viking Age silver hoards have been divided into groups on the basis of their contents. Graham-Campbell (1976) divides the hoards into coinless and coin hoards, the former being hoards with non-numismatic material only. The latter denotes hoards both with coins only and hoards with coins and non-numismatic material. This classification is also followed by Ó Floinn (1998:157-161). John Sheehan uses the threefold division of coinless, mixed and coin hoards in his earlier works on Irish Viking Age hoards. The definition of coinless hoards is the same as for Graham-Campbell while mixed hoards contain coins and non-numismatic material. Coin hoards contain only coins (Sheehan 1998a:166,167,169,170). More recently he has developed a new way of categorizing coinless and mixed hoards into five classes. Coins are not considered in the classification even though they are present in some of the hoards (Sheehan 2004:178, 2007a:151-152):

- Class 1 hoards contain only complete ornaments
- Class 2 contain only complete ingots
- Class 3 hoards contain complete ornaments and ingots
- Class 4 contain complete ornaments, ingots and hack-silver
- Class 5 hoards contain only hack-silver

The present study makes use of Sheehan's original threefold division of hoards into coinless, mixed and coin types. The reason for this is partly of convenience and secondly because these terms are useful to describe the character of the hoards. To facilitate the examination of the hoards in relation to their context I have subdivided the hoards based on the type of settlement they were found in. I have assigned the hoards to ecclesiastical sites (monasteries and church sites), Irish secular settlements or Norse towns/trading settlements. The remaining hoards are unlocalized or not found in association with known settlements. Information about the context of the hoards can be found in the columns "hoard location" and "site description" in appendix 1. The assigning of hoards to settlements is based on secondary sources since going through the antiquarian records would have been too time-consuming. Still I think the information I have concerning the hoards' association with settlements is representative.

3.3.1   Ecclesiastical hoards

Twenty-seven hoards have been found in monasteries or at church sites. Some hoard locations' relationship to the local church site is uncertain; these hoards are marked with question marks. The remaining hoards have been found at ecclesiastical sites or close to them:

Hoard location	Hoard contents	Dating
Delgany, Co. Wicklow (?)	115 Anglo-Saxon and 1 papal coin	c. AD 830
Hare Island 1, Co. Westmeath (?)	10 gold arm-rings	9th/10th century?
Hare Island 2, Co. Westmeath (?)	Arm-rings, ingots	9th/10th century?
Tynan Demesne, Co. Armagh (?)	7 arm-rings	9th/10th century?
Fennor, Co. Meath (?)	2 Anglo-Saxon coins	AD 920 or 945
Glasnevin, Co. Dublin	2 Anglo-Saxon, 5/6 Viking and 2 Kufic coins	c. AD 927
Durrow, Co. Offaly	10 Anglo-Saxon coins and 1 Viking coin from York	c. AD 940
Glendalough 2, Co. Wicklow	49 Anglo-Saxon coins	c. AD 942
Monasterboice, Co. Louth	3 Anglo-Saxon coins and 1 ingot	c. AD 953
Mungret, Co. Limerick	Many Anglo-Saxon and Viking coins and hack-silver in the form of ingots	c. AD 953
Killyon, Co. Meath (?)	88 Anglo-Saxon and Viking coins	c. AD 958
Armagh, Co. Armagh (?)	3 Anglo-Saxon and 1 Viking coin	c. AD 970
Killincoole, Co. Louth (?)	7 Anglo-Saxon coins and ingots or hack-silver	c. AD 970
Rahan 1, Co. Offaly	Anglo-Saxon coins	c. AD 970
Rahan 2, Co. Offaly	Anglo-Saxon coins, hack-silver and ingot	c. AD 970
Derrykeighan, Co. Antrim	280 Anglo-Saxon, 2 Viking and 1 Carolingian coin	c. AD 975
Glendalough 3, Co. Wicklow	Anglo-Saxon coins	c. AD 975
Kildare, Co. Kildare	34 Anglo-Saxon coins	c. AD 991
Clondalkin 2, Co. Dublin	Hiberno-Norse coins	c. AD 997
Kilkenny, Co. Kilkenny	Anglo-Saxon and Hiberno-Norse coins	c. AD 1035
Clondalkin 1, Co. Dublin	Hiberno-Norse coins	c. AD 1065
Clonmacnoise, Co. Offaly	Hiberno-Norse coins, bronze ingot and fragment of a gold ornament	AD 1075-1090
Glendalough 1, Co. Wicklow	Hiberno-Norse coins	c. AD 1090
Kilmainham, Co. Dublin	Hiberno-Norse coins	11th century
Armagh Cathedral, Armagh	3 Hiberno-Norse coins	c. AD1103
Kilcullen, Co. Kildare	Many Hiberno-Norse coins	c. AD 1103
Kildare round tower, Kildare	6 Hiberno-Norse coins	c. AD 1135

Table 1: Ecclesiastical hoards

The hoards from ecclesiastical sites are dominated by coins: 19 of the 27 hoards are coin hoards while five hoards are mixed hoards containing coins, ingots and/or hack-silver. The remaining three hoards are coinless containing complete arm-rings and in one case ingots (Hare Island 2). Even though non-numismatic silver is present, the coins are the dominant artefacts in these hoards. Except for the two hoards from Hare Island and that from Tynan Demesne, all other ecclesiastical hoards contain only coins or coins in combination with other artefacts. The hoards from Hare Island could derive from a Norse base at Lough Ree (see chapter 3.1).

There are no obvious chronological gaps in the 10th century depositions of ecclesiastical hoards; the hoards are especially concentrated around the third quarter of the 19th century. The 11th and 12th century depositions are more scarcely and less evenly distributed chronologically. The chronology of ecclesiastical hoards indicates that Anglo-Saxon coins

were in circulation until the mid 11th century, at least in the economic sphere that the monasteries participated in. One hoard contains both Anglo-Saxon and Hiberno-Norse coins and the Hiberno-Norse coins seem to have taken over completely by the mid 11th century. The chronological distribution conforms well to the last three of Graham-Campbell's phases of coin hoards (see chapter 3.4.1).
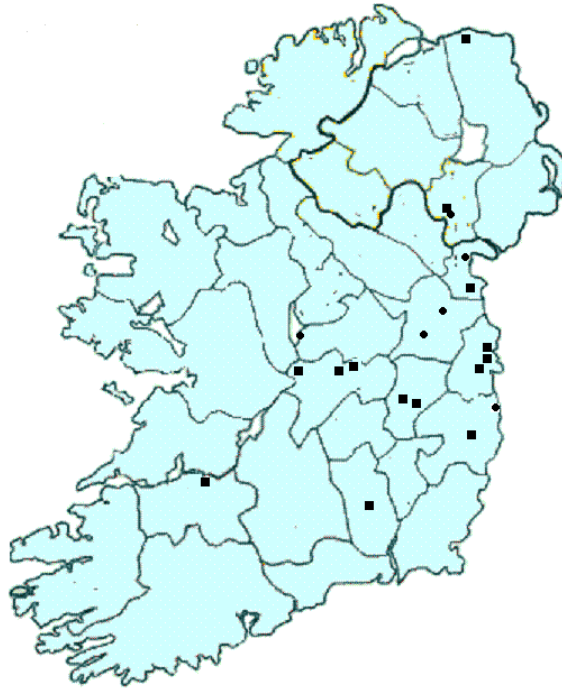
Fig. 16: The location of hoards in monasteries and church sites

The hoards that can be connected to ecclesiastical sites are marked with a square, while uncertain ecclesiastical hoards are marked with a circle. Four of the monasteries or church sites with hoards are situated within the proposed area that constituted *Dyflinarskiri* (see fig. 6 and 16 and above chapter 3.1):

- Delgany in Co. Wicklow (uncertain church site)
- Clondalkin, Glasnevin and Kilmainham, Dublin

The Viking king Olaf supposedly built a fortress at Clondalkin, Co. Dublin and annalistic references to an attack on Clondalkin in 867 reported Norse fatalities, suggesting that they lived right outside the monastery (Clarke 1998:336; de Paor 1976:31; Ó Floinn 1998:163). The Clondalkin hoards on the other hand are from the late 10th and mid 11th century and consist solely of Hiberno-Norse coins. Even though Clondalkin has been considered ecclesiastic, Norse influence on the settlement was probably strong. Kilmainham (Irish *Cell Maignenn*) is a monastery on a site which is now located in Dublin city. The density of grave finds in this area and in the nearby cemetery of Islandbridge indicates that this area could be

the location of the first Norse settlement in Dublin, the *longphort* (Ó Floinn 1998:137; O'Brien 1998:217, see chapter 3.1). The Kilmainham hoard is younger than the cemetery but the settlement's location so close to Hiberno-Norse Dublin suggests that this site was important to the inhabitants of Dublin. Glasnevin is also situated in Dyflinarskiri. The hoard from Delgany is possibly from an ecclesiastical site but this is uncertain, and I would suggest that this rather reflects Norse presence in the area.

In addition to the four ecclesiastical sites within *Dyflinarskiri*, many monasteries and church sites in Dublin's peripheral zone (see chapter 3.1) have yielded hoards (see fig. 7 and 8):
- Clonmacnoise, Durrow and Rahan (two hoards) in County Offaly
- Fennor and Killyon in Co. Meath (possible church sites)
- Glendalough in Co. Wicklow (three hoards)
- Kilcullen and Kildare (two hoards) in Co. Kildare
- Kilkenny in Co. Kilkenny
- Killincoole (possible church site) and Monasterboice in Co. Louth

The hoards from Kilkenny (AD 1035) and Clonmacnoise (AD 1075-1090) are found in the areas that probably constituted Dublin's periphery up until c. AD 1015 but not later (see fig. 7 and 8). The location and dating of these two hoards are therefore interesting.

As mentioned in chapter 3.1 the other Hiberno-Norse towns could have had their own hinterlands (see fig. 9) and the monastery of Mungret is right outside Limerick. The map of areas under Hiberno-Norse control includes some areas without clear evidence of control or settlement such as an area northwest of Limerick. The hoard from Mungret strengthens the idea that this area was under Hiberno-Norse control.

The church sites with hoards that are not situated in the hinterland or peripheral zone of one of the Hiberno-Norse towns are the hoards from:
- Armagh and Tynan (possible church site), Co. Armagh
- Derrykeighan, Co. Antrim
- Hare Island, Co. Westmeath (possible church site but might attest to Norse presence – see chapter 3.1 and above: this chapter)

Ecclesiastical settlement was widespread all over Ireland in the early medieval period (see fig. 2). The distribution of ecclesiastical hoards in some areas in Viking Age Ireland is remarkable

considering the abundance of monasteries and church sites at the time. This study of ecclesiastical hoards has revealed two significant patterns:

1. The hoards from monasteries and church sites are dominated by coins
2. 16 of the 20 church sites and monasteries with hoards are found in *Dyflinarskiri*, Dublin's peripheral zone or in the possible hinterland of Limerick

These discoveries are discussed in more detail in chapter 4.

3.3.2 Hoards from secular Irish settlements

The following 20 hoards are associated with secular settlement types and are therefore considered to have been deposited by Irish people. Also included in the list are hoards found at sites known to have been inhabited by Irish tribes, for reasons explained below:

Hoard location	Site description	Hoard contents	Dating
Carraig Aille II, Co. Limerick	ring-fort	Arm-ring, 3 arm-ring fragments, 2 ingots and ingot fragment	$9^{th}/10^{th}$ century (?)
Carrick, Co. Westmeath	On the shore of Lough Ennell	60 ingots	$9^{th}/10^{th}$ century (?)
Cave Hill, Co. Antrim	ring-fort	2 arm-rings and ingot	$9^{th}/10^{th}$ century (?)
Coolure Demesne, Co. Westmeath	ring-fort	Arm-ring and 3 arm-ring fragments	$9^{th}/10^{th}$ century (?)
Dysart 2, Co. Westmeath	Crannog	2 ingots	$9^{th}/10^{th}$ century (?)
Dysart 3, Co. Westmeath	On Dysart Island	2 ingots	$9^{th}/10^{th}$ century (?)
Emyvale, Co. Monaghan	ring-fort	4 arm-rings	$9^{th}/10^{th}$ century (?)
Kilmacomma, Co. Waterford	ring-fort	Arm-ring fragment, 10 ingot fragments and rod fragment	$9^{th}/10^{th}$ century (?)
Loughcrew, Co. Meath	Crannog	Brooch fragment, 4 arm-ring fragments and 5 ingot fragments	$9^{th}/10^{th}$ century (?)
Lough Kinale, Co. Longford	Crannog	2 ingots, 25 ingot fragments, 2 arm-ring fragments and several brooch fragments	$9^{th}/10^{th}$ century (?)
Lough Sewdy, Co. Westmeath	Crannog	2 arm-rings	$9^{th}/10^{th}$ century (?)
Rathmooley, Co. Tipperary	ring-fort	2 arm-rings (1 complete rod + 1 plain penannular)	$9^{th}/10^{th}$ century (?)
Rivory, Co. Cavan	Crannog	2 arm-ring fragments, 1 ingot and 6 ingot fragments	$9^{th}/10^{th}$ century (?)
Roosky, Co. Donegal	ring-fort	4 arm-rings	$9^{th}/10^{th}$ century (?)
Dysart 1, Co. Westmeath	On Dysart Island	5 complete ingots	Early 10th century (?)
Nure, Co. Westmeath	On the shore of Lough Ennell	2 ingot fragments	10th century
Millockstown, Co. Louth	ring-fort	2 ingot fragments and a Kufic coin	post-AD 905/906
Dysart 4, Co. Westmeath	On Dysart Island	45 Anglo-Saxon, Viking, "Temple Type" and Kufic coins/fragments, 85 ingot and ingot fragments + 29 pieces of hack-silver (H-N types and bossed and ball type brooch fragments)	AD 907
Knowth, Co. Meath	Souterrain	2 Anglo-Saxon coins	c. AD 950

Newtownlow, Co. Westmeath	Crannog	6 coins (Anglo-Saxon?)	AD 950-955

Table 2: Hoards from secular Irish sites

Eight of the hoards come from ring-forts, six are from *crannóga*, one is from a souterrain and the remaining five are from secular Irish sites, but not from within a settlement structure. Four of the ring-fort hoards contain only complete arm-rings and/or ingots while four contain complete and fragmented non-numismatic silver. The *crannóg* hoards are somewhat more diverse but the difference is not great: two hoards contain only ingots and/or complete arm-rings, one contains only hack-silver, one contains only coins and two hoards contain both complete and fragmented non-numismatic silver.
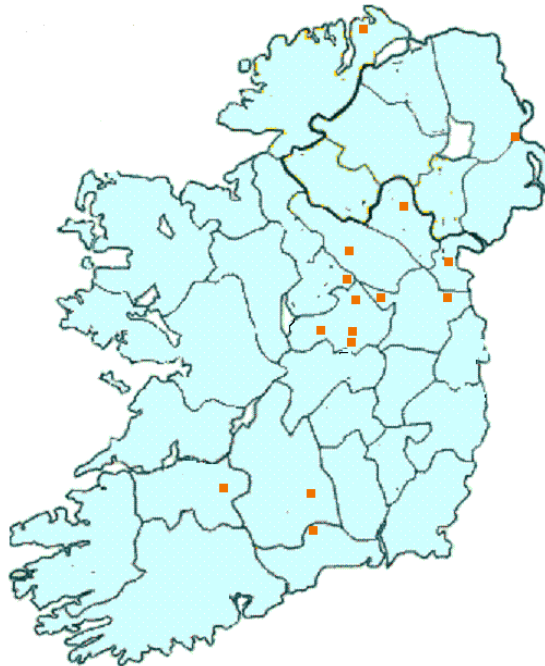
Fig. 17: The distribution of secular Irish sites with hoards

The distribution of hoards from secular Irish sites is different than that of ecclesiastical hoards (see fig. 17 compared to 16). None of the secular Irish hoards are found within *Dyflinarskiri* while fourteen hoards are found within the peripheral zone of Dublin AD 934-1014:

- Carrick, Coolure Demesne, Dysart 1-4, Lough Sewdy, Newtownlow and Nure in Co. Westmeath
- Loughcrew (fig. 18) and Knowth in Co. Meath
- Lough Kinale, Co. Longford
- Millockstown, Co. Louth
- Rivory, Co. Cavan

Six hoards have been found outside the peripheral zones of the Hiberno-Norse towns:

- Carraig Aille II, Co. Limerick
- Cave Hill, Co. Antrim

- Emyvale, Co. Monaghan
- Kilmacomma, Co. Waterford
- Rathmooley, Co. Tipperary
- Roosky, Co. Donegal

Fig. 18: Brooch fragment and ingots from the hoard found at Loughcrew *crannóg*, Co. Meath (after Sheehan 1998a:190; with courtesy of the National Museum of Ireland)

The dating of the coinless hoards is uncertain but it has been argued that they date to the second half of the 9th and the first half of the 10th centuries (see chapter 3.4.2). A total of six hoards have been found around Lough Ennell: Dysart hoards 1-4 and the Carrick and Nure hoards. These hoards are all in the central area of the territory of the Irish *Clann Cholmáin*, a branch of the southern Uí Néill. The hoards are very close to their twin royal sites *Dún na Sgiath* (a ring-fort) and *Cró Inis* (a *crannóg*) (Kelly 1991:81; Ó Floinn 1998:159; O'Sullivan 2007:167 – see fig. 19). The location of the hoards makes it probable that they were deposited by members of the *Clann Cholmáin*, thus Irish people were behind the deposition of the hoards (see Ryan et al. 1984:364).
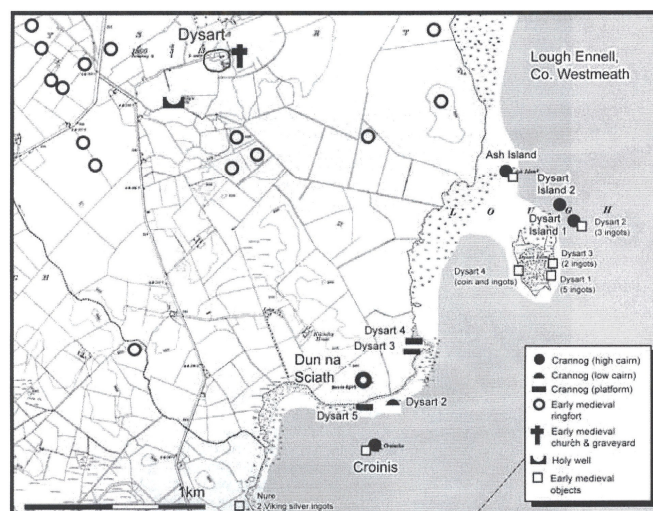
Fig. 19: The central area of the *Clann Cholmáin* (after O'Sullivan 2007:167)

The hoard from Knowth (*Cnogba*) was found in a souterrain constructed in a prehistoric burial mound. Knowth was the centre of the northern sub-kingdom of the kingdom of Brega, ruled by another branch of the southern Uí Néill. A third branch ruled from a crannóg at Lagore, Co. Meath (Byrne 2001:87; Henry 1970:27; Ó Corráin 1972:17-19; Ó Floinn 1998:159). No hoard has been found at Lagore so far. Based on the location of the hoards in the central area of the *Clann Cholmáin* and the location of the hoard from a souterrain at Knowth, we can be assume that they were deposited by Irish people.

The pattern in hoards found in secular Irish settlements is distinct: 16 of the 20 hoards contain only non-numismatic silver in the form of ingots, arm-rings and hack-silver, two are mixed and two are coin hoards. This forms a clear contrast to hoards from ecclesiastical sites: they are mostly made up of coins, with limited non-numismatic material. The difference in hoards from ecclesiastical and secular Irish sites could either be a result of contemporary or chronological differences; this will be examined in chapter 4. None of the hoards from secular Irish sites have been found within *Dyflinarskiri* and six of them were found in areas without Hiberno-Norse influence. Fourteen hoards have been found within the estimated peripheral zone of Dublin.

3.3.3   Hoards from Hiberno-Norse towns and trading settlements

The following eight hoards have been found in Hiberno-Norse towns and possible Norse trading sites:

Hoard location	Hoard contents	Dating
Dalkey, Co. Dublin	At least 71 Anglo-Saxon coins	c. AD 975
Castle Street, Dublin	Anglo-Saxon coins	Late 10th century
Castle Street, Dublin	Coins	Late 10th century
Werburgh Street, Dublin	Coins	Late 10th century
High Street, Dublin	2 gold arm-rings	Late 10th/early 11 century
Limerick, Co. Limerick	108 (?) Hiberno-Norse coins	c. AD 1063
Christ Church Cathedral, Dublin	7 Hiberno-Norse coins	c. AD 1105
Limerick (near), Co. Limerick (?)	2 kite-brooches	Uncertain

Table 3: Hoards from Hiberno-Norse towns and trading settlements

Of the few hoards from Hiberno-Norse towns and trading settlements, six hoards contain only coins and two hoards are coinless; one contained gold arm-rings and the other one a pair of kite-brooches. The lack of hack-silver is, however, striking. The difficulties associated with identifying Norse settlement (see chapter 3.1) can to some extent explain the small number of

hoards from definite Norse contexts: few sites have been identified outside of towns. Still, few hoards have been found in Hiberno-Norse towns and the total absence of hoards from Cork and Wexford and their hinterlands is striking considering that they were Hiberno-Norse centres. Only Dublin and Limerick are represented in this list. The character of the hoards from Hiberno-Norse towns is fairly similar to those from monasteries described in chapter 3.3.1. However, ecclesiastical hoards contain more hack-silver as well as some ingots.

The hoards from Hiberno-Norse contexts are also less evenly distributed in time compared to the ecclesiastical hoards (see chapter 3.3.1), but this could be because the former group consists of fewer hoards. The hoard from Christ Church Cathedral has been added to this list since it is derived from an urban Hiberno-Norse settlement rather than an ecclesiastical settlement. Hiberno-Norse affiliation has also been applied to the two hoards from Limerick, though the association of the hoard containing kite-brooches with Hiberno-Norse Limerick is uncertain. *Dalkey*, or "Dagger Island", is one of the few authentic Norse place-names in Ireland and seems to denote an island and part of the mainland. Researchers have suggested that the name was given by Norse people at the time of their first settlement in the area. Place-name evidence and written sources in combination with the hoard evidence put together indicate a Norse trading site in the Viking Age (Bradley 1998b:131,132; Doyle 1998:101; Oftedal 1976:131).

3.3.4   Non-site-specific hoards

The hoard locations mentioned in the previous three chapters account for 55 of the total 146 Viking Age hoards, i.e. almost 40 % of all the hoards. This means that 91 hoards are not associated with settlements. This could be either because they are from extramural isolated locations or because too little information about their exact location is known. 24 of these are entirely unlocalized. The remaining 67 non-site specific hoards (appendix 3) are still interesting as a comparison to the settlement hoards. The hoards connected to communication routes will be examined in chapter 4.2 but they have been included here as they do not derive from known settlements. 31 of these hoards contain only coins, 23 hoards are coinless and eight hoards coins are mixed. Five of the hoards are from river crossings, four were found in megalithic tombs. We have some information concerning deposition and/or location for twelve hoards, but the information regarding the remaining 44 hoards is limited to their contents.

Non-site-specific hoards are present in counties were no settlement hoards have been found: Laois, Wexford, Clare, Cork, Kerry, Galway, Mayo, Down and Tyrone. The non-site-specific hoards in counties Wexford and Cork attest to the Hiberno-Norse settlements here. Co. Laois lies within the peripheral zone of Dublin while the hoards from Clare, Kerry, Galway, Mayo, Down and Tyrone have been found in areas without known Norse settlement. Non-site-specific hoards have been found within Dyflinarskiri and in the peripheral zone of Dublin. Even though the hoards cannot be associated with settlements they attest to the presence of people and the use of silver in these areas. The hoards could either be from extra-mural locations or from undiscovered settlements. As they outnumber the hoards in the other three groups (see chapters 3.3.1-3.3.3) the non-site specific hoards are important in considering the overall distribution of hoards (fig. 13 and 14).

3.4   Presentation of the artefacts

The Irish Viking Age silver hoards contain varying numbers of ingots, arm-rings, hack-silver derived from arm-rings or ingots, and/or coins. The hoards that can be most securely dated are those containing coins.

3.4.1   Coin and mixed hoards

James Graham-Campbell (1976:46-49) divided the hoards containing coins into four phases. At the time when his article was written 69 such hoards were known. Phase one of the depositions comprised six hoards and corresponded to the period from c. AD 800 to the early 10th century. Phase two covered the time period c. AD 920-1000 and consisted of 41 hoards. This period consisted of the majority of the hoards containing coins. Ten of the latter hoards are made up of silver and gold objects in addition to the coins. The third phase dated from c. AD 1030 to 1075 and was represented by twelve hoards. The last and fourth phase covered the time span from the late 11th century up to 1170 (the Norman invasion). The fourth phase consisted of ten hoards which were made up exclusively of Hiberno-Norse coins.

The chronology of the coin and mixed hoards (appendix 2) follows that of Graham-Campbell. A hoard dating to AD 1180 has been included as it contains Hiberno-Norse coins along with an English penny. Three hoards do not confine to Graham-Campbell's chronology: the hoards dating to the period between AD 1000 and 1030. The main increase in coin hoards since 1976 concerns the hoards dating to AD 920-1000 and this confirms that most coin hoards can be dated within this time-span.

There are many more hoards containing foreign coins than Hiberno-Norse ones. Of the total 92 hoards containing coins, 57 contain only foreign coins, 21 contain only Hiberno-Norse coins and 11 hoards contain both foreign and Hiberno-Norse coins. The type of coins present in the hoards from Castle Street, Werburgh Street and Dunmore Cave is uncertain. Viking coins from Northumbria and East Anglia never appear together with Hiberno-Norse in a hoard.

Hoards containing foreign coins are present in the following counties:
- Leinster: Dublin (6), Kildare (4), Kilkenny (2), Laois (1), Louth (8), Meath (7), Offaly (4), Westmeath (10), Wexford (2), Wicklow (3)
- Munster: Cork (2), Limerick (2), Tipperary (1), Waterford (1)
- Connacht: none
- Ulster: Antrim (6), Armagh (1), Derry (1), Donegal (1), Down (1)

Hoards containing Hiberno-Norse coins have this distribution:
- Leinster: Dublin (5), Kildare (2), Kilkenny (1), Laois (2), Louth (1), Meath (2), Offaly (1), Westmeath (5), Wexford (2), Wicklow (2)
- Munster: Cork (1), Limerick (3)
- Connacht: none
- Ulster: Antrim (2), Armagh (2), Tyrone (1), Down (1)
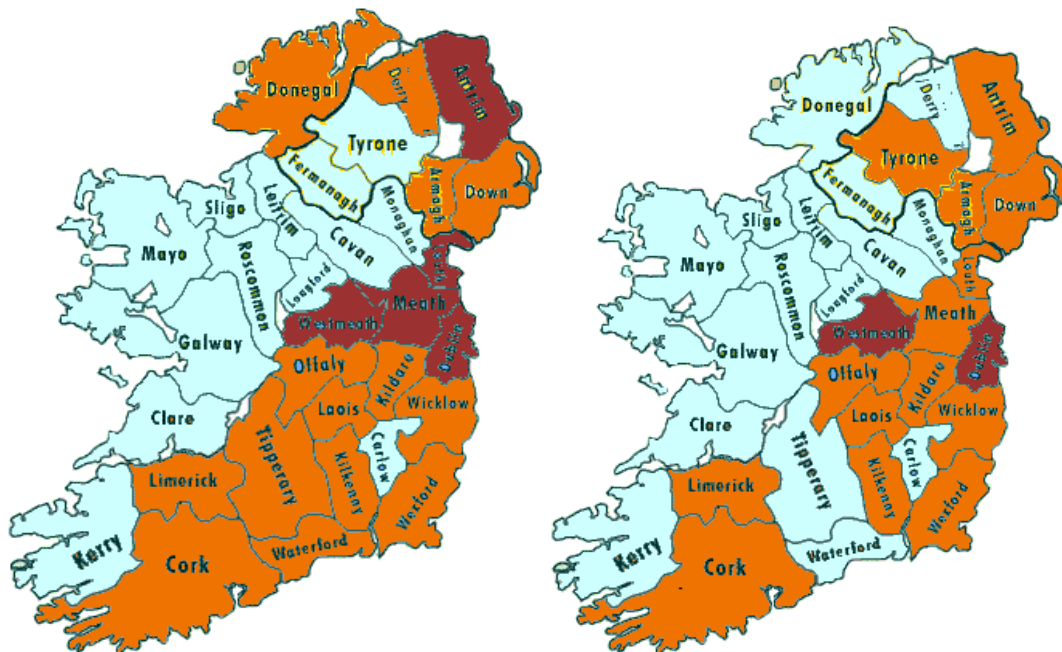
Fig. 20 (left): The distribution of hoards containing imported coins
Fig. 21 (right): The distribution of hoards containing Hiberno-Norse coins

The distribution of foreign and Hiberno-Norse coins is fairly similar (see fig. 20 and 21). Dark red indicates areas with 5-10 coin hoards, light red indicates areas with 1-4 hoards and light

blue are areas with no coin hoards. Hoards containing imported and Hiberno-Norse coins respectively are present in the same counties in Leinster and no hoards containing any type of coins are found in Connacht. The differences in distribution are focused on Munster and to a lesser extent Ulster. That coin hoards should appear in Cork and Limerick is no surprise considering that these were Hiberno-Norse towns, but foreign coins have been found in counties Tipperary and Waterford where no Hiberno-Norse coins have been found. Foreign coins are present in hoards in five counties in Ulster while only four counties have yielded hoards with Hiberno-Norse coins. The distribution of coin hoards indicates that Leinster was the main circulation area for both foreign and Hiberno-Norse coins. This is not a huge surprise since this area witnessed the main activities of the Norse (see above chapter 3.1). The geographical distribution of coin hoards can be compared to the distribution of coinless hoards (see above: chapter 3.2 and fig. 15).

Many of the coins that were imported would have been re-smelted and converted into arm-rings and ingots. The mixed hoards could give an indication of when coins were used for commercial purposes rather than being re-smelted and this most likely happened in the middle of the 10th century (Sheehan 2000:32), although the chronology of hoards with coins indicates that this happened even earlier; possibly in the late 9th or early 10th century. Already from the early 10th century there is a steady deposition of coin and mixed hoards.

3.4.2   Coinless hoards

The hoards that contain only non-numismatic material have been dated to the last half of the 9th and first half of the 10th century (Sheehan 1998a:173, 2001:52). This is based on the dating of broad-band arm-rings (see below: this chapter). This must be broadly correct but some of the hoards containing non-numismatic material are contemporary with hoards containing coins (see chapter 3.4.1). I will conform to the dating of the coinless hoards but I will allow for possible fluctuations. No chronology of these hoards will be presented as they cannot be assigned a fixed dating.

Of the artefacts in the Irish Viking Age silver hoards ingots are neither culturally not regionally distinctive (Sheehan 1998a:167); an exception is the large ingots from the Dysart 4 hoard that could possibly be of Irish manufacture (Ryan et al. 1984:364). A silver ingot can be defined as worked silver in a form without function as an ornament (following Kruse 1988:288). Complete silver ingots are found in 22 Irish Viking Age silver hoards while ingot-

derived hack-silver has been found in 14 hoards; four of the latter also contain complete ingots.

Fig. 22: Broad-band arm-rings (after Sheehan 1998a:179; with courtesy of the National Museum of Ireland)

Arm-rings are by far the most common artefact of the Hiberno-Norse silver-working tradition and occur both complete and as hack-silver. Broad-band arm-rings are the most frequent type and are found in 30 hoards (see fig. 22). The arm-rings are difficult to date exactly, but related con-dated hoards indicate that the type was manufactured between AD 880 and 930/940 (Sheehan 1989-90:125, 1998a:178, 2007b:196).

Fig. 23: Rod arm-ring from the Rathmooley hoard (after Sheehan 1998a:191; with courtesy of the National Museum of Ireland)

The rod arm-ring originated in Norway and complete examples of this type are found in two Irish Viking Age hoards, most likely imported (Sheehan 1998a:190,191):

1. Macroom, Co. Cork
2. Rathmooley., Co. Tipperary (fig. 23)
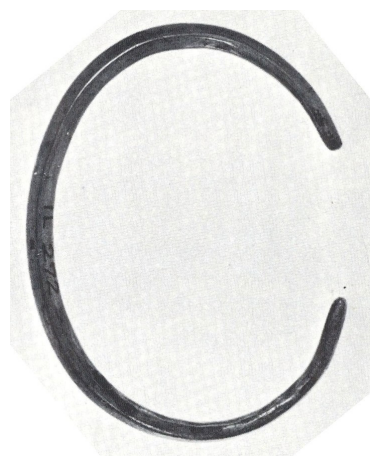
Fig. 24: Ring-money (adapted after Graham-Campbell 1982:plate 34; with courtesy of the National Museum of Antiquities of Scotland)

Scoto-Norse ring-money are penannular rings and often entirely plain. They occur both complete and as hack-silver (Graham-Campbell 1995:38 – see fig. 24) and are found in three hoards in Ireland:

1. Shannon river, Co. Clare: 3 complete
2. Knockmaon, Co. Waterford: 3 fragments
3. Lough Sewdy, Co. Westmeath: 2 complete

Fig. 25: The hoard from Lough Kinale, Co. Longford (after Ó Floinn 1998:158; with courtesy of the National Museum of Ireland)

Penannular brooch fragments (see fig. 10 and 11) are present in two hoards:

1) Dysart 4, Co. Westmeath (one bossed and one ball type fragment)

2) Lough Kinale, Co. Longford (fig. 25, at least one fragment of a bossed type brooch)

3.5 A summary of Irish Viking Age silver hoards

Irish pre-Viking society was complex and hierarchical: large numbers of secular and ecclesiastical sites are known and they formed a complex settlement pattern. The first Norse settlements, *longphuirt*, were established around Ireland in the 830 and 840s, and the 10th century witnessed the beginning of urbanization concentrating on the Hiberno-Norse towns of Dublin, Limerick, Cork, Wexford and Waterford. The interaction between the Norse and the Irish took various forms in different parts of the country, and Norse settlement added to the already complex settlement pattern. The Norse also introduced a new scale and dimension to the manufacture and use of silver in Ireland. Most research has focused on Norse silver-working but the Irish also manufactured, acquired and deposited silver artefacts.

The geographical distribution of silver hoards corresponds broadly with the recorded Norse activities in Ireland with a concentration in Leinster, especially in Dublin and Westmeath. The

hoards from Munster are clustered in Limerick and Cork while few hoards are found in Connacht. The north-eastern part of Ireland is almost without hoards and none have been found in Fermanagh, Leitrim, Sligo and Roscommon. The distribution of foreign and Hiberno-Norse coins is fairly even except for some counties that have yielded hoards with foreign coins but not with Hiberno-Norse; these counties are generally situated away from Hiberno-Norse settlement.

Coins dominate the hoards found in monasteries and church sites and most of the 27 ecclesiastical hoards have been found in Norse-influenced areas or in areas with links to the Norse polities. Hoards from Norse settlements on the other hand are few in number but diverse in character: coins are common but coinless hoards are also represented. The hoards from secular Irish settlements have a distinct character; 16 of 20 hoards contain only non-numismatic material and this forms a sharp contrast with the ecclesiastical hoards, either reflecting a contemporary or chronological difference. Non-site specific hoards are widespread with diverse contents and depositional circumstances – they are also found in Connacht and parts of Munster where no settlement hoards have been recorded. The reasons for these distribution patterns are discussed in more detail in chapter 4 and 6.

CHAPTER 4: INTERPRETING IRISH VIKING AGE SILVER HOARDS

4.1   Introduction

In the previous chapters I have provided a framework for studying Irish Viking Age silver hoards by presenting my aims and a summary of previous research on silver hoards in Ireland and in general. This was followed by a thorough description of the Irish material. The following conclusions and questions will be examined in this chapter:

- 91 hoards cannot be attributed to settlements. 24 of these are entirely unlocalized and the remaining 67 are non-site-specific hoards. Are there any factors that can explain the distribution of these non-site-specific hoards?
- There is a difference in the contents of the hoards from ecclesiastical and secular Irish sites respectively. What is the reason? Is this a contemporary or chronological difference?
- Hoards are not distributed evenly around Ireland. What is the reason for this apparent difference in hoarding activity?

4.2   Roads and communication

55 Irish Viking Age silver hoards can be attributed to settlements (see chapter 3), and unlocalized hoards set aside there are 67 hoards for which we have information concerning exact location but not the character of the site. This led me to search for other factors that might be important in the distribution of hoards. An association with rivers and fords (river crossings) is a common factor for nine hoards: eight non-site-specific and one ecclesiastical.

Hoard location	Site description	Hoard contents	Dating
Adare, Co. Limerick	Ford of the river Maigue	Anglo-Saxon and Hiberno-Norse coins	c. AD 1050
Athlone, Co Westmeath (2 hoards)	Ford of the river Shannon	4 or 5 arm-rings	9th/10th century (?)
		2 arm-rings	9th/10th century (?)
Castlelyons, Co. Cork	Crossing point of the river Bride	Many Hiberno-Norse coins	c. AD 1140 (?)
Clonmacnoise, Co. Offaly	At the crossing of the river Shannon and the *Eiscer Riada*	30 Hiberno-Norse coins, a bronze ingot and fragment of a gold ornament	AD 1075-1090
Drogheda, Co. Louth	Ford of the river Boyne and close to the Irish Sea coast	Viking and Kufic coins	c. AD 905
Dunbrody, Co. Wexford	Along the river Barrow	Up to 1600 Anglo-Saxon and Hiberno-Norse coins	c. AD 1050
Liffey (river), Co. Dublin	River	6 Hiberno-Norse coins	c. AD 1040
"Liffeyside", Co. Dublin	River	Several arm-rings	9th/10th century (?)
Macroom, Co. Cork	Along a river	Anglo-Saxon coins and 2 arm-rings?	c. AD 953

Table 4: Hoards connected to rivers and fords
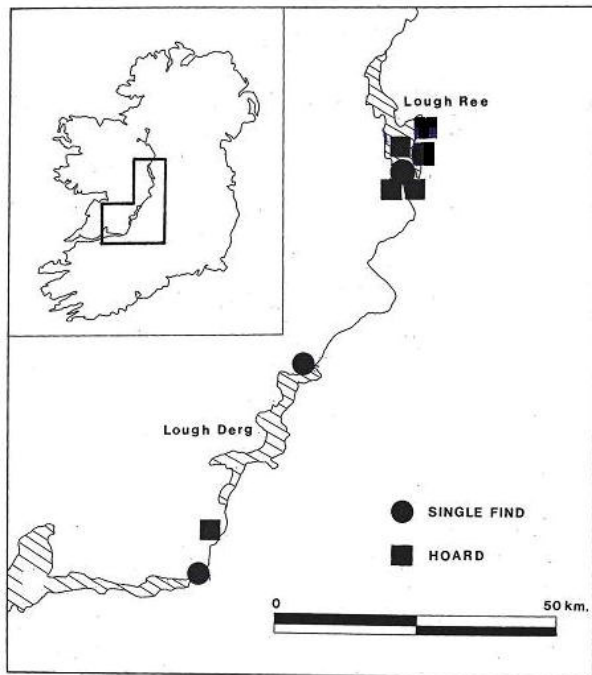
Fig. 26: Hoards and single finds along the river Shannon (after Sheehan 1989-90:128)

The distribution of hoards along the river Shannon (fig. 26) shows the importance of this route-way during the Viking Age, at the same time the hoards attest to a Norse presence at Lough Ree (Sheehan 1989-90:127,129 - see chapter 3.1).

An article on road-ways in Ireland from 1940 mentioned sites with hoards that were not associated with settlements, thus it indicates a link between hoards and communication routes. The hoard locations presented here are associated with the network of roads identified by Colm O Lochlainn (1995[1940], fig. 27):
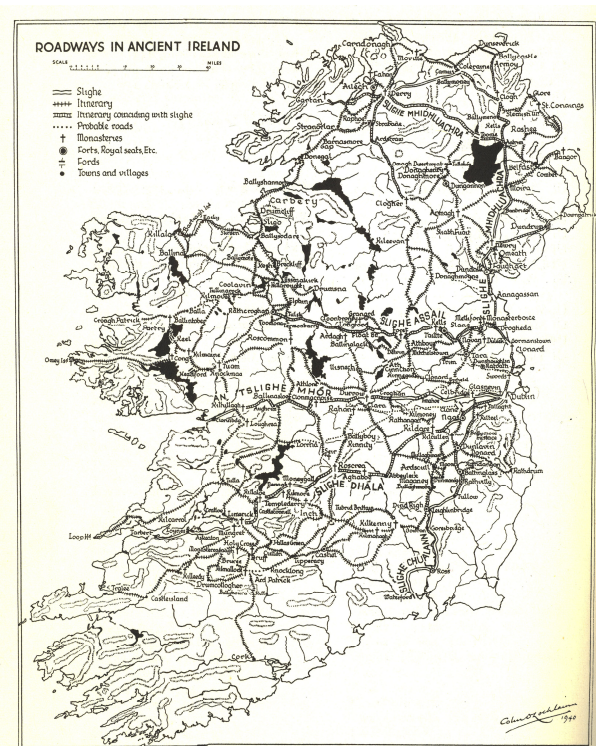
Fig. 27: Roadways in ancient Ireland (after O Lochlainn 1995[1940]:594)

The following 21 hoards (table 5) have been found in connection with the identified roadways and other communication routes. Eight of them are non-site-specific, eleven hoards have been found at ecclesiastical sites and two hoards derived from a Hiberno-Norse settlement.

Hoard location	Site description	Hoard contents	Dating
Armagh (near), Co. Armagh	Armagh lies at an important crossing between three route-ways	2 arm-rings	9th/10th century (?)
Armagh, Co. Armagh		3 Anglo-Saxon and 1 Viking coin	c. AD 970
Armagh Cathedral, Armagh		3 Hiberno-Norse coins	c. AD 1103 (?)
Athlone, Co Westmeath	Along a route-way	4 or 5 arm-rings	9th/10th century (?)
		2 arm-rings	9th/10th century (?)
Baltinglass, Co. Wicklow	Along the *Slighe Cualann* that goes from Dublin to Waterford	84 Hiberno-Norse coins	c. AD 1050 (?)
Cullen, Co. Tipperary	In a bog along a route-way	Arm-rings	9th/10th century (?)
Donough Henry, Co. Tyrone	Along a route-way	Hiberno-Norse coins	c. AD 1105
Drogheda, Co. Louth	At the crossing of the *Slighe Mhidluachra* and the *Slighe Assail*	Viking and Kufic coins	c. AD 905
Dundalk, Co. Louth	At the Irish Sea coast and along the *Slighe Mhidluachra*	Anglo-Saxon coins (?)	c. AD 995
Durrow, Co. Offaly	Along the *Eiscer Riada* and at the meeting point of this and of two route-ways	10 Anglo-Saxon and 1 Viking coin from York	c. AD 940
Glasnevin, Co Dublin	Along a probable road from Dublin towards Clonard	Anglo-Saxon, Viking and Kufic coins	c. AD 927
Kilcullen, Co. Kildare	At the crossing point between two route-ways	Hiberno-Norse coins	c. AD 1103
Kildare, Co. Kildare	At a route-way and very close to a route-way coinciding with a high-road (*slighe*)	34 Anglo-Saxon coins	c. AD 991
Kildare round tower		6 Hiberno-Norse coins	c. AD 1135 (?)
Kilkenny, Co. Kilkenny	At the meeting of the river Nore and two route-ways	Anglo-Saxon and Hiberno-Norse coins	c. AD 1035
Limerick (near), Co. Limerick	Along the *Slighe Dhala* that goes from Limerick to Dublin + lies along the coast	2 kite-brooches	Uncertain
Limerick, Co. Limerick		Many Hiberno-Norse coins	c. AD 1063 (?)
Mungret, Co. Limerick	Along the *Slighe Dhala*	Anglo-Saxon and Viking coins and hack-silver from ingots	c. AD 953
Newry, Co. Down	At the crossing of the *Slighe Mhidluachra*, another Slighe and route-ways	2 or 3 ingots	9th/10th century (?)
Rahan 1, Co. Offaly	Along a route-way from Durrow to Roscrea	Many Anglo-Saxon coins	c. AD 970
Rahan 2, Co. Offaly		Anglo-Saxon coins, hack-silver and an ingot	c. AD 970

Table 5: Hoards connected to routes of communication

Many of the hoards mentioned in table 4 and 5 have been found in ecclesiastical or Hiberno-Norse settlements. Their relevance to routes of communication is important but a more likely explanation for the occurrence of hoards is that they derive from a Norse or ecclesiastical context. The remaining fifteen hoards are not associated with settlements and all we know about them is that they were found in connection to rivers and roads:

- Adare
- Armagh (near)
- Athlone (2 hoards)
- Baltinglass
- Castlelyons
- Bog of Cullen
- Donough Henry
- Drogheda
- Dunbrody
- Dundalk
- Liffey river
- "Liffeyside"
- Macroom
- Newry

It should be noted that while no hoards from secular Irish settlements can be connected to routes of communication, both ecclesiastical sites, such as Armagh and Kildare, and Hiberno-Norse settlements like Limerick are represented. This could imply that location near roadways and rivers was more important for the monastic and Hiberno-Norse towns than the secular Irish sites, at least concerning silver exchange. At the same time this difference could also reflect that ecclesiastical sites were more engaged in regional trade than the secular Irish sites. Chronology might have been a factor in the deposition of hoards at ecclesiastical sites compared to secular Irish sites (see section 4.3), but there is no reason why these route-ways would have changed in the 9th and 10th centuries.

O Lochlainn based his interpretations of early medieval Irish routes on written sources: place-names along with battle locations and travels were combined with other descriptive texts (O Lochlainn 1995[1940]:466,467). We should not take all his assumptions at face value, but his map of roads seems to be a good match for many of the hoard locations. Topography influences the course of roadways, for instance rivers and mountains. Possible crossing places on rivers and gaps in the hills are likely places for roads and route-ways. Place-names are also a good indication for the existence of ancient road-ways: names like *ath* (ford), *droichead* (bridge), *slighe* (high road) and *eiscir* (natural ridges formed by glaciers) all provide evidence for possible route-ways (O Lochlainn 1995[1940]:466).

Place-names such as Athlone, *Áth Luain* in Irish, reflect the connection with the river. The place-name Adare also seems to include the prefix *áth* (ford). The name Drogheda derives from the Irish word for bridge and if the place-name is old, it points to a crossing point also here. No hoards from Dublin are mentioned even though major routeways met here; the *Slighe Mhór* following the glacial ridge *Eiscer Riada* and the *Slighe Chualann*, along with several other roads and rivers and not to mention Dublin's location on the Irish Sea coast. One of Dublin's Old Irish names is *Áth Cliath*, the ford of the hurdles (O'Brien 1998:218), which refers to a river crossing. The hoards found in Dublin hoards should also be included as major route-ways met there: slighes, roads, the river Liffey and the Irish Sea.

In chapter 3.2 I pointed out the lack of hoards from Co. Carlow. The river Barrow flows through Carlow, a fact that makes it even more surprising that no hoards have been found there. The river also flows through Kildare and reaches the sea at Waterford harbour, and should have been a vital communication route in the Viking Age. One explanation could be that other communication routes were preferred, such as the *Slighe Cualann* (or other roadways and rivers), but since the hoard from Dunbrody (Co. Wexford) was found by the river Barrow (table 6) this seems an unlikely explanation for the lack of hoards in Carlow. Another possibility is that Waterford was not so politically or economically important in Ireland's trading networks, meaning that route-ways that led there were not intensively utilised.

Based on the connection between hoards and communication routes I would argue that inland communication routes – roads and rivers – were very important, as were coastal trading routes. These routes are linked to many of the non-site-specific hoard locations. The Hiberno-Norse living in Dublin could have obtained goods in many ways (see above: chapter 3.1). One way was to pay silver to Irish rulers on the periphery of Dublin's sphere of influence: in this way, permission was gained to pass into or through their territory to acquire goods (Valante 2000:77). This could explain hoards at crossing points and settlements along lines of communication. Clustering of goods around natural routes of communication is not confined to Viking Age Ireland but is also seen, for example, in the distribution of some Late Roman Age/Migration Period imported goods in Norway (Hauken 1991:105,109).

In this chapter I have demonstrated that many settlement hoards and non-site-specific hoards can be connected to rivers and roadways. Nine hoards have been found near river crossings

and 21 other hoards can be connected to the routes of communication proposed by O
Lochlainn. In this way the hoards demonstrate that silver travelled along these routes. One
possible explanation for the link between roads, rivers and hoards is that the artefacts were
given to gain permission to pass through territory. Fifteen of the hoards included in this
section are not from known settlements, and the link to routes of communication is the only
known factor to explain the occurrence of hoards there. Thus the reason for the geographical
distribution of c. 22% (15 of 67) of the non-site-specific hoards is their association with rivers
and other routes of communication.

4.3   Economic spheres

The different contents of the hoards from monastic and secular Irish contexts were described
in chapter 3:

1. The ecclesiastical hoards are dominated by coins
2. The hoards from secular Irish sites are dominated by non-numismatic material

As mentioned in chapter 3 this difference is either a reflection of contemporary economic
differences or represents a definite chronological division between hoard depositions at the
two types of sites. The coinless hoards are broadly dated to AD 850-950 and as a result only
four of the hoards from secular Irish sites can be assigned a more precise dating
(Millockstown, Dysart 4, Knowth and Newtownlow): these are dated to the beginning and
middle of the 10th century. The ecclesiastical hoards, on the other hand, can be coin-dated in
most cases: Except for four uncertain ecclesiastical hoards (Delgany, Hare Island and Tynan
Demesne) there is a constant chronological deposition pattern in monasteries and church sites
from the 920s up until the second quarter of the 12th century. There are two possible reasons
for this contrasting deposition pattern at ecclesiastical and secular Irish sites:

1) Hoarding activity in secular Irish settlements was decreasing when hoards began to be
deposited at ecclesiastical sites
2) Many hoards in ecclesiastical and secular Irish sites were deposited throughout the same
time-period

Either possibility is plausible. Nonetheless, different silver-based economies seem to have
operated in secular and ecclesiastical circles, whether this reflects contemporary economic
conditions or the fact that secular settlements were abandoned in the period when monasteries
retained and perhaps increased their importance. This theory of different secular and

ecclesiastical economic spheres is not new, but has been argued by Irish scholars for some time: Raghnall Ó Floinn (1998:157,161), for example, argues that the difference in hoards is largely a result of a chronological difference. One sphere was secular, where silver circulated in the form of ornaments. This type of economy probably started in the middle of the 9th century and continued until the middle of the 10th century. The other type of economy developed in the early 10th century and was characterized by the transmission of silver as coins and sometimes as ingots and hack-silver. This economy circulated in an ecclesiastical and urban context.

The present re-examination of hoards from monastic and secular Irish settlements supports Ó Floinn's notion of two economic spheres, but while they confirm his interpretation of the ecclesiastical sphere, they suggest that the character of the secular may have been more complex. The hoards from secular Irish sites do contain a high degree of complete arm-rings, but at the same time ingots and hack-silver derived from arm-rings and ingots are frequent. The urban Hiberno-Norse economy is difficult to assess from the hoard evidence alone, since only eight hoards can be attributed to this settlement context, but these hoards also support Ó Floinn's concept of an urban economy with a focus on coins. This pattern is not clear-cut, however, since two hoards containing complete arm-rings and kite-brooches respectively have been found in Hiberno-Norse towns (see above: chapter 3.3.3). The latter two hoards could either attest to manufacture of artefacts, or to the complexity of the urban economy in Viking Age Ireland.

The discussion of economic spheres just presented highlights the fact that the economies must have intersected. Hoards of a different character have in some cases been found in the same places, for instance the hoards from Dysart Island, Co. Westmeath. The six hoards consist of only ingots, ingot fragments or a mixture of coins, ingots, ingot fragments and hack-silver derived from arm-rings and penannular brooches (see chapter 3.3.2). The occurrence of hoards along communication routes that was presented in section 4.2 also supports the notion of a closer relationship between the urban and monastic economy compared to the secular Irish economy. Silver hoards have been found in Hiberno-Norse towns and ecclesiastical sites along rivers and roads, but the same is not true for secular Irish hoard sites.
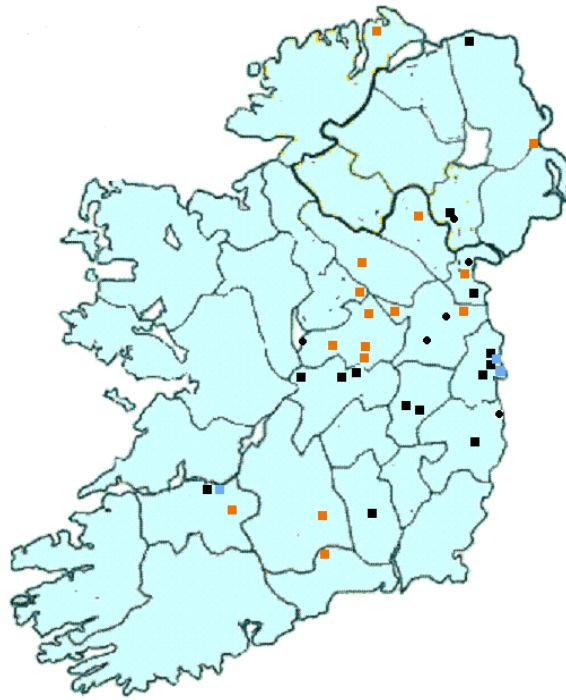
Fig. 28: Settlement hoards

The idea of a common urban/ecclesiastical economy can be supported by the geographical distribution of hoards from ecclesiastical sites (black), Hiberno-Norse towns (blue) and secular Irish sites (orange) (fig. 28). The distribution provides no clear picture but it is evident that ecclesiastical hoards and hoards from Hiberno-Norse settlements generally appear close to each other. Hoards from secular Irish and Hiberno-Norse settlements on the other hand are situated further from each other. The geographical distribution confirms that secular Irish power was not strong in *Dyflinarskiri* or in areas in the periphery that were close to Dublin; instead the ecclesiastical sites were dominant in *Dyflinarskiri* and in the southern half of the peripheral zone. The secular Irish sites with hoards are located within the northern half of the peripheral zone or outside of it. Thus the ecclesiastical and secular economies seem to have dominated different areas of Ireland in the Viking Age.

The differences in hoards at secular Irish sites and ecclesiastical sites could be a result of different relationships between Hiberno-Norse towns and secular Irish sites on one hand, and Hiberno-Norse towns and ecclesiastical sites on the other hand. While trading links between the Hiberno-Norse town and the ecclesiastical sites are the most likely explanation for the hoards found at the latter sites, the relationship between Hiberno-Norse towns and secular sites could have been in the form of tribute, as represented by the hoards from these sites.

The largely uniform character of the hoards in the secular and ecclesiastical settlements provides evidence that these hoards are not the result of raids, but rather from the conscious obtaining of silver objects through trade, tribute or other forms of exchange. If the secular hoards represented loot, then it would be expected that their contents would be more varied. The early 10th century mixed Dysart 4 hoard (see chapter 3.3.3) could be an exception to this: it can be dated to the period prior to the Norse expulsion from Dublin (see chapter 3.1), and might therefore represent the result of plundering after of the expulsion. If, on the other hand, ecclesiastical hoards represent material buried for safe-keeping, then we should expect hoards in monasteries and church sites to date from the early Norse incursions, and not mainly from the 10th century onwards.

In this section the difference in hoards found in ecclesiastical sites, secular Irish settlements and Hiberno-Norse towns has been examined. The main conclusion is that there is a difference between the secular and ecclesiastical economies; either due to a chronological distinction or a contemporary difference in forms of exchange. However, the division between the economies would not have been clear-cut and they must have intersected. Another important conclusion to be drawn is that the monasteries seem to have had strong, potentially commercial links with the Hiberno-Norse towns and this is will be examined in the next section.

4.3.1 Ecclesiastical economy

As mentioned in chapter 3.3.1, 16 of the 20 ecclesiastical sites with hoards are situated in *Dyflinarskiri*, Dublins's peripheral zone and in the possible hinterland surrounding Limerick. While source-critical concerns (see chapter 1.3) must be taken into consideration, this distribution indicates that the ecclesiastical sites in these areas had particularly strong links to the Hiberno-Norse towns. In this chapter I will try to link the hoard evidence to market activity at Irish monasteries.

Many authors mention that there must have been trade and contact between Hiberno-Norse towns and large monastic settlements, but few explore it further (Doherty 1980:71; Ó Floinn 1998:159; Sheehan 1998a:175; Valante 2000:81). The deposition of many hoards at monasteries and church sites could signify that the ecclesiastical sites, along with markets in Hiberno-Norse towns, were the main meeting places for the Norse and Irish. This potentially

explains why more ecclesiastical hoards have been found close to Hiberno-Norse towns than elsewhere.

If the ecclesiastical hoards represent the product of trade between these sites and the Hiberno-Norse towns, then what goods could the ecclesiastical sites have sold to the towns? The relationship between Dublin and the surrounding areas was discussed in chapter 3.1, where it was suggested that agricultural surplus would have been wanted by the inhabitants of Dublin. The monasteries were potentially the main, if not the only, producers of agricultural surplus, and they could accumulate this surplus far quicker than the secular sites (Doherty 1985:55; Ó Corráin 1972:72). Thus trade in grain very likely took place between the Hiberno-Norse towns and the ecclesiastical sites. The artefacts in the hoards could be the payment for agricultural products. This could explain why most hoards in ecclesiastical contexts are found within the periphery of Dublin, in *Dyflinarskiri* or in the hinterland of Limerick: these areas provided the towns with what they needed. The scale of these hoards would indicate that this trade was substantial and that such commodities were valued highly.

Exceptions to the pattern are the hoards from Armagh and Tynan Demesne, Co. Armagh; Derrykeighan, Co. Antrim and Hare Island, Co. Westmeath. The hoard from Derrykeighan is an anomaly among the ecclesiastical hoards in that it is not from a known area of Norse influence or from a monastery known to have been large or especially influential. Derrykeighan is situated inland from the northern coast of Co. Antrim and even though no large Hiberno-Norse settlement was located nearby there are historical references to Norse activity in the area (see fig. 6 and 7) and furnished Norse burials have been found along the Antrim coast (Harrison 2001:66).

Armagh, Kells, Clonmacnoise, Derry, Clonard, Downpatrick and Kildare were the most prominent monasteries in early medieval Ireland and were possibly proto-urban from the 10th century onwards (see above: chapter 3.1 and fig. 5). A 10th century date of the beginning of the proto-urban phase of monastic development is supported by the chronological distribution of the majority of the ecclesiastical hoards. The hoards from Tynan, Hare Island and Delgany set aside, the remaining ecclesiastical hoards were deposited from AD 920 onwards. Hoarding activity at monasteries and church sites intensified in the 970s and continued up to the very end of the 10th century, followed by a gap in depositions until AD 1035. Interestingly the chronological distribution of ecclesiastical hoards corresponds well with the broader

chronological distribution of coin hoards proposed by James Graham-Campbell (see chapter 3.4.1). This chronological distribution of ecclesiastical hoards indicates that the ecclesiastical centres were a part of an upsurge in exchange and trade involving coins from the 10th century onwards, as pointed out by Charles Doherty (1980:71). The possible proto-urban monasteries of Armagh, Clonmacnoise and Kildare have yielded one or more hoards and this hoard evidence can be seen as part of a broader range of evidence for market activity at these sites.

Two hoards have been found in Kildare: one contained 34 Anglo-Saxon coins and was dated to c. 991 and the other hoard, found below the floor of the round-tower, contained six Hiberno-Norse coins dating from c. 1135. Charles Doherty (1985:67) has interpreted the latter as the lost coins of a workman repairing the tower in the 12th century. In any case the coins ended up in Kildare, and that could attest to the commercial character of the settlement in the Viking Age. The monastery of Kildare also had a market-place, and this was probably located where today's market square and Market House are, to the south-east on the boundary between the inner and outer enclosure (Swan 1985:86). Manufacture at the site is attested by a documentary reference to comb-working activity in Kildare (Doherty 1980:83, 1985:67). Although Kildare retained its ecclesiastical importance, the international trading port in Dublin became more important, and came to dominate Leinster and even the whole of Ireland in the 12th century (Doherty 1985:63). Dublin was also elected as the archbishopric of Leinster over Kildare in the 11th century (Wallace 1985:139). This implies that the relationship between Dublin and the large monasteries took on the form of competition in the late Viking Age, a development that may have started even earlier, and which may have involved the economic as well as the ecclesiastical sphere.

Ill. 1a and b—Obv. and rev.

Ill. 2a and b—Obv. and rev.
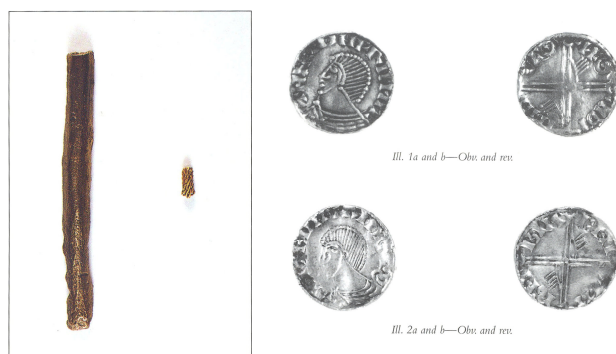
Fig. 29: Bronze ingot and gold fragment (after Ó Floinn and King 1998:123) and Hiberno-Norse coins (after Kenny 1998:141) from the Clonmacnoise hoard
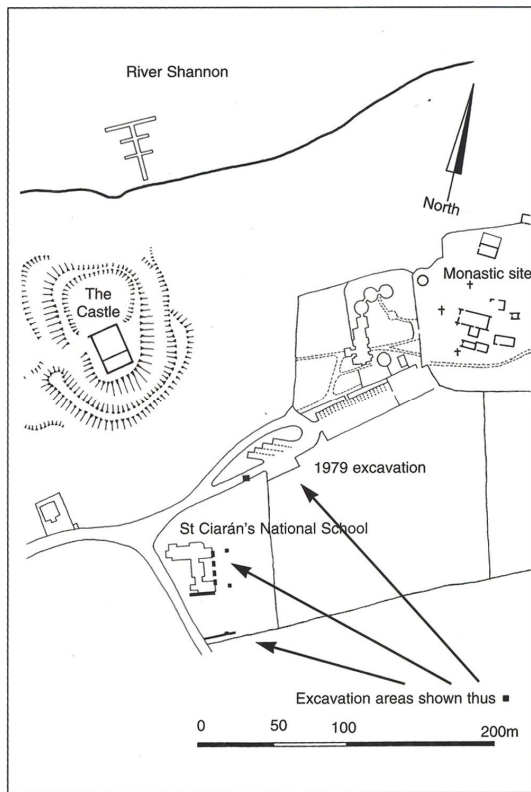
Fig. 30: Clonmacnoise site plan (after Murphy 2003:1)

One hoard dated to AD 1075-1090 has been found in Clonmacnoise (fig. 31): it contained Hiberno-Norse coins, a bronze ingot and a fragment of a gold ornament. This combination of artefacts in a Viking Age hoard is very peculiar (see fig. 29). The hoard was found in the grounds of St. Ciarán's National School in an area believed to be within the proposed settlement surrounding the monastery and therefore part of the monastic complex (Kenny 1998:133; Ó Floinn and King 1998:120; Murphy 2003:21 – see fig. 30).

Fig. 31: Clonmacnoise (after Tubridy 1998:1; Dúchas The Heritage Service©)

This means that the hoard derives from an area of domestic activity area or manufacturing. There is evidence of metal-working in the vicinity of Clonmacnoise, and this has made Ó Floinn and King (1998:123) suggest that the hoard belonged to a gold-smith. This is possible but members of the clergy could also have deposited the artefacts. The monastery was influential and it probably surpassed Armagh as a centre of learning and literacy. References are made to well-made streets and houses at the settlement (Doherty 1985:64,65). Surveying at Clonmacnoise has revealed possible traces of an expansion of the monastery in the 8th and 9th centuries. The outer enclosure has been estimated to cover 13ha; a substantial area (Murphy 2003:19,22).

Three hoards have been found at Glendalough and they all contain coins of different sorts. Glendalough 2 (c. 942) contained 49 Anglo-Saxon coins, Glendalough 3 (c. 975) contained Anglo-Saxon coins and Glendalough 1 (c. 1090) contained an unknown number of Hiberno-Norse coins. These three hoards deposited over a period of almost 150 years indicate relatively stable trading links with Dublin, not unlikely considering that Glendalough was situated in Dublin's peripheral zone (see fig. 7 and 8). Glendalough had a cross (see chapter 3.1) right outside the outer enclosure beside the river which is widely believed to have been associated with a market site (Doherty 1980:83).

Five hoards have been found in Co. Armagh:

Hoard location	Site description	Hoard contents	Dating
near Armagh	Uncertain	2 arm-rings	9th/10th century (?)
Tynan Demesne	Uncertain, possibly monastic	7 arm-rings	9th/10th century (?)
In Armagh	Monastic	3 Anglo-Saxon and 1 Viking coin	c. 970
Armagh Cathedral	Monastic	3 Hiberno-Norse coins	c. 1103
Outlack (?)	Uncertain	12 Hiberno-Norse coins	c. 1105

Table 6: Hoards in Co. Armagh

The distribution of these hoards in or around Armagh (fig. 15) testifies to the role of this monastery as a distribution centre and indicates that exchange took place there. While we cannot be sure if all five hoards are effectively derived from the monastery, it is probable. Armagh was the Irish monastery that had the closest resemblance to a town – with its regular streets and suburbs – and a monetary economy could have developed here in the 11th century (Gosling 2003:74; Ó Corráin 1972:73). The market-place at Armagh was marked by a cross (see chapter 3.1) between the inner and outer enclosure on the east side of the settlement. This is also the location of the modern market square (Swan 1985:86).

The importance of Armagh, Kildare, Clonmacnoise and Glendalough is attested to by the hoards found there: these sites have all yielded hoards. These major monasteries are not the only ones which witnessed hoarding activity. The concept of "market crosses" was mentioned in chapter 3.1, and two hoards have in fact been found in connection with crosses at ecclesiastical sites: Monasterboice and Kilmainham. The hoard from Kilmainham is described by some sources as found in connection to a tomb-stone but this was actually a cross-shaft (pers. comm. Stephen Harrison).
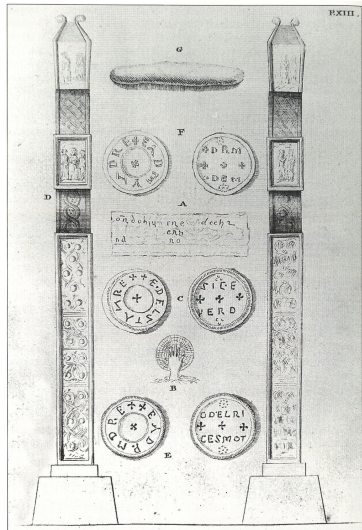
Fig. 32: The hoard from Monasterboice (after Ó Floinn 1998:160, from T. Wright *Louthiana*, London, 1748)

The hoard from Monasterboice was found near Muiredach's Cross in the graveyard and contained three Anglo-Saxon coins and ingot(s) (fig. 32). The cross derives its name from an abbot resident at the site, either the Muiredach who died in AD 844 or a later abbot bearing the same name who died in AD 922/923 (Roe 2003:27,29). Muiredach's Cross is right inside or outside of the line of the inner enclosure at Monasterboice. If the cross is at the inside, within the sacred core of the monastery, it is unlikely to have been a market cross. This does not however prevent the existence of a market-place at the monastery, but suggests that this cross had another function. According to the proposed ground plan of Monasterboice (fig. 4 (no. 9)) the cemetery extends further out in the southeast than the proposed inner enclosure exactly in the area where Muiredach's Cross stands (fig. 33). In any case the hoard indicates a market nearby.
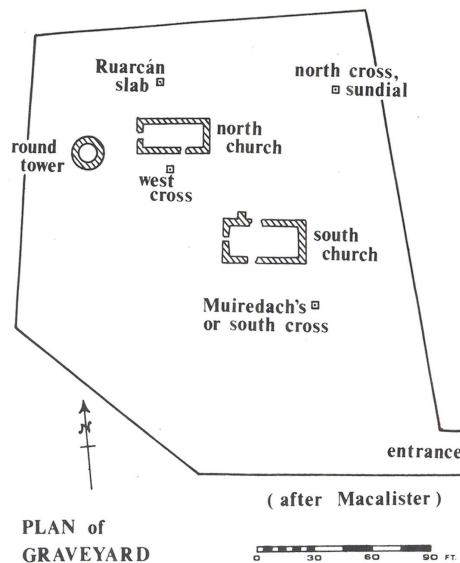
Fig. 33: The graveyard at Monasterboice (after Roe 2003:26)

Monasterboice seen today today would give an impression of a small, if wealthy monastic settlement, but the written sources tell a different story. The attacks on the settlement (see chapter 3.1) apparently left at least three hundred people dead. Even though annalists are known to exaggerate, the population must have been large. Three souterrains found within the outer enclosure also attest to the size of the settlement, indicating that the buildings at Monasterboice must have been spread out over a sizeable area. The number of high-crosses in

the monastery is indicative of its wealth: three crosses survive on site along with at least two cross fragments. Aerial photography has also revealed the extent of the outer enclosure, which is almost twice as large as that at Clonmacnoise, another indication of the wealth of Monasterboice (Gosling 2003:76; Murphy 2003:22; Roe 2003:9,67 – see fig. 34).
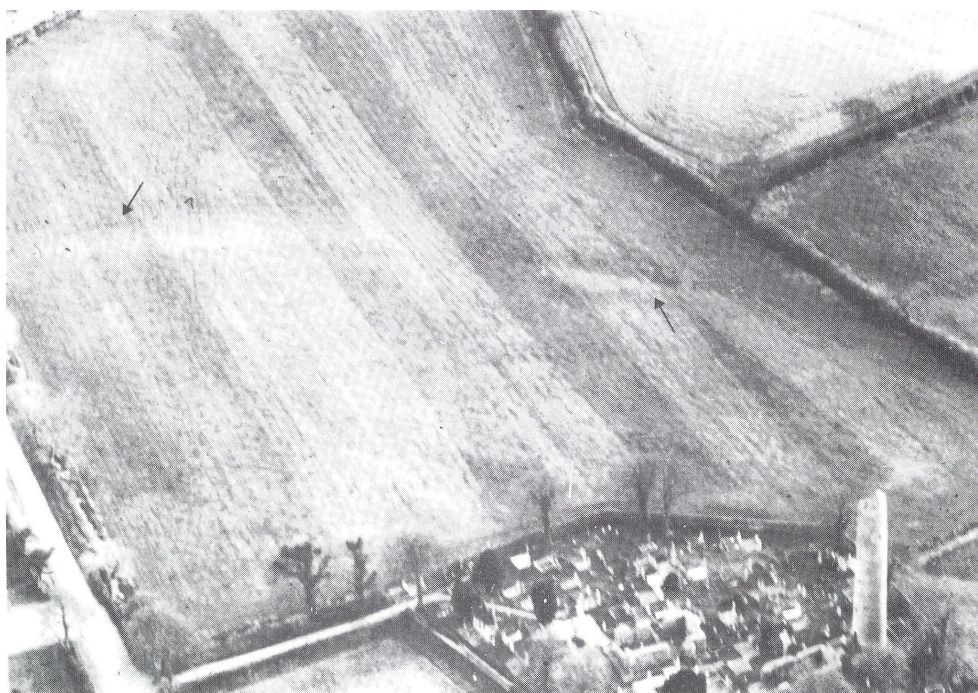
Fig. 34: Traces of the outer enclosure at Monasterboice (after Gosling 2003:75)

The monastery of Kells also had a market street and a market cross (Swan 1985:86) but no hoard has been found in Kells, either because no hoards were deposited or perhaps because they have gone unnoticed. There might be a distinguishing factor in Kells' history to explain this, specifically who had control of the monastery. Edel Bhreathnach (1999:9) has suggested that Kells and the *Clann Cholmáin* tribe were in conflict with Dublin and the kingdom of Brega (see chapter 3.3.2). While this could potentially explain the lack of hoards from Kells, I find it more likely that this lack is a result of the role of secular sites in Míde compared to that of the ecclesiastical sites. Only four hoards in Míde are from possible church sites (Hare Island (2 hoards), Fennor and Killyon) while eleven of the twenty secular Irish hoards have been found in counties Meath and Westmeath. This indicates strong secular power in the area; corresponding with the proposal of a concentration of secular power in the northern part of Dublin's peripheral zone argued elsewhere (see chapter 4.3). This may indicate that in Meath the secular sites had closer relations with Hiberno-Norse towns than the monasteries.

In this chapter I have argued that the hoards found in ecclesiastical settlements attest to the mercantile importance of major Irish monasteries. This is further strengthened by the clusters of hoards found in and around Armagh, Glendalough and Rahan, as pointed out by Gerriets (1985:133). 27 hoards have been found in monasteries and church sites (see chapter 3.3.1), this supports the picture that the written sources provide of the monasteries as economical focal points in society. The number of hoards in ecclesiastical sites suggests that they were meeting places for the Irish and the Norse. The monasteries in the hinterland and peripheral zones to the Hiberno-Norse towns in particular have yielded many hoards, and the artefacts in the hoards could be payment for agricultural produce or other materials needed by the town. The chronological distribution of the ecclesiastical hoards supports the notion that some of these sites were part of exchange networks from the 10th century onwards; they could even have become proto-urban. At the same time the chronology of the ecclesiastical hoards also indicates that the monasteries played an important role in a period of increasing trade and exchange in Viking Age Ireland. In two cases the hoards seem to have been deposited near crosses that may be associated with market activity. Thus, the deposition of hoards at ecclesiastical sites is an expression both of their role in regional trade and of their close relationship with Hiberno-Norse settlements.

4.3.2 *Longphuirt* and Hiberno-Norse towns

As seen in chapter 3.3.3 only eight hoards can be assigned to Hiberno-Norse settlements:

- Five hoards from Dublin town
- One hoard from Dalkey
- Two hoards from Limerick (one uncertain)

The small number of hoards from Norse contexts is odd but it can be explained by the role of these towns as distributive centres. The role of these settlements as centres of international and regional trade is indicated by where the wealth from the towns ended up. The towns were responsible for both the import of coins, the later production of coins, arm-ring manufacture and most of the manufacture of ingots (see chapter 3.1 and 3.1.1). Thus, most of the silver found in Ireland and elsewhere, the hoards included, was derived from the towns and trading settlements.

In the previous sections the upsurge in hoarding activity in the 10th century has been mentioned, but the 9th century *longphuirt* may also have played a role in the redistribution of artefacts. An analysis of the coinless hoards and the recognition of Hiberno-Norse and native

Irish silver-working tradition make it likely that the greatest amount of silver was imported between c. AD 850 and 950. This means that silver was imported before the establishment of the 10th century Hiberno-Norse towns, and it testifies to the importance of 9th century *longphuirt*: some of them were potentially important trading and market settlements (Sheehan 1998a:171-172, 1998b:148, 2001:59). James Graham-Campbell has suggested that the growing number of coin hoards from AD 920 and onwards may be the result of large quantities of silver being introduced by the Norse, as mentioned in chapter 2.1. The artefacts in the hoards make it likely that this process of importation began earlier.

The Hiberno-Norse urban settlements that grew up around the Irish coast derived their wealth from trade, particularly with Anglo-Saxon England, and this led to the import of Anglo-Saxon coins in the 10th century (Doherty 1980:82; Williams 2007:202). Earlier hoards could result from raids and also other exchange mechanisms such as trade and tribute. 13 hoards with coins predate the re-founding of Dublin in AD 917 (see chapter 3.1):

Hoard location	Hoard contents	Dating
Unlocalized hoard, Co. Louth	Coins from the reign of Offa	Late 8th/early 9th century (?)
Ballywillin, Co. Antrim	Anglo-Saxon coins	9th century (?)
Delgany, Co. Wicklow (church site?)	115 Anglo-Saxon and one papal coin	c. AD 830
Mullaghboden, Co. Kildare	Carolingian coins	c. AD 847
Cushendall, Co. Antrim	Pin, chain and 2 Anglo-Saxon coins	c. AD 850
Unlocalized hoard from Leinster	7 Anglo-Saxon coins	c. AD 875
Unlocalized hoard, "Ireland"	Anglo-Saxon coins	c. AD 875
Drogheda, Co. Louth	Viking and Kufic coins	c. AD 905
Millockstown, Co. Louth (ring-fort)	2 ingot fragments and a Kufic coin	post-AD 905/906
Dysart 4, Co. Westmeath	45 coins, 85 ingot and ingot fragments and 29 pieces of hack-silver	c. AD 907
Magheralagan, Co. Down	Several arm-rings and arm-ring fragments, ingots, 2 "silver forks", Kufic coins	c. AD 910 (?)
Unlocalized hoard, Co. Antrim (fig. 35)	4 arm-ring fragments, 2 ingot fragments, coin	c. AD 910 (?)
Unlocalized, Co. Derry	Kufic coins	c. AD 910 (?)

Table 7: Coin-dated hoards predating AD 917

Five of these hoards are unlocalized, five are non-site specific, two are from secular Irish sites and one is possibly from a church site. These hoards were found in coastal areas except the hoards from Mullaghboden and Dysart 2, and they correspond to the Norse incursions in Leinster and Ulster in the 9th century, known from Irish written sources (see chapter 3.1). The character of Norse activity at this stage is difficult to assess. The early hoards could be loot

from raids in England, and they show that the Norse brought coins into Ireland in the 9th and early 10th century and that these coins ended up in hoards. This redistribution of wealth could possibly have happened via the *longphuirt*.

Fig. 35: Unlocalized mixed hoard from Antrim c. AD 910 (after Sheehan 2001:54; with courtesy of Ulster Museum, Belfast)

The archaeological material from Woodstown, Co. Waterford (see above chapter 3.1) can shed light on the character and function of *longphort* settlements: the excavations here have revealed ship-nails, balance-weights, weapons, a 9th century Kufic coin, a 9th or 10th century Norse burial and silver artefacts. Together these artefacts indicate that this was a Norse base in the 9th and early 10th centuries, and more importantly they attest to the character of this early Norse base. Metal-working and/or small-scale exchange could have taken place on site (Downham 2004:77,84; Harrison 2007:12,15,21,25,37,38,46). The economic character of the site is emphasized by the 40 silver objects that were found; including ingots, ingot fragments, a silver weight, arm-ring derived hack-silver and casting waste. Artefacts from the hoard from the ring-fort at Kilmacomma (see chapter 3.3.2) resemble the silver assemblage from Woodstown, it is even possible that the hoard is derived from Woodstown (Sheehan 2007b:206-207). The Kilmacomma hoard thus indicates the redistributive role of the *longphuirt*.

The main trading settlements in the 9th century were Dublin and Annagassan (Sheehan 1998a:172) but only the role of Annagassan is possibly attested to by the early hoards containing coins, three of which come from Co. Louth. The hoards from Mullaghboden and Dysart 4 attest to Norse influence in Leinster: Mullaghboden lies in Co. Kildare while Dysart lies in the heartland of the Irish *Clann Cholmáin* dynasty as seen in chapter 3.4.3. Two Irish secular settlements are represented among the early coin hoards: the Dysart 4 hoard from Co. Westmeath and the hoard from Millockstown, Co. Louth. This could indicate that relations with the secular Irish aristocracy were being established or had already been established in the

early 9th century. On the other hand the artefacts in these hoards could derive from Irish raids on Norse settlements, especially following the event in Dublin in AD 902 (chapter 3.1). Some form of early non-violent contact between secular Irish and Norse settlements is not unlikely. When the Millockstown and Dysart 4 hoards were deposited the Norse had been settled in Ireland for more than 50 years, that they were present for so long in Ireland without being in contact with the ruling Irish tribes is unlikely. There is some evidence for alliances between the Norse and the local Irish dynasties in this period (Ó Corráin 1972:92-93).

The hoard from the ring-fort of Carraig Aille II in Co. Limerick also indicates that relations were being formed between the Norse and the Irish people in this area. This hoard can be dated to the 9th or 10th century, and cannot be related to any known historical event, in contrast to the Dysart 4 hoard. The occurrence of early hoards in secular Irish settlements on opposite sides of Ireland makes it possible that relations with the Irish were established in the early 9th century. Even though the silver was extracted from the Norse though tribute or by violent means the hack-silver elements of four hoards (Millockstown, Dysart 4, Magheralagan and the unlocalized hoard from Antrim) indicate the recognition of the commercial value of silver.

A Norse base was set up in the Limerick area in the 830s/840s, and while the initial Norse settlement in Limerick seems to have been established in the 920s, the site did not become a town until around AD 967 (chapter 3.1). The site's redistributive function is attested by the five hoards found in Co. Limerick:

Hoard location	Site description	Contents	Dating
Carraig Aille II	Ring-fort	Arm-ring, 3 arm-ring fragments, 2 ingots, ingot fragment	9th/10th century (?)
Mungret	Monastic	Anglo-Saxon and Viking coins and hack-silver	c. AD 953
Adare	Ford	Anglo-Saxon and Hiberno-Norse coins	c. AD 1050
Limerick	Hiberno-Norse town	Hiberno-Norse coins	c. AD 1063
Limerick (near)	Uncertain	2 kite-brooches	Uncertain

Table 8: Hoards in Co. Limerick

Objects in the late hoards from Co. Limerick could be derived from the established Norse settlement, but the coinless hoards and the hoard from Mungret could attest to the commercial character of the settlement before a town evolved. The occurrence of coins, ornaments and ingots before Limerick's town phase hint to the character of this settlement, possibly of a

longphort type. The artefacts could have been obtained elsewhere and we have no guarantee that they were traded in Limerick, but I find it likely that a *longphort* in the area was the arena of exchange or at least the source of this silver.

Written evidence from the 11th century refers to Norse people, probably from Wexford, attending the *óenach* (see chapter 3.1) at Carman near Wexford. It was most likely to have been a regular phenomenon for people from Dublin and other Hiberno-Norse towns to attend Irish fairs to obtain products. The Irish probably also attended Hiberno-Norse markets and brought their goods with them there (Valante 2000:78-79,81). From the 10th and 11th century onwards Old Norse shipping and trading vocabulary started appearing in the Irish language, this must reflect regular trading and communication (Greene 1976:79). There is also an example of local trade from Hiberno-Norse Dublin; Irish "souterrain" pottery from the late 11th or early 12th century has been found there. The pottery is generally provenanced to northeast Ireland, the rest of the country being largely aceramic during this period. The vessels could have contained foodstuffs of some sort, and the small number of vessels found suggests that the contents were more important than the container itself (Wallace 1985:135).

The large number of hoards from the kingdom of Míde was mentioned in chapter 4.3.1 and is illustrative of the relationship between this kingdom and Dublin: the economies of Míde and Dublin cannot be treated as separate entities. It is possible that the inhabitants of Míde were aware of money as a medium and set aside money for trade with coin users, although they did not use coins like this in their own community (Kenny 1991:115). On the other hand coins found at Irish sites do not necessarily indicate a coin-using exchange system between the Irish and Hiberno-Norse centres – the artefacts could also result from tribute in silver (Wallace 1985:138).

The redistributive function of *longphuirt* and Hiberno-Norse towns has been the focus of this chapter. The role of the *longphuirt* is attested by the early import of silver evident from the coinless hoards and the early hoards containing coins, even though some of the latter hoards could result from raids as well. Some of the early 10th century hoards suggest that relations with the Irish tribes had already been established, at least in the areas around Dublin and Limerick. There is also evidence that the Norse visited Irish markets. Thus the distribution of hoards can be explained by relations to a Hiberno-Norse redistributive centre. While the main

focus of chapter 4 has been economic, social and cultural aspects of silver exchange in Viking Age Ireland will be examined in the following chapters.

CHAPTER 5: INTERPRETATIVE FRAMEWORK

5.1   Introduction

In chapter 3 I presented the geographical distribution of Irish Viking Age silver hoards and the artefacts that have been found in the hoards. The final section of the material chapter dealt with hoards from ecclesiastical sites, secular Irish sites and Hiberno-Norse towns. The first pattern that emerges is the uneven geographical distribution of hoards and this can to a certain extent be explained by source-critical aspects (chapter 1.3) and the extent of Norse control (chapter 3). The other discovery relates to different artefacts being deposited in hoards in ecclesiastical and secular Irish contexts respectively. The concept of "economic spheres" was discussed in chapter 4.3, and there I argued that the settlement hoards support the theory that ecclesiastical and secular Irish sites were parts of different commercial spheres; either contemporary or at different times. Chapter 4 explained hoard distribution in terms of trade but this was not the only exchange mechanism at work in Viking Age Ireland. My aim is to discuss the geographical variation and varying contents of the silver hoards in relation to exchange networks and cultural identity in Viking Age Ireland and thus theories of exchange from economic anthropology (chapter 5.2) will be used in the interpretation of the patterns in the Irish Viking Age silver hoards. In the next chapter (5.3) I will present a framework for understanding cultural identity and ethnicity in Viking Age Ireland. Economic explanations have dominated research on Viking Age silver: an example is the interpretation of hack-silver (see above: chapter 2.1). Section 5.3 discusses fragmentation of silver objects and the role of material culture in social relations. In chapter 6 I will apply these theories to the silver hoards presented in chapter 3.

5.2   Exchange and economic anthropology

Trade has long been the main focus when studying transactions (Gustin 2004:11-12; Kruse 2007:163) but there were other means to exchange goods in Viking Age Ireland: either through raids, client-ships, tribute, mutual gift-exchange, donations to monasteries or even to gain permission to pass through territory to acquire goods (Gustin 2004:12; Sheehan 1998b:148; Valante 2000:74-75,77).

A central concept in economic anthropology is the dichotomy of gift versus commodity. A commodity is an object that has use value and can be exchanged for a counterpart with an

equivalent value in the immediate context. The goal of the exchange of commodities is solely to obtain the counterpart value, either by direct exchange or indirectly by way of money. Commodities are common things, in contrast to singular things which are not exchangeable with anything else. Commodities and singular things are polar types: they cannot be separated and no economic system has one type exclusively (Kopytoff 1986:68-69,70). Archaeologists have tried to distinguish between possible gifts ("prestige goods") and commodities based on the objects themselves. This could turn out false, as objects can acquire new meanings over time and move between spheres of transactions. Things can be decommoditized after the exchange, and artefacts can switch between being a commodity and being singularized. When artefacts are singularized they are pulled out of their usual commodity sphere (Kopytoff 1986:74). Objects are transformed between types of transactions in specific contexts denoted "tournaments of value" by Arjun Appadurai (1986:21). In the medieval period "tournaments of value" were specific locations, often markets and festivals related to central cult places (Theuws 2001:202-203). To sum up, the interpretation of an artefact is based on the meaning of the transaction of that artefact, not the actual artefact itself.

The anthropologists Jonathan Parry and Maurice Bloch (1989:2,23) are not so much concerned with the dichotomy of gift versus commodity exchange but are rather interested in the meanings of transactions: they differentiate between short-term transactions that are individual actions for individual competition, and long-term transactions that are enacted for the reproduction of social and cosmic order. This means a shift from the objects themselves to the meanings behind transactions and how they are perceived by the actors. The two types of transaction exist side by side and objects can exist in both and move between them. This does not mean that the two types of exchange are separated – in fact they are mutually intertwined. Short-term transactions provide the material basis for long-term exchange and long-term transactions are only possible through individual actions (Parry and Bloch 1989:26).

In this chapter I have shown that economic value cannot be separated from the social and cultural aspects of exchange. Ideas from economic anthropology provide an interpretative framework for studying Viking Age silver hoards in Ireland, as will be explored in chapter 6.

5.3   Ethnicity and cultural identity

The exchange of silver between the Irish and the Norse/Hiberno-Norse took place within a social context, and this makes concepts of ethnicity and cultural identity relevant. The term

"archaeological culture" is controversial but it is not entirely wrong: spatial variation in material culture does occur and "culture" can be used to express this. The important thing is to avoid equating material culture with ethnic groups (Shennan 1989:6), and instead view ethnicity as an aspect of social relations and behaviour. Some aspects of material culture relate to ethnic boundaries while others cross-cut them. Archaeological distributions comprise many cross-cutting patterns and this should be seen as the reality, instead of forcing diverse archaeological assemblages into convenient "cultures" (Lucy 2005:86,92,93; Shennan 1989:13). By acknowledging cross-cultural variation we can understand the processes that led to different patterns in hoard depositions in Viking Age Ireland; processes linked to ethnic and cultural identity.

The concept of identity is difficult to define and the term can refer to both a person's self-identity and group identity. Margarita Díaz-Andreu and Sam Lucy (2005:1) define identity as the individual's identification with broader groups on the basis of differences socially sanctioned as different. Belonging to a group demands action and identity is not static, rather it is constructed through interaction between people: choice and agency are crucial in order to maintain or change our identity. Identities can be hybrid and multiple and different identities can intersect (Díaz-Andreu and Lucy 2005:1-2). "Ethnic identity" denotes the definition of oneself resulting from identification of a broader group in opposition to others, a type of identity based on perceived cultural differences and/or common descent. An "ethnic group" is a group of people who are setting themselves apart or are being set apart by others. Different ethnic groups interact and co-exist on the basis of perceptions of cultural differentiation and/or common descent. Ethnicity is focused on how social and cultural processes intersect in the identification of, and interaction between, ethnic groups (Jones 1997:xiii).

Lucy defines ethnicity as feelings of social belonging based on shared territory. A shared practice in a group is necessary for an ethnic identity to be continually constructed (Lucy 2005:101). Fredrik Barth (1969:10) saw ethnic identity as a created idea rather than a natural identity, in his opinion people maintain ethnic groups and validate ethnic boundaries. We have always had a need to categorize the world, and ethnic classifications are one way to create order (Lucy 2005:98). The meeting of different cultural and ethnic groups means that the old categorizations of ethnicity and cultural identity no longer make sense: this is called an "in-between"-situation. Uncertainty arises and the divisions previously used for categorization are being displaced. This ethnic and cultural confusion can lead to the creation of new ethnic

and cultural classification; called "hybridization" or "creolization" (Bhabha 1994:177,178; Eriksen 1994:12-13,30,33,35,36). The Norse Vikings encountered native populations in different areas, thus the identity and cultural expressions that developed in the different colonized areas would have differed from each other (Glørstad forthcoming:4,23).

In this chapter I have presented a framework for a discussion of ethnicity and cultural identity in Viking Age Ireland. The main conclusion is that ethnicity and cultural identity are cultural constructions.

5.4   Fragmentation

I have already mentioned the interpretation of hack-silver as representing a stage of development towards a monetary economy (chapter 2.1). Fragmentation of silver artefacts in northern Europe in the Viking Age and early medieval period could have other explanations besides the pure economic ones. A possible scenario is two people agreeing on dividing up an artefact and keeping one part each in order to create a social bond (Chapman 2000:6). The concept of fragmentation is central in the works of John Chapman (Chapman 2000; Chapman and Gaydarska 2007). In his study he sees social relations based on the concepts of accumulation of mostly complete objects and enchainment, meaning a succeeding chain of personal relations through exchange of fragments. In this way he seeks out to link individuals through material culture (Chapman 2000:4-6,105).

The deposition of locally produced complete objects seems to signify a time and place where it was important to emphasize integration rather than social fragmentation. The use of complete objects in local enchained relations symbolized social integration and harmony between fractally related persons. This would explain the deposition of complete items in graves or special hoard locations. Linking people in this way is another type of relation than enchainment based on fragmented objects (Chapman 2000:45).

CHAPTER 6: SOCIAL AND CULTURAL ASPECTS OF IRISH VIKING AGE SILVER HOARDS

6.1   Introduction

In chapter 5 I presented an interpretative framework for the study of the Irish Viking Age silver hoards. The main patterns that will be examined are the geographical distribution of silver hoards and the different hoards found at secular Irish sites and ecclesiastical sites. The hoards from Hiberno-Norse towns are similar to those from ecclesiastical sites and thus they differ from the secular Irish hoards. This indicates that Irish and Norse related differently to silver and will be examined in chapter 6.2. The Irish had a perception of themselves and their ethnicity: this can be discerned from the focus on descent and genealogies evident in the Irish written sources (Byrne 2001:1,3,4). This group identity was contrasted with the coming of the Norse, *gaill*. This perception of difference was most likely shared by the Norse kings, and we can therefore assume that Norse and Irish were two distinct categories, at least in the beginning of the Viking Age (Bhreathnach 1999:8; Mytum 2003a:114-116). Distinguishing factors in their definition of each other may have been language, religion, ancestry and a different material culture. Ethnic and cultural relations are and were not natural categories and would have changed as the Viking Age progressed (Barrett 2004:209, see chapter 5.2). The term "Hiberno-Norse" refers to Norse groups established in Ireland (Harrison 2007:3), and also the material culture that combined Norse and Irish elements: the term is based on an idea that the archaeological material of these towns also contains elements of native Irish material culture along with Norse elements (Clarke 1998:332; Wallace 1985:107,129). Some artefacts were associated with different groups while others were used by both Irish and Hiberno-Norse people (Harrison 2007:23).

6.2   Comparing hoard from secular Irish sites, ecclesiastical sites and Hiberno-Norse towns

Are cultural and ethnic differences evident in the hoards? Hoards from Hiberno-Norse settlements are either coinless or coin hoards: six hoards contain only coins, one hoard contains gold arm-rings while another contains two kite-brooches (see chapter 3.4.3). The hoards from secular Irish sites are different: thirteen of 20 hoards contain complete ingots and/or ingot fragments, six contain complete arm-rings and seven contain arm-ring fragments. This indicates that people associated with secular Irish sites preferred complete arm-rings,

ingots and ingot fragments while people living in Hiberno-Norse towns mostly dealt with silver in the form of coins. Whether these differences are the result of cultural differences or exchange links is uncertain, but evidently ethnic differences can be discerned in the way which different silver objects were preferred by the Irish and Hiberno-Norse respectively.

Of the ecclesiastical hoards (see chapter 3.3.1), only the gold fragment from the Clonmacnoise hoard is ornament-derived, otherwise no arm-rings are represented. The ecclesiastical hoards have more in common with the hoards from Hiberno-Norse settlements, but have a higher occurrence of non-numismatic silver. The silver present at ecclesiastical sites seem to be a mix of the economies that can be discerned from the secular Irish and Hiberno-Norse contexts. This supports the notion of the monasteries as meeting places between different people as mentioned in chapter 3.1.

Documentary evidence from Ireland testifies to the presence of Norse people at the monasteries of Monasterboice, Kilmainham and Glasnevin (chapter 3.3.1). The use of silver coinage at ecclesiastical centres could be caused by the presence of Norse merchants, but the supposed difference in the ethnicity of peoples present in the monasteries is not evident in the contents of the hoards. Hoards from "Irish" monasteries are similar to ecclesiastical settlements with Norse people present, and thus the ethnicity of the people at these sites did not seem to influence the kind of artefacts that were deposited here. Most of the ecclesiastical sites with hoards were situated in the hinterland or peripheral zone of one of the Hiberno-Norse towns, which indicates that these areas were characterized by a common material culture. This can be contrasted to the hoards from secular Irish sites, which diverge from the Hiberno-Norse hoards. Here cultural differences between the Irish and the Hiberno-Norse seem to be present. The reason for different hoards in secular Irish sites and Hiberno-Norse towns thus seems to be that they preferred different silver objects, i.e. the hoards point to cultural and ethnic differences. On the other hand the character of secular Irish hoards is not uniform, and this will be discussed in the next section.

6. 3   Interpreting hoards from secular Irish sites: arm-rings and arm-ring fragments
The geographical distribution of hoards from secular Irish sites was presented in chapter 3.3.2: fourteen hoards have been found within the peripheral zone of Dublin and six hoards have been found in areas without Hiberno-Norse influence: no secular Irish hoards have been

found within *Dyflinarskiri*. The main differences of the contents of the hoards in and outside of areas with Hiberno-Norse influence respectively are:

1. The occurrence of imported objects (coins and the Baltic brooch) and penannular brooch fragments (Dysart 4 and Lough Kinale) at sites within the peripheral zone

2. Eleven hoards containing ingots and ingot fragments have been found in the peripheral zone, compared to three outside of it

3. Five hoards outside of the peripheral zone contain arm-rings, while only two hoards found within the peripheral zone do

4. The occurrence of arm-ring fragments (in five hoards within the peripheral zone and two hoards outside of it)

These patterns indicate that the secular Irish sites in the peripheral zone had a different relationship with the Hiberno-Norse towns compared to the sites further away from Hiberno-Norse settlement: they obtained different artefacts. This could attest to the cultural identity of the Irish on these sites, especially considering the occurrence of arm-rings and arm-ring fragments respectively in and outside of the peripheral zone. The different pattern in hoards could be a result of either a more economically oriented relationship with Irish living in areas close to the Hiberno-Norse, or different ways to mark alliances with Irish in different areas: complete arm-rings were exchanged with the Irish outside of the peripheral zone, while hack-silver and ingots were exchanged with the Irish in the peripheral zone of Hiberno-Norse Dublin. This pattern is further supported by the hoards outside of the peripheral zone of Dublin that contain arm-ring fragments, rod fragments and ingots and ingot fragments; two of the three are found not far away from Hiberno-Norse settlement: Carraig Aille II in Co. Limerick and Kilmacomma in Co. Waterford. John Sheehan (chapter 4.3.2) has even suggested that the hoard from Kilmacomma derived from the *longphort* at Woodstown near Waterford.

In chapter 5.4 I mentioned that fragmentation of objects could create social bonds and mark alliances in a situation were integration was emphasized over social fragmentation. This can explain the frequency of hack-silver in secular Irish hoards in the peripheral zone of Dublin and the hoards from Carraig Aille II and Kilmacomma respectively. The relationships between the Hiberno-Norse and the Irish in these areas were not always peaceful but constant struggle would not have been beneficial. Either the fragments of arm-rings were the results of exchange, or they represented the social bonds that were established between the secular Irish

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elite and the inhabitants of the Dublin, Limerick and Woodstown/Waterford. These hoards indicate a silver use resembling that of the urban/ecclesiastical economy (see chapter 4.3).

Arm-rings were often cut up to be used in economic or social transactions, but the frequency of complete items suggests that they had a particular status if kept whole (Mytum 2003a:123). Rings are known to have been given by Germanic kings as a reward to their retainers (Graham-Campbell 1982:33; Kilger 2008:292), and this custom is also described among Irish kings in the *Book of Rights* (Irish *Lebor na Cert*) (Ó Floinn 1998:159; Swift 2004:189). Arm-rings thus can be seen as symbolic objects especially efficient for long-distance communication among political allies or social groups. Such symbolic objects created and reinforced alliances. The arm-rings would have enjoyed particular status, even if they were not necessarily rare objects, but rather familiar items that people would have recognized (following DeMarrais et al. 1996:18). Using anthropological terms arm-rings in general were commodities, but some arm-rings were pulled out of their commodity sphere and singularized as objects symbolizing alliances. In the words of Parry and Bloch (see chapter 5.1) certain arm-rings were exchanged in long-term transactions concerned with social relations. The complete arm-rings found in secular Irish hoards support this interpretation; they are more frequently found in areas outside of Hiberno-Norse influence. Even though the arm-rings found in these hoards were special, arm-rings were common and have been found in many Viking Age silver hoards (see chapter 3.4.2).

Where would exchange have taken place in Viking Age Ireland? The *longphuirt*, Hiberno-Norse towns and ecclesiastical sites were the most likely "tournaments of value" (see above: chapter 4.3.2 and 6.1), where commercial transactions would have taken place and also other types of exchange such as the giving of arm-rings and fragmentation of arm-rings. Exchange between cultural groups incorporates elements of both long-term and short-term transactions. The exchange was in one sense commodity exchange, but at the same time there was a more symbolic and complex meaning behind exchanging goods across cultural borders in Ireland. As Gaimster (1991:117) has put it: "contact with foreign merchants and distant peoples had a meaning beyond the pure worth of silver". This is especially true for the trade encounters in the first phase of Norse occupation. The trade indicated in the hoards can be seen as a negotiation strategy between the Norse and the Irish, similar to the relationship between the Sámi and the Norse in northern Norway (chapter 2.1). The Irish may have found it safer to accept trading links with the Norse in order to risk further raiding, but what were the first

trading encounters like? I find it likely that the first attempts at more peaceful contacts were made by the Norse, since they had to prove that they were more than raiders. The initial contacts might have been established by silver artefacts being paid as tribute from the Norse to the Irish.

To sum up, the Irish living in and outside of the peripheral zone of the Hiberno-Norse towns had different relations to these and preferred different types of artefacts; most notably complete arm-rings have been found in areas outside of Hiberno-Norse influence, while in contrast arm-ring fragments have been found in the peripheral zone of Dublin or not close to Limerick and Waterford. The complete arm-rings could be the result of long-distance political alliances between Irish tribes and Hiberno-Norse people, while the arm-ring fragments marked the relationship between the Hiberno-Norse and the Irish tribes living in areas close to the Hiberno-Norse towns. This is in accordance with Chapman's idea that fragments and complete objects link people in different ways (chapter 5.4). Thus the reason for the difference in hoards in secular Irish sites in and outside of the periphery can be ascribed to different relationships with the Hiberno-Norse polities.

6.4   Cultural identity in Viking Age Ireland

The previous sections have explained the differences in hoards in terms of the relationships these areas had with Hiberno-Norse towns, the patterns that have emerged indicate that people living in the hinterland and peripheral zones related differently to the Hiberno-Norse than the Irish living in areas further away from Hiberno-Norse influence. The geographical distribution of ecclesiastical hoards shows that monasteries and church sites within *Dyflinarskiri* and Dublin's peripheral zone had closer ties to Hiberno-Norse towns than ecclesiastical sites outside of the peripheral zone (chapter 4.3.1). This pattern is supported by the contents of the hoards from secular Irish sites in the peripheral zone of Dublin and in areas not far from Limerick and Waterford, compared to the hoards outside the areas of Hiberno-Norse influence (previous chapter). The uneven geographical distribution of Viking Age silver hoards in Ireland (chapter 3.2) further emphasizes this bias. Source-critical aspects (chapter 1.3) and economic relations partly explain these distributions (chapter 5) but I will argue that these differences also relate to the cultural identity of the inhabitants of Viking Age Ireland; the distribution of hoards is partly a result of an active choice of whether or not to have contact with the Hiberno-Norse population.

The main argument for this is the concentration of hoards in northern Leinster (in counties Meath and Westmeath) and in the counties Limerick (seven hoards) and Cork (five hoards) contrasted to the lack of hoards in other areas (for instance Co. Carlow), as seen in chapter 3.2. Altogether 34 hoards have been found in counties Meath and Westmeath, among these are eleven of the twenty hoards found at secular Irish sites. These two counties constitute the kingdom of Míde, which enjoyed a particularly strong relationship with Dublin in terms of economy (chapter 4.3.2). This is not purely for economic reasons and is the result of an <u>active</u> choice among the inhabitants to have contact with the Norse population, and indicates that Míde was a secular power which identified itself strongly with the Norse.

Lack of hoards in some areas could result from a lack of contact with the Norse population. However, another reason could be that it displays a choice not to be identified and even not to have contact with the Hiberno-Norse population, in other words an active maintenance of their Irish identity. Source-critical aspects such as modern-day development and antiquarian activity have to be taken into consideration when mapping the hoards (see chapter 1.3), but the lack of hoards from Carlow is striking. Despite the fact that Carlow is a small landlocked county (see fig. 1), the county lies within the periphery of Dublin and Norse activity is attested not far away at Castledermot, Co. Kildare in the form of a hogback grave; a type of monument that originated in Scandinavian England (Corlett 1999). Carlow is the only county in Leinster without hoards and this makes the lack of hoards even more striking, it may reflect a population that would not engage in affairs with the Norse. Sligo, Leitrim, Fermanagh and Roscommon are the other four counties without Viking Age hoards, but this most likely derives from a lack of contact with the Norse, and is supported by the lack of Norse activity in these counties (fig. 7 and 8).

Clare and Kerry are medium sized counties according to Irish standards (see fig. 1); one hoard has been found in Clare, while two have been found in Kerry. The two counties border to the north and the southwest of Limerick, so a lack of a nearby Hiberno-Norse settlement should not account for the small number of hoards from these counties. The lack of hoards from Kerry and Clare is peculiar but fits the pattern of hoard distribution: few hoards have been found along the western coast of Ireland (chapter 3.2). Further development and archaeological investigations could very likely discover hoards in Co. Clare; single finds of a silver neck-ring, a gold arm-ring and silver coins in Co. Clare indicate Norse activity or links to Norse settlement also here (Sheehan 2000:33).

The differences in hoard distribution indicate that ethnic affiliation was not uniform among the Irish population: all Irish could have been part of a common ethnic group, but multiple cultural identities may have been present in Viking Age Ireland. Some Irish associated themselves with the Norse culture while others became more distinctly Irish. The Irish depositing hoards possibly identified themselves more with the Norse than the Irish, and the artefacts in the hoards may symbolize the preferred cultural links to be on display. These people were Irish who actively engaged in contact with the Norse, and this would mean that they actively changed their cultural identity. This makes the hoards identity markers. The constant negotiation of cultural identity had caused an "in-between" situation where the ethnic and cultural categories "Irish" and "Norse" were replaced by new ones. The following groups can be discerned:

1. Irish who actively obtained artefacts from the Norse
2. Irish who were not so much in contact with the Norse
3. Irish who actively chose not to obtain artefacts from the Norse.

Group 1 is represented by Irish in the peripheral zone, especially today's Meath and Westmeath, while the latter groups most likely lived in areas where few hoards have found. Other cultural groups were also present in Viking Age Ireland:

4. The Hiberno-Norse population (settled Norse)
5. More recently settled Norse

This adds well with the idea that there is no one-to-one relationship between culture and ethnic identity (Jones 1997:34): the relationship between degrees of interaction and patterns in material culture is not straightforward. Some groups would choose assimilation in the context of regular interaction while others retained their distinct identities without reference to material culture, making them invisible to archaeologists (Hodder 1982:185,186-187). The latter would in the case of Ireland go well with group 3, in other words Irish who avoided contact with the Norse and actively maintained their Irish identity. Spatial distribution of material culture does not necessarily map the extent and boundaries of self-conscious ethnic groups in the past (Jones 1997:122-123), but the distribution of silver hoards can indicate the areas where people preferred to be in contact with the Norse.

Instead of viewing Irish, Norse and Hiberno-Norse as an either/or situation we could see them as shades on a scale (pers. comm. Stephen Harrison), resulting from an active choice of affiliation:

IRISH	HIBERNO-NORSE	NORSE
Group 2 and 3	Group 1 + Settled Norse	Newly arrived Norse

Irish who were not in contact with the Norse naturally would have considered themselves Irish, likewise the Irish who chose not to relate to the Norse would have associated themselves only with the Irish culture. Settled Norse and the Irish who were affiliated with the Norse can be treated as one common cultural group. Newly arrived Norse would primarily have defined themselves in terms of their Norse identity.

6.5   Phases of cultural relations

John Bradley (1988:68) has divided the Irish Viking Age into two phases of cultural identity, as seen in chapter 2.2. Phase 1 stretched from the mid to the late 9th century and was associated with the foundation of Norse bases. This period witnessed the distribution of a distinct Norse "kit" of material culture evident in the Norse graves. The second phase started in the AD 910s with the foundation of new or enlarged bases. The material culture was no longer ethnically distinctive and a quick cultural integration took place. Harold Mytum (2003a:117) follows along the same lines and argues that the first phases of Viking activity in Ireland belong to a period where political and cultural distinctions between Norse and Irish can be most easily identified, meaning they were probably more pronounced. I have elaborated Bradley's twofold chronological division into four main stages. The dating of the different stages is difficult and should not be taken at face value.

Stage 1 has been defined as the period from the mid 9th century to AD 900/910 and is equal to Bradley's phase 1, where cultural and ethnic distinctions were pronounced and before cultural relations between the Norse and Irish had been established. This period witnessed the deposition of coinless hoards and some coin hoards; mostly along the coast (chapter 3.2 and 3.3). Only settlement hoards attributed to secular Irish sites belong to this time period; no hoard from a secular Norse settlement have been found. This does not mean that no Norse people deposited hoards but we cannot assign any hoards to a Norse context with certainty. Except for the hoard possibly associated with a church site at Delgany, no hoards were deposited within *Dyflinarskiri*.

Stage 2 started around AD 900/910 and lasted until approximately the second quarter of the 10th century. Irish and Norse were still the main ethnic groups present, but trade and contact

had created cross-cultural traits and a need for new cultural and ethnic classifications. This "in between"-situation demanded new categorizations (following chapter 5.2), and ethnic and cultural distinctions in Ireland were about to be fragmented. This period is marked by the first depositions of numismatic material in secular Irish settlements: the Dysart 4 hoard (c. AD 907) and the hoard from Millockstown (post-AD 905/906) and in this way the character of the secular Irish hoards resemble that of the later coin hoards from Hiberno-Norse sites. The first hoard was deposited within *Dyflinarskiri*; the coin hoard from Glasnevin, Co. Dublin. This period coincided with urbanization of the Hiberno-Norse settlements and the monasteries (see chapter 3.1).

Stage 3 lasted from around the second quarter of the 10th century until the late 11th century/ early 12th century. The period denoted a time where a mixed Irish-Norse hybrid culture had been created, but at the same time more Norse people arrived in Ireland. While we should be careful not to create an impression of set ethnic categories, it is evident that newly arrived Norse could have been viewed as a separate category from those that were already present in Ireland (chapter 6.4). The Hiberno-Norse town of Dublin had existed for a few decades since the Norse came back (see chapter 3.1) and this had created Ireland's first urban multi-ethnic setting. This phase is characterized by similar hoarding patterns in the Hiberno-Norse settlements, the secular Irish sites and the ecclesiastical sites (see chapter 3.3.1-3.3.3): coin and mixed hoards in ecclesiastical sites, coin hoards at secular Irish sites (Knowth and Newtownlow) and coin hoards in Hiberno-Norse towns. This stage can thus be seen as a consolidation phase of the hybridized cultures which had been created.

In stage 4 the hybrid cultures were well established, and this period started around the early 12th century. Ethnic and cultural distinctions between the Irish and Hiberno-Norse had virtually disappeared, the hybrid cultures were on their way to being incorporated into the larger Irish ethnic group, so this phase could be called the incorporation phase. Coinless hoards were no longer deposited and coin hoards dominated along with some mixed hoards. The absence of coinless hoards could result from the disappearance of defined cultural groups: if Irish, Norse and Hiberno-Norse had ceased to exist as categories there was no longer a need for identity markers and negotiation strategies through the use of silver. This would have coincided with a development towards a monetary economy and a stronger focus on economic aspects of the silver artefacts in circulation.

CHAPTER 7: CONCLUSIONS

Previous research on silver hoards has focused on the dichotomy between economic and ritual depositions, but I have chosen to focus on how and where the artefacts ended up prior to their deposition. Interaction between the Irish and the Norse took on many forms; trade being one major force of communication. Norse settlement and influence was not evenly distributed throughout the country; the *longphuirt* and Hiberno-Norse towns were the core areas of Norse settlement and the towns were surrounded by hinterlands populated by both the Irish and the Norse. While the Norse dominated the hinterlands they also dealt with peripheral zones where the Irish were the dominant population group. The distribution of settlement hoards and non-site specific hoards have been seen in relation to the estimated hinterlands and peripheral zones.

Perhaps the most important result of this study of hoards is the way in which it has revealed the varying contents of artefacts in hoards from ecclesiastical (mostly coin and mixed hoards) and secular Irish sites (mostly coinless hoards) respectively. This strongly indicates that that these sites belonged to different economic spheres, and thus supports the theory that the secular economy was separated from the ecclesiastical/urban economy in the Viking Age. Secular Irish sites within the peripheral zone possibly were part of the ecclesiastical/urban economy, and the Irish within and outside the peripheral zone had different relationships with the Hiberno-Norse towns. The same is true for ecclesiastical sites: those within the hinterland and peripheral zones had relations with the Hiberno-Norse towns while few ecclesiastical sites outside of the peripheral zones have yielded hoards.

Another important discovery is that although only eight hoards have been found in association with Hiberno-Norse settlement, the redistributive role of the centres is attested to by hoards from the surrounding areas.

The cultural relations indicated by the silver hoards were not static but changed throughout the Viking Age. The first phase of interaction was characterized by distinct cultural differences in the depositional practice. The second phase can be described as an "in-between" situation where the basis for new cultural groups was laid. In the third phase the hybridization was complete and consolidated, illustrated by a similar depositional practice.

The fourth and last phase was characterized by a lack of identity markers; negotiation strategies between groups were no longer needed.

The aim of this thesis has been to discuss the geographical variation and varying contents of the Irish Viking Age silver hoards. Thus the main conclusion is that the locations and contents of the silver hoards reflect degrees of inter-cultural communication in Viking Age Ireland.

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APPENDIXES

Appendix 1: Catalogue of Viking Age silver hoards in Ireland

Site	County	Context	Hoard location	Site description	Dating	Contents	Literature
Adare	Limerick			The ford of the river Maigue	c. 1050 (?)	"Two dozen" A-S and H-N	Blackburn and Pagan 1986:298; Hall 1973-4:80; Sheehan 1998a:167 (note)
Armagh (near)	Armagh					2 armrings	Sheehan 1998:198; Graham-Campbell 1976:66
Armagh	Armagh	Eccl.			c. 970	3 (+) A-S and 1 Viking	Blackburn and Pagan 1986:296; Hall 1973-4:76
Armagh	Armagh	Eccl.	Found in Armagh Cathedral		c. 1103 (?)	3 (+) H-N	Blackburn and Pagan 1986:300; Hall 1973-4:81
Athlone (near)	West-meath			Ford of Shannon		4 or 5 arm-rings	Sheehan 1998a:201
Athlone (river Shannon)	West-meath			Ford of Shannon		2 arm-rings	Graham-Campbell 1976:68; Sheehan 1998a:201
Ballany	West-meath					Ingots	Sheehan 1998a:201
Ballitore	Kildare				c. 965	A-S and Viking from York	Blackburn and Pagan 1986:296; Hall 1973-4:76: Kenny 1991:112
Ballyadams	Laois					Ring, ingot	Graham-Campbell 1976:67; Sheehan 1998a:200
Ballycastle 1	Antrim		Found in a prehistoric mound?		c. 1030	Large number of A-S and H-N	Blackburn and Pagan 1986:298
Ballycastle 2	Antrim		Found in a prehistoric mound?		c. 970 (?)	70 A-S	Blackburn and Pagan 1986:296
Ballywillin	Antrim				9th/10th century (?)	"A few" A-S	Hall 1973-4:84
Baltinglass	Wicklow				c. 1050 (?)	84 H-N	Blackburn and Pagan 1986:298; Hall 1973-4:80

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Blackcastle	Wexford					17 ingots	Bøe 1940:107; Graham-Campbell 1976:68; Sheehan 1998a:202
Bishop's Lough	West-meath				c. 990	4 Anglo-Saxon coins?	Kenny 1991:112,114
Bullock 1 (near Dalkey)	Dublin		Found while quarrying		c. 970	3 A-S	Blackburn and Pagan 1986:296; Hall 1973-4:77
Bullock 2 (near Dalkey)	Dublin				c. 970	65 (?) A-S	Blackburn and Pagan 1986:296, Hall 1973-4:77
Burt, Carroween	Donegal		Under a stone	Coastal	c. 970	11 (+) A-S	Blackburn and Pagan 1986:296; Gerriets 1985:130; Hall 1973-4:76; Ó Floinn 1998:157
Carraig Aille II (Lough Gur)	Limerick	Secular		Ring-fort		Arm-ring, 3 arm-ring fragments, 2 ingots, ingot fragment	Graham-Campbell 1976:67; Sheehan 1998a:200; 2001:52
Carrick (Lough Ennell)	West-meath	Secular	Found by the shore, on a spit of land extending into the lake			60 ingots	Ryan et al. 1984:335
Carrow-more	Donegal		In a megalithic tomb? Under a large stone			5 arm-rings	Bøe 1940:122; Graham-Campbell 1976:66; Ó Floinn 1998:157; Sheehan 1998a:199
Castle-bellingham	Louth				c. 920	2 Anglo-Saxon	Blackburn and Pagan 1986:295; Hall 1973-4:73
Castlelyons	Cork			Crossing point of river	c. 1140 (?)	Several hundred (?) H-N coins	Hall 1973-4:82
Cave Hill	Antrim	Secular		Ring-fort		2 arm-rings, ingot	Sheehan 1998a:175,198
Clogher-more Cave	Kerry						Sheehan 2004:177 (note); Sheehan 2007a:160 (note)
Clondalkin 1	Dublin	Eccl.			c. 1065	"A fair number" of H-N	Blackburn and Pagan 1986:299; Hall 1973-4:81; Ó Floinn 1998:159,163

Clondalkin 2	Dublin	Eccl.		First appearance of H-N coins	c. 997	"Large parcel" of H-N coins	Hall 1973-4:79; Ó Floinn 1998:159,163
Clonmac-noise	Offaly	Eccl.	In St. Ciarans National School		1075-1090	30 H-N coins + bronze ingot + fragment of gold ornament	Blackburn and Pagan 1986:300; Kenny 1998:133; Ó Floinn and King 1998:122-123
Coolure Demesne	West-meath	Secular		Crannog		Arm-ring, 3 arm-ring fragments	Sheehan 1998a:175,201
Creaghduff	Wes-tmeath			Island		6 arm-ring fragments, ingot, 3 ingot fragments	Sheehan 1998a:175,201
Cullen (bog of)	Tippe-rary			Bog		Arm-rings (broad-band type?)	Graham-Campbell 1976:67; Sheehan 1998a:201
Cushalogurt	Mayo					25 arm-rings and fragments (hack-silver)	Graham-Campbell 1976:67; Sheehan 1998a:200, 2007a:156
Cushendall (near Red Bay)	Antrim				c. 850	2 A-S coins	Blackburn and Pagan 1986:294; Graham-Campbell 1976:61,62; Hall 1973-4:73
Dalkey	Dublin			Trading settlement	c. 975	A-S (71 listed)	Blackburn and Pagan 1986:296; Hall 1973-4:77-78
Delgany	Wicklow	Eccl.?		Earliest hoard containing coins	c. 830	115 A-S and one papal	Blackburn and Pagan 1986:294; Gwynn and Hadcock 1988:379; Hall 1973-4:71
Derry-keighan	Antrim	Eccl.	Found while grave-digging in the church-yard		c. 975	280 (+) A-S, 2 Viking, 1 Carolingian	Blackburn and Pagan 1986:296, Hall 1973-4:78; Ó Floinn 1998:157,159
Derrymore	West-meath				c. 1000	2 A-S, 9 H-N	Blackburn and Pagan 1986:297; Hall 1973-4:79; Kenny 1991:112,114

Derryna-hinch	Kilkenny		Under stone?			Rings and hack-silver/ingots (?)	Graham-Campbell 1976:66; Ó Floinn 1998:157; Sheehan 1998a:200
Donough Henry	Tyrone		Found in a bog - contained in a small cup (chalice?)		c. 1105	"a small cup full" of H-N	Blackburn and Pagan 1986:300; Hall 1973-4:81
Drogheda	Louth			Crossing point of the river Boyne	c. 905	"Nearly two gallons", incl. Viking and Kufic	Blackburn and Pagan 1986:295; Hall 1973-4:73; Harbison 2003:163
Dublin (Castle Street)	Dublin	Urban			Late 10th century	A-S coins	Ó Floinn 1998:161; Sheehan 1998a:175
Dublin (Castle Street)	Dublin	Urban			Late 10th century	Coins	Ó Floinn 1998:161; Sheehan 1998a:175
Dublin (Christ Church Cathedral)	Dublin	Eccl./urban			c. 1105	7 H-N	Blackburn and Pagan 1986:300; Hall 1973-4:81
Dublin (High Street)	Dublin	Urban			Late 10th/ early 11th century?	2 gold arm-rings	Graham-Campbell 1976:66; Sheehan 1998a:175 (note); Wallace 1985:139
Dublin (Werburgh Street)	Dublin	Urban			Late 10th century	Coins	Ó Floinn 1998:161
Dunamase	Laois				c. 1090	Several hundred (?) H-N	Blackburn and Pagan 1986:300; Hall 1973-4:81
Dunbrody	Wexford				c. 1050	1600 (?) A-S and H-N	Blackburn and Pagan 1986:298; Hall 1973-4:80
Dundalk	Louth				c. 995	Less than 20 coins; A-S and H-N	Blackburn and Pagan 1986:297
Dunmore Cave	Kilkenny				c. 928	10 A-S, Viking and Kufic + hack-silver/ingot fragments	Blackburn and Pagan 1986:295; Graham-Campbell 1976:67; Hall 1973-4:73; Sheehan 1998a:188,200
Dunmore Cave	Kilkenny				c. 970	Coins and non-	Sheehan 2007a:150

						numismatic material?	
Durrow	Offaly	Eccl.			c. 940	10 A-S, 1 Viking from York	Blackburn and Pagan 1986:295; Hall 1973-4:74; Kenny 1991:112
Dysart	Kilkenny					Ingot fragment, arm-ring fragment (?)	Sheehan 1998a:200
Dysart 1 (Lough Ennell)	West-meath	Secular	Eastern side of Dysart Island on the western shore of the lake		early 10th c.?	5 complete ingots	Ryan et al. 1984:336
Dysart 2 (Lough Ennell)	West-meath	Secular	In the centre of a crannog	Crannog		2 ingots	Ryan et al. 1984:337-338; Sheehan 1998a:175
Dysart 3 (Lough Ennell)	West-meath	Secular	On the eastern side of Dysart Island			2 ingots	Ryan et al. 1984:338
Dysart 4 (Lough Ennell)	West-meath	Secular	Western side of Dysart Island		c. 907	45 A-S, Viking, "Temple Type" and Kufic coins/fragments, 85 ingot and ingot fragments + 29 pieces of hack-silver (H-N types and bossed and ball type brooch fragments)	Blackburn and Pagan 1986:295; Ryan et al. 1984:339,340-341,434-344,350,353-355; Sheehan 1998a:170
Emyvale	Mona-ghan	Secular		Ring-fort		4 arm-rings	Bøe 1940:118; Graham-Campbell 1976:67; Sheehan 1998a:175,201
Fenit	Kerry					1 armring, 1 neckring	Graham-Campbell 1976:66; Sheehan 1998a:199
Fennor	Meath	Eccl.?	In a megalithic tomb?		c. 920 or 945 (?)	2 A-S (found w/ a brass pin and coins of William and Mary)	Blackburn and Pagan 1986:296; Hall 1973-4:75; Ó Floinn 1998:159

Fourknocks	Meath		Found just below the surface of a Neolithic mound		c. 1027	2 A-S, 27 H-N + 1 ingot	Blackburn and Pagan 1986:298; Graham-Campbell 1976:48,67; Hall 1973-4:80
Galway (near)	Galway					Many arm-rings	Sheehan 1998a:199
Garron Point	Antrim					2 arm-rings, pin, chain	Graham-Campbell 1976:66; Sheehan 1998a:198
Geashill	Offaly				c. 920	5 Viking from York, some Continental?	Blackburn and Pagan 1986:295; Hall 1973-4:73; Kenny 1991:114
Glasnevin	Dublin	Eccl.			c. 927	2 A-S, 5/6 Viking, 2 Kufic	Blackburn and Pagan 1986:295; Hall 1973-4:73; Sheehan 1998a:188
Glenda-lough 1	Wicklow	Eccl.			c. 1090	Unknown number of H-N	Blackburn and Pagan 1986:300; Hall 1973-4.81; Ó Floinn 1998:159
Glenda-lough 2	Wicklow	Eccl.			c. 942	49 A-S (incl. 1 imitation)	Blackburn and Pagan 1986:295; Hall 1973-4:74; Ó Floinn 1998:159
Glenda-lough 3	Wicklow	Eccl.			c. 975	"A small parcel" of A-S	Blackburn and Pagan 1986:296; Hall 1973-4:78; Ó Floinn 1998:159
Hare Island 1 (Lough Ree)	West-meath	Eccl.?				10 gold arm-rings	Graham-Campbell 1976:68
Hare Island 2 (Lough Ree)	Westmeath	Eccl.?				Arm-rings, ingots	Graham-Campbell 1976:68; Sheehan 1998:202
Inishowen	Donegal					10 or 11 arm-rings	Graham-Campbell 1976:66; Sheehan 1998a:199
Kilbarry	Cork		In a wooden vessel			At least 7 arm-rings, 2 arm-ring fragments (hack-silver)	Graham-Campbell 1976:66; Ó Floinn 1998:157; Sheehan 1998a:198, 1998b:160 (note), 2007a:156

Kilcullen (Old Kilcullen)	Kildare	Eccl.			c. 1103	H-N (probably large amount)	Graham-Campbell 1976:66; Ó Floinn 1998:157; Sheehan 1998a:198
Kildare	Kildare	Eccl.			c. 991	34 A-S	Blackburn and Pagan 1986:297; Hall 1973-4:79; Dolley 1966:51
Kildare	Kildare	Eccl.	Found below the floor of the round tower		c. 1135 (?)	6 H-N coins	Dolley 1966:84-86; Hall 1973-4:81-82
Kilkenny (west)	West-meath				c. 970/975	60 (+) A-S and hack-silver/rings?	Blackburn and Pagan 1986:297; Graham-Campbell 1976:67; Hall 1973-4:78; Sheehan 1998a:200
Kilkenny	Kilkenny	Eccl.			c. 1035	"A large number" A-S and H-N	Blackburn and Pagan 1986:298; Hall 1973-4:80
Killincoole	Louth	Eccl.?	Under stone	Coastal	c. 970	7 A-S and (hack-silver in the form of?) ingots	Blackburn and Pagan 1986:296; Graham-Campbell 1976:67; Hall 1973-4:77; Ó Floinn 1998:157; Sheehan 1998a:169-170,200
Killyon	Meath	Eccl.?			c. 958	88 A-S and Viking	Blackburn and Pagan 1986:296; Hall 1973-4:75; Kenny 1991:112; Ó Floinn 1998:159
Kilma-comma	Water-ford	Secular	Deposited in the bank of the ring-fort	Ring-fort	880-940?	8 ingot fragments, 2 broad-band arm-ring fragments, rod fragment, wire fragment	Sheehan 1998a:175,201, 2007b:191,202
Kilmainham	Dublin	Eccl.	Found in connection to a tomb-stone? Cross-shaft?		11th century	"A number" of H-N	Blackburn and Pagan 1986:300; Hall 1973-4:83-84
Kilmaroney (?), Ballylynan	Laois				c. 1050	1 (+) A-S + "a great number" of H-N	Blackburn and Pagan 1986:298; Graham-Campbell 1976:63; Hall

							1973-4:80
Knock	Mayo					2 ingots, 1 fragment, 1 gold ingot	Sheehan 1998a:200
Knockmaon	Water-ford				c. 1000	14 A-S, Viking and Carolingian coins + 3 Scoto-Norse armring fragments	Blackburn and Pagan 1986:297; Hall 1973-4:79; Sheehan 1998a:169-170,201
Knowth	Meath	Secular	In the primary silt of a souterrain in the upper part of a prehistoric burial mound		c. 950	2 A-S	Blackburn and Pagan 1986:296; Edwards 1990:44; Hall 1973-4:74-75; Ó Floinn 1998:159
Leggagh	Meath		Found "in a sand pit"		c. 915/924/950?	10 A-S, Viking and Kufic + hack-silver/ingots?	Blackburn and Pagan 1986:295; Graham-Campbell 1976:67; Hall 1973-4:73; Sheehan 1998a:188,200
Liffey (river)	Dublin				c. 1040	6 H-N	Blackburn and Pagan 1986:298; Hall 1973-4:80
"Liffeyside"	Dublin					Several arm-rings	Sheehan 1998a:199
Limerick	Limerick	Urban			c. 1063 (?)	108 (?) H-N	Blackburn and Pagan 1986:299; Hall 1973-4:81
Limerick (near)	Limerick	Urban?				2 kite-brooches	Sheehan 1998a:200
Lohort	Cork					6 rings	Graham-Campbell 1976:66; Sheehan 1998a:198
Loughcrew	Meath	Secular		Crannog		Brooch fragment, 4 arm-ring fragments, 5 ingot fragments	Sheehan 1998a:175,200
Lough Kinale	Longford	Secular		Crannog		2 ingots, 25 ingot fragments, 2 arm-ring fragments, several brooch	Sheehan 1998a:200

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						fragments	
Lough Lene 1	West-meath			Lake	c. 965	28 (?) A-S, Viking and Continental	Blackburn and Pagan 1986:296; Hall 1973-4:76; Kenny 1991:112
Lough Lene 2	West-meath			Lake	c. 995-1000	8 coins (mostly Hiberno-Norse)	Kenny 1991:112,114
Lough Sewdy	West-meath			Crannog		2 Scoto-Norse arm-rings	Sheehan 1998a:202
Macroom	Cork				c. 953	17+ A-S and/or 2 arm-rings?	Blackburn and Pagan 1986:296; Hall 1973-4:75; Sheehan 1998a:199
Magheralagan	Down				c. 910?	Several arm-rings and arm-ring fragm, ingots, 2 "silver forks", Kufic coins	Blackburn and Pagan 1986:295; Sheehan 1998a:188,199
Marl Valley (Mullingar 1)	West-meath				c. 986	120-150 A-S + hack-silver / 2 pins, ingots, gold finger rings	Blackburn and Pagan 1986:297, Graham-Campbell 1976:61,64,68; Hall 1973-4:78; Sheehan 1998:202
Millockstown	Louth	Secular		Ring-fort	tpq 905-6	2 ingot fragments + Kufic coin	Sheehan 1998a:175,200
Monaster-boice	Louth	Eccl.	Near Muiredach's Cross in the graveyard		c. 953	3 A-S and ingot(s)	Blackburn and Pagan 1986:296; Graham-Campbell 1976:67; Hall 1973-4:75; Kenny 1991:112; Ó Floinn 1998:159,160
Moyvore	West-meath				c. 970	5 Anglo-Saxon coins	Sheehan 1998a:200
Mullagh-boden	Kildare		Contained in something ?		c. 847	11 (+) Carolingian coins	Blackburn and Pagan 1986:294; Dolley 1960-61: 51; Graham-Campbell 1976:48; Hall 1973-4:71

Mullingar 2	West-meath				c. 1025-50	3 A-S, 14 H-N	Blackburn and Pagan 1986:298; Hall 1973-4:79; Kenny 1991:114
Mungret	Limerick	Eccl.	Found while opening a quarry near the Old Churches		c. 953	Many A-S, Viking and hack-silver in the form of ingots. 9 coins and 7 ingots descr.	Blackburn and Pagan 1986:296; Graham-Campbell 1976:67; Hall 1973-4:75; Ó Floinn 1998:159; Sheehan 1998a:200
Newry	Down					2 or 3 ingots	Sheehan 1998a:199
Newtown-low	West-meath	Secular		Crannog	950-955	6 coins (Anglo-Saxon?)	Kenny 1991:112; Blackburn and Pagan 1986:296; Ó Floinn 1998:159
Nure (Lough Ennell)	West-meath	Secular	On the western shore of the lake		10th century	2 ingot fragments	Ryan et al. 1984:338-339
Oldcastle	Meath		In a gravel pit below a small flagstone		c. 958	12+ A-S and Viking	Blackburn and Pagan 1986:296; Hall 1973-4:75: Kenny 1991:112; Ó Floinn 1998:157 (note)
Outlack (?)	Armagh				c. 1105	12 Hiberno-Norse	Blackburn and Pagan 1986:300; Hall 1973-4:81
Rahan 1	Offaly	Eccl.			c. 970	Many A-S	Blackburn and Pagan 1986:296; Hall 1973-4:77; Ó Floinn 1998:159
Rahan 2	Offaly	Eccl.			c. 970	Many A-S + hack-silver + ingot	Blackburn and Pagan 1986:296; Graham-Campbell 1976:67; Hall 1973-4:77; Ó Floinn 1998:159; Sheehan 1998a:201
Raphoe (near)	Donegal					6 arm-rings, 1 arm-ring fragment, 4 ingots	Sheehan 1998a:199
Rathbarry	Cork		In a leather (?) bag concealed		c. 950	Unknown number of coins (at least some A-S)	Hall 1973-4:74

			in a souterrain				
Rathlin Island	Antrim				c. 1040 (?)	7 or 8 Hiberno-Norse (?)	Blackburn and Pagan 1986:298; Hall 1973-4:80
Rathmooley, Killenaule	Tipperary	Secular		Ring-fort		2 arm-rings (1 complete rod + 1 plain penannular)	Graham-Campbell 1976:67; Sheehan 1992:210,211, 1998a:175,191,201
Rivory	Cavan	Secular		Crannog		2 arm-ring fragments, 1 ingot, 6 ingot fragments	Sheehan 1998a:175,198
Roosky, Clonmany	Donegal	Secular		Ring-fort		4 arm-rings	Graham-Campbell 1976:66; Sheehan 1998a:175,199
Scrabo Hill	Down				c. 1130 (?)	100 (?) H-N coins	Hall 1973-4:81
Shannon (river)	Clare					3 Scoto-Norse arm-rings	Graham-Campbell 1976:66; Sheehan 1998a:198, 1998b:154
Smarmore	Louth		Under stone		c. 970	72 A-S and 1 Viking	Blackburn and Pagan 1986:296; Hall 1973-4:77; Kenny 1991:112; Ó Floinn 1998:157
Tonyowen	West-meath				c. 1035	2-3 H-N	Blackburn and Pagan 1986:298; Kenny 1991:114
Tynan Demesne	Armagh	Eccl.?				7 arm-rings	Graham-Campbell 1976:66; Gwynn and Hadcock 1988:409; Sheehan 1998a:198
Unlocalized	Antrim				c. 910?	4 arm-ring fragments, 2 ingot fragments, coin	Sheehan 1998a:198
Unlocalized	Cork					2 arm-rings	Graham-Campbell 1976:66; Sheehan 1998a:199

Unlocalized	Cork					2 arm-ring fragments, 1 ingot	Graham-Campbell 1976:66; Sheehan 1998a:199
Unlocalized	Derry		Found in an iron pot		c. 910?	"Great numbers" of Kufic	Blackburn and Pagan 1986:295; Hall 1973-4:83; Sheehan 1998a:188
Unlocalized	Dublin				c. 935	29 A-S, 1 imitation, 1 Viking from York + 1 ingot, fragments of ornament + bracelet	Blackburn and Pagan 1986:295; Graham-Campbell 1976:66; Hall 1973-4:73-74, Sheehan 1998a:169,199
Unlocalized	Galway					3 arm-rings, 2 arm-ring fragments, neckring, 2 lost fragments	Graham-Campbell 1976:67; Sheehan 1998a:199
Unlocalized	Ireland				c. 875	7 A-S	Blackburn and Pagan 1986:294; Hall 1973-4:73
Unlocalized	Ireland				925-950 (?)	"Many Anglo-Saxon"	Blackburn and Pagan 1986:295; Hall 1973-4:74
Unlocalized	Ireland				c. 965	48 (+) A-S and Viking	Blackburn and Pagan 1986:296; Hall 1973-4:76
Unlocalized	Ireland				c. 960-970	Arm-ring, arm-ring fragment, neck-ring fragment, 2 ingots, 2 ingot fragments, coin	Sheehan 1998a:202
Unlocalized	Ireland				c. 980	5 A-S	Blackburn and Pagan 1986:300; Hall 1973-4:78
Unlocalized	Ireland					2 arm-rings, arm-ring fragment	Sheehan 1998a:202
Unlocalized	Ireland					8 rings	Sheehan 1998a:202
Unlocalized	Ireland					2 arm-rings	Sheehan 1998a:202
Unlocalized	Ireland					2 arm-rings	Sheehan 1998a:202
Unlocalized	Ireland					2 arm-rings	Sheehan 1998a:202
Unlocalized	Kildare				c. 935	6 A-S, 4 fragm. A-S, 1 fragm. Kufic	Blackburn and Pagan 1986:295; Hall 1973-4:74, Sheehan

							1998a:188
Unlocalized	Kilkenny					Rings	Graham-Campbell 1976:67; Sheehan 1998a:200
Unlocalized	Louth				Late 8th/ early 9th century (?)	Coins minted under Offa	Graham-Campbell 1976:63
Unlocalized	Meath				c. 970	2 (+) A-S and 1 Kufic	Blackburn and Pagan 1986:296; Hall 1973-4:77; Sheehan 1998a:188
Unlocalized	Meath				c. 1075	Up to 20 (?) H-N	Blackburn and Pagan 1986:300; Graham-Campbell 1976:63
Unlocalized	Tipperary				c. 942	19 A-S (incl. 1 Viking imitation)	Blackburn and Pagan 1986:295; Hall 1973:74
Unlocalized	West-meath				c. 1005	Less than 20; A-S and H-N	Blackburn and Pagan 1986:297
Unlocalized	Wexford				c. 1180	3 (+) H-N coins and 1 English penny	Hall 1973-4:82

Appendix 2: Coin and mixed hoards

Hoard location	Site description	Contents	Dating
Unlocalized hoard, Co. Louth		Coins of Offa (reigned AD 757-796)	Late 8th/early 9th century (?)
Ballywillin, Co. Antrim		"A few Anglo-Saxon coins	9th century/ 10th century (?)
Delgany, Co. Wicklow	Ecclesiastical?	115 Anglo-Saxon and 1 papal coin	c. AD 830
Mullaghboden, Co. Kildare		11+ Carolingian coins	c. AD 847
Cushendall, Co. Antrim		Anglo-Saxon coins + a pin and a chain	c. AD 850
Unlocalized hoard, Ireland		Anglo-Saxon coins	c. AD 875
Drogheda, Co. Louth	Crossing point	Many Viking and Kufic coins	c. AD 905
Millockstown, Co. Louth	Ring-fort	Kufic coin + 2 ingot fragments	post-AD 905/906
Dysart 4, Co. Westmeath	Secular Irish settlement	45 Anglo-Saxon, Viking, Kufic and "Temple Type" coins + ingots, ingot fragments and hack-silver	c. AD 907
Magheralagan, Co. Down		Kufic coins + arm-rings, arm-ring fragments and ingots	c. AD 910 (?)
Unlocalized hoard, Co. Antrim		Coin + arm-ring fragments and ingot fragments	c. AD 910 (?)
Unlocalized hoard, Co. Derry		Kufic coins	c. AD 910 (?)
Leggagh, Co. Meath		10 Anglo-Saxon, Viking and Kufic coins + hack-silver?	c. AD 915/924/950 (?)
Geashill, Co. Offaly		5 Viking from York and some Continental?	c. AD 920
Castlebellingham, Co. Louth		2 Anglo-Saxon coins	c. AD 920
Fennor, Co. Meath	Ecclesiastical?	2 Anglo-Saxon + brass pin and newer coins	c. AD 920 or 945 (?)
Unlocalized hoard, Ireland		Anglo-Saxon coins	c. AD 925-950
Glasnevin, Co. Dublin	Ecclesiastical	2 Anglo-Saxon, 5/6 Viking and 2 Kufic coins	c. AD 927
Dunmore Cave, Co. Kilkenny		10 Anglo-Saxon, Viking and Kufic coins + hacksilver/ingot fragments	c. AD 928
Unlocalized hoard, Co. Dublin		29 Anglo-Saxon and 1 Viking from York + ingot and arm-ring fragments	c. AD 935
Unlocalized hoard, Co. Kildare		Anglo-Saxon and Kufic coins	c. AD 935
Durrow, Co. Offaly	Ecclesiastical	10 Anglo-Saxon and 1 Viking coin from York	c. AD 940
Glendalough 2, Co. Wicklow	Ecclesiastical	49 Anglo-Saxon coins	c. AD 942
Unlocalized hoard, Co. Tipperary		19 Anglo-Saxon coins	c. AD 942
Knowth, Co. Meath	In a souterrain in an earlier prehistoric burial mound	2 Anglo-Saxon coins	c. AD 950
Rathbarry, Co. Cork	In a souterrain	Anglo-Saxon coins	c. AD 950
Newtownlow, Co. Westmeath	Crannóg	6 Anglo-Saxon coins	c. AD 950-955
Macroom, Co. Cork		17 Anglo-Saxon coins + 2 arm-rings	c. AD 953

Monasterboice, Co. Louth	Ecclesiastical	3 Anglo-Saxon coins + ingot(s)	c. AD 953
Mungret, Co. Limerick	Ecclesiastical	Anglo-Saxon and Viking coins + hack-silver	c. AD 953
Killyon, Co. Meath	Ecclesiastical?	88 Anglo-Saxon and Viking coins	c. AD 958
Oldcastle, Co. Meath		12 Anglo-Saxon and Viking	c. AD 958
Unlocalized hoard, Ireland		Coin + arm-ring, ingots and hack-silver	c. AD 960-970
Ballitore, Co. Kildare		Anglo-Saxon and Viking coins from York	c. AD 965
Lough Lene 1, Co. Westmeath	Lake	28 Anglo-Saxon, Viking and Continental coins	c. AD 965
Unlocalized hoard, Ireland		48+ Anglo-Saxon and Viking coins	c. AD 965
Armagh, Co. Armagh	Ecclesiastical	3+ Anglo-Saxon and 1 Viking coin	c. AD 970
Ballycastle 2, Co. Antrim	Found in a prehistoric mound?	70 Anglo-Saxon coins	c. AD 970
Bullock 1, Co. Dublin		3 Anglo-Saxon coins	c. AD 970
Bullock 2, Co. Dublin		65 (?) Anglo-Saxon coins	c. AD 970
Burt, Co. Donegal	Coastal	11+ Anglo-Saxon coins	c. AD 970
Dunmore Cave, Co. Kilkenny		Mixed hoard	c. AD 970
Killincoole, Co. Louth	Ecclesiastical?	7 Anglo-Saxon coins + hack-silver	c. AD 970
Moyvore, Co. Westmeath		Anglo-Saxon coins	c. AD 970
Rahan 1, Co. Offaly	Ecclesiastical	Anglo-Saxon coins	c. AD 970
Rahan 2, Co. Offaly	Ecclesiastical	Anglo-Saxon coins + hack-silver and ingot	c. AD 970
Smarmore, Co. Louth		72 Anglo-Saxon and 1 Viking coin	c. AD 970
Unlocalized hoard, Co. Meath		2+ Anglo-Saxon and 1 Kufic coin	c. AD 970
Dalkey, Co. Dublin	Trading settlement?	Many Anglo-Saxon coins	c. AD 975
Kilkenny west, Co. Westmeath		60+ Anglo-Saxon coins + hack-silver/rings	c. AD 970/975
Derrykeighan, Co. Antrim	Ecclesiastical	280+ Anglo-Saxon, 2 Viking and 1 Carolingian coin	c. AD 975
Glendalough 3, Co. Wicklow	Ecclesiastical	Anglo-Saxon coins	c. AD 975
Unlocalized hoard, Ireland		5 Anglo-Saxon coins	c. AD 980
Marl Valley, Co. Westmeath		120-150 Anglo-Saxon coins + ornaments and hack-silver	c. AD 986
Bishop's Lough, Co. Westmeath		Anglo-Saxon coins?	c. AD 990
Kildare, Co. Kildare	Ecclesiastical	34 Anglo-Saxon	c. AD 991
Dundalk, Co. Louth		Anglo-Saxon and Hiberno-Norse coins	c. AD 995 (?)
Lough Lene 2, Co. Westmeath		Hiberno-Norse coins?	AD 995-1000
Clondalkin 2, Co. Dublin	Ecclesiastical	Hiberno-Norse coins	c. AD 997
Castle Street, Dublin	Urban	Anglo-Saxon coins	Late 10th century
Castle Street, Dublin	Urban	Coins	Late 10th century
Werburgh Street, Dublin	Urban	Coins	Late 10th century
Derrymore, Co. Westmeath		2 Anglo-Saxon and 9 Hiberno-Norse coins	c. AD 1000
Knockmaon, Co. Waterford		14 Anglo-Saxon, Viking and Carolingian coins + 3 Scoto-Norse arm-ring fragments	c. AD 1000

Unlocalized hoard, Co. Westmeath		Anglo-Saxon and Hiberno-Norse coins	c. AD 1005
Mullingar 2, Co. Westmeath		3 Anglo-Saxon and 14 Hiberno-Norse coins	c. AD 1025-1050
Fourknocks, Co. Meath	Found in a prehistoric mound	2 Anglo-Saxon, 27 Hiberno-Norse + 1 ingot	c. AD 1027
Ballycastle 1, Co. Antrim	Found in a prehistoric mound?	Many Anglo-Saxon and Hiberno-Norse coins	c. AD 1030
Kilkenny, Co. Kilkenny	Ecclesiastical	Anglo-Saxon and Hiberno-Norse coins	c. AD 1035
Tonyowen, Co. Westmeath		2-3 Hiberno-Norse coins	c. AD 1035
Liffey, Co. Dublin	Found in the river Liffey	6 Hiberno-Norse coins	c. AD 1040
Rathlin Island, Co. Antrim		7 or 8 Hiberno-Norse coins	c. AD 1040
Adare, Co. Limerick	Crossing point	Anglo-Saxon and Hiberno-Norse coins	c. AD 1050 (?)
Baltinglass, Co. Wicklow		84 Hiberno-Norse coins	c. AD 1050
Dunbrody, Co. Wexford		1600 (?) Anglo-Saxon and Hiberno-Norse coins	c. AD 1050
Kilmaroney, Co. Laois		1+ Anglo-Saxon and many Hiberno-Norse coins	c. AD 1050
Limerick, Co. Limerick		108 (?) Hiberno-Norse coins	c. AD 1063
Clondalkin 1, Co. Dublin	Ecclesiastical	Hiberno-Norse coins	c. AD 1065
Unlocalized hoard, Co. Meath		Hiberno-Norse coins	c. AD 1075
Clonmacnoise, Co. Offaly	Ecclesiastical	30 Hiberno-Norse coins + bronze ingot and fragment of gold	AD 1075-1090
Dunamase, Co. Laois		Many Hiberno-Norse coins	c. AD 1090
Glendalough 1, Co. Wicklow	Ecclesiastical	Hiberno-Norse coins	c. AD 1090
Kilmainham, Co. Dublin	Ecclesiastical	Hiberno-Norse coins	11th century
Armagh Cathedral, Armagh	Ecclesiastical	3+ Hiberno-Norse coins	c. AD 1103
Kilcullen, Co. Kildare	Ecclesiastical	Hiberno-Norse coins	c. AD 1103
Christ Church Cathedral, Dublin	Urban	7 Hiberno-Norse coins	c. AD 1105
Donough Henry, Co. Tyrone	Found in a bog	Hiberno-Norse coins	c. AD 1105
Outlack (?), Co. Armagh		12 Hiberno-Norse coins	c. AD 1105
Scrabo Hill, Co. Down		100 (?) Hiberno-Norse coins	c. AD 1130
Kildare, Co. Kildare	Found in the round tower	6 Hiberno-Norse coins	c. AD 1135
Castlelyons, Co. Cork	Crossing point of river	Many Hiberno-Norse coins	c. AD 1140
Unlocalized hoard, Co. Wexford		3+ Hiberno-Norse coins and 1 English penny	c. AD 1180

Appendix 3: Non-site-specific hoards

Hoard location	Context	Contents	Dating
Near Armagh, Co. Armagh		2 arm-rings	9th/10th century?
Near Athlone, Co. Westmeath	Crossing point	4 or 5 arm-rings	9th/10th century?
Athlone, Co. Westmeath	Crossing point	2 arm-rings	9th/10th century?
Ballany, Co. Westmeath		Ingots	9th/10th century?
Ballyadams, Co. Laois		Ring + ingot	9th/10th century?
Blackcastle, Co. Wexford		17 ingots	9th/10th century
Carrowmore, Co. Donegal	In a megalithic tomb? Found under a large stone	5 arm-rings	9th/10th century
Creaghduff, Co. Westmeath	On an island	6 arm-ring fragments, ingot, 3 ingot fragments	9th/10th century?
Cullen, Co. Tipperary	In a bog	Arm-rings	9th/10th century?
Cushalogurt, Co. Mayo		25 arm-rings and hack-silver	9th/10th century?
Derrynahinch, Co. Kilkenny	Under stone?	Rings and hack-silver/ingots?	9th/10th century?
Dysart, Co. Kilkenny		Ingot fragment and arm-ring fragment?	9th/10th century?
Fenit, Co. Kerry		Arm-ring and neck-ring	9th/10th century?
Near Galway, Co. Galway		Many arm-rings	9th/10th century?
Garron Point, Co. Antrim		2 arm-rings, a pin and a chain	9th/10th century?
Inishowen, Co. Donegal		10 or 11 arm-rings	9th/10th century?
Kilbarry, Co. Cork	In a wooden vessel	At least 7 arm-rings and 2 arm-ring fragments/hack-silver	9th/10th century?
Knock, Co. Mayo		2 ingots, 1 fragment and a gold ingot	9th/10th century?
"Liffeyside", Co. Dublin		Several arm-rings	9th/10th century?
Lohort, Co. Cork		6 rings	9th/10th century?
Newry, Co. Down		2 or 3 ingots	9th/10th century?
Near Raphoe, Co. Donegal		6 arm-rings, 1 arm-ring fragment and 4 ingots	9th/10th century?
River Shannon, Co. Clare		3 Scoto-Norse arm-rings	9th/10th century?
Ballywillin, Co. Antrim		A few Anglo-Saxon coins	9th century?
Mullaghboden, Co. Kildare	Contained in something?	11 Carolingian coins	c. AD 847
Cushendall, Co. Antrim		Pin, chain and 2 Anglo-Saxon coins	c. AD 850
Drogheda, Co. Louth	Crossing point	Viking and Kufic coins	c. AD 905
Magheralagan, Co. Down		Arm-rings, arm-ring fragments, ingots and Kufic coins	c. AD 910?
Leggagh, Co. Meath	Found "in a sand pit"	10 Anglo-Saxon, Viking and Kufic coins + hack-silver/ ingots	c. AD 915/924/ 950?
Castlebellingham, Co. Louth		2 Anglo-Saxon coins	c. AD 920
Geashill, Co. Offaly		5 Viking coins from York and some Continental?	c. AD 920
Dunmore Cave, Co. Kilkenny		10 Anglo-Saxon, Viking and Kufic coins + hack-silver/ ingot fragments	c. AD 928
Rathbarry, Co. Cork	In a leather (?) bag concealed in a souterrain	Anglo-Saxon coins	c. AD 950
Macroom, Co. Cork		17 Anglo-Saxon coins and 2 arm-rings?	c. AD 953

Oldcastle, Co. Meath	In a gravel pit below a small flagstone	12+ Anglo-Saxon and Viking coins	c. AD 958
Ballitore, Co. Kildare		Anglo-Saxon and Vikings coins from York	c. AD 965
Lough Lene 1, Co. Westmeath	Lake	28 (?) Anglo-Saxon, Viking and Continental coins	c. AD 965
Ballycastle 2, Co. Antrim	Found in a prehistoric mound?	70 Anglo-Saxon coins	c. AD 970?
Bullock 1 (near Dalkey), Co. Dublin		3 Anglo-Saxon coins	c. AD 970
Bullock 2 (near Dalkey), Co. Dublin		65 (?) Anglo-Saxon coins	c. AD 970
Burt, Co. Donegal	Under a stone	11+ Anglo-Saxon coins	c. AD 970
Dunmore Cave, Co. Kilkenny		Coins and non-numismatic material?	c. AD 970
Kilkenny west, Co. Westmeath		Rings and coins	c. AD 970
Moyvore, Co. Westmeath		5 Anglo-Saxon coins?	c. AD 970
Smarmore, Co. Louth	Under stone	72 Anglo-Saxon and 1 Viking coin	c. AD 970
Marl Valley, Co. Westmeath		120-150 Anglo-Saxon coins, hack-silver / 2 pins, ingots, gold finger rings	c. AD 986
Bishop's Lough, Co. Westmeath		Anglo-Saxon coins	c. AD 990
Dundalk, Co. Louth		Anglo-Saxon and Hiberno-Norse coins?	c. AD 995
Lough Lene 2, Co. Westmeath		8 Hiberno-Norse coins	c. AD 995-1000
Derrymore, Co. Westmeath		2 Anglo-Saxon and 9 Hiberno-Norse coins	c. AD 1000
Knockmaon, Co. Waterford		14 A-S, Viking and Carolingian coins + 3 Scoto-Norse armring fragments	c. AD 1000
Mullingar 2, Co. Westmeath		3 Anglo-Saxon and 14 Hiberno-Norse coins	c. AD 1025-1050
Fourknocks, Co. Meath	Found in a Neolithic mound contained in leather	2 Anglo-Saxon and 27 Hiberno-Norse coins + 1 ingot	c. AD 1027
Ballycastle 1, Co. Antrim	Found in a prehistoric mound?	Many Anglo-Saxon coins	c. AD 1030
Tonyowen, Co. Westmeath		2-3 Hiberno-Norse coins	c. AD 1035
River Liffey, Co. Dublin		6 Hiberno-Norse coins	c. AD 1040
Rathlin Island, Co. Antrim		7 or 8 Hiberno-Norse coins	c. AD 1040?
Adare, Co. Limerick	Crossing point	Anglo-Saxon and Hiberno-Norse coins	c. AD 1050?
Baltinglass, co. Wicklow		84 Hiberno-Norse coins	c. AD 1050?
Dunbrody, Co. Wexford		1600 (?) Anglo-Saxon and Hiberno-Norse coins	c. AD 1050
Kilmaroney, Co. Laois		Anglo-Saxon and Hiberno-Norse coins	c. AD 1050
Dunamase, Co. Laois		Several hundred (?) Hiberno-Norse coins	c. AD 1090
Donough Henry, Co. Tyrone	Found in a bog contained in a small cup	Hiberno-Norse coins	c. AD 1105
Outlack (?), Co. Armagh		12 Hiberno-Norse coins	c. AD 1105

Scrabo Hill, Co. Down		100 (?) Hiberno-Norse coins	c. AD 1130?
Castlelyons, Co. Cork	Crossing point	Several hundred (?) Hiberno-Norse coins	c. AD 1140?
Cloghermore Cave, Co. Kerry		?	?