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The Weapons from the Kilmainham-Islandbridge Cemeteries in a Norwegian Perspective¹

On the southbank of the River Liffey, just west of Dublin, in the nineteenth century workmen unearthed dozens of skeletons together with all sort of antiquities, including weapons, ornaments, tools, scales and weights. The site was situated in the vicinity of the former Royal Hospital Kilmainham and the village of Islandbridge, which are now part of Dublin City. On the modern map this is roughly the area between Heuston Station, the Cammock River, the War Memorial Park and the River Liffey.

The Danish archaeologist Jens Worsaae, who stayed in Dublin from November 1846 to February 1847, was the first to realize that these finds represented a Viking burial place and that the artefacts were of Norwegian rather than Danish origin.² He commissioned the painter James Plunket to draw a selection of the artefacts and sent some artefacts to the Royal Museum of Northern Antiquities in Copenhagen (the National Museum of Denmark). Plunket's watercolours are still preserved in the National Museums of Denmark and Ireland.

The first recorded finds date from c. 1836. In the century to come every now and then new finds turned up. They came to light during

¹ This article is based upon a lecture held at the annual congress of the Scandinavian Departments of the Universities of Amsterdam, Ghent and Groningen, 24th March 2000. It includes the results of a Nuffic / Norsk Forskningsråd research scholarship for Oldsaksamlingen, Oslo.

² Henry, *Viking Ireland*, 1995, pp. 2, 25.

groundwork involving gravel quarrying (1836 and 1861), the construction of the so-called Great Southern and Western Railway (1842-48 and 1861) and finally the layout of the War Memorial Park (1933-34). Only in 1934 a Viking burial was excavated, by Liam Cogan of the National Museum of Ireland. Many artefacts finally ended up in the National Museum of Ireland. In 1910 George Coffey and Walter Armstrong published a survey of all the Viking artefacts in the collection which were attributed to the Kilmainham-Islandbridge area. They were listed again by the Norwegian archaeologist Johannes Bøe, who came to Ireland in the summer of 1926 in order to research all Viking objects in Irish museums. In 1940 his results were published in *Norse antiquities in Ireland*.

In this article I will have a closer look at the weapons of the Kilmainham-Islandbridge cemeteries. How do these cemeteries relate to Viking burials in Norway and in the western colonies? What do the weapons tell us about the provenance of the Viking settlers who had been buried there: do they indicate anything about either a West-Norwegian or an East-Norwegian origin of the settlers?

The article starts with a brief historical account of Viking activity in Ireland during the Early Viking Age (c. 800 – c. 900), especially of those Vikings who settled in the Liffey estuary. Then it goes on to describe the find circumstances and the nature of the cemeteries. The main part of this article deals with a description of the weapons – notably the swords – from the cemeteries. I have not studied the artefacts myself; I have only seen the selection which is on permanent display in the National Museum of Ireland. Nearly all artefacts are described by Bøe, but unfortunately his corpus seems to contain quite some errors.³ When it comes to swords I have used Aiden Walsh's article on Viking Age swords in Ireland. On the basis of his classification an attempt is made to determine the place of origin of the Dublin Vikings. The material culture of Viking Age Norway was not homogenous, but showed some regional differences.

³ Ó Floinn, 'The Archaeology of the Early Viking Age in Ireland', 1998, p. 148.

The Vikings in Ireland during the Early Viking Age

The earliest record of Viking activity in Ireland dates from 795, when the monastic islands of Rathlin Island and Inishmurray and Inishbofin were plundered. At first the Vikings made seasonal raids from Scandinavia. They used to operate in small bands, which carried out hit-and-run affairs in the coastal areas. But from the 830's onwards they scaled up their activities: they appeared in much larger numbers and in 840/841 Vikings overwintered for the first time in Ireland. Around this time they started building so-called *longphorts*. A *longphort* – at least in its original, literary meaning of '(war)ship-harbour' – must have been a fortified, more or less temporary settlement, which was protected by an earthen, possibly palisaded rampart. The structure needed to include the fleet, and therefore it is reasonable to suggest that the rampart was only semi-circular, leaving the waterside unprotected to allow the Viking ships easy access.

In 837 there was a Viking fleet on the River Boyne and another one on the nearby River Liffey, both said to have consisted of sixty ships. In 849 there came a fleet of one hundred and twenty ships to Ireland. Supposing a ship carried forty people on average, each expedition would involve almost five thousand men. The annals say that the fleet of 849 carried adherents of the king of the foreigners. Four years later there was another apparently royal initiative, for in 853 a certain Olav came to Ireland who in the Annals of Ulster is called 'son of the king of *Laithlind*'.

Both historical and place-name evidence show that the Vikings who were active in Ireland were predominantly Norwegian. The Irish annals distinguish between *finn gaill* and *dubb gaill* (light and dark foreigners respectively). Whatever the meaning of this difference in colour, it is unanimously held that *finn gaill* refers to Norwegian and *dubb gaill* to Danish Vikings. Whereas the *finn gaill* are especially linked with Irish affairs, the *dubb gaill* are usually mentioned in relation to England. Moreover, of the place-names in Ireland of Scandinavian origin, none can be identified as specifically Danish. Instead, many have been shown

to be specifically Norwegian.⁴ Finally we may add that the bulk of Irish artefacts found in graves in Scandinavia has been found in Norway, especially in the counties Rogaland, Sogn og Fjordane and Nord-Trøndelag (Vestlandet), but also at the site of the ninth-century trading-place Kaupang, in the very south of Vestfold (Østlandet).⁵ The involvement of Vestfold is supported by some indirect, historical evidence, for part of the Vikings who ransacked Nantes in 843 are called *Westfaldingi* 'people from Vestfold' and these presumably were based in Ireland.⁶

The *longphort* of Dublin

In 841 Vikings built a *longphort* at *dubb linn* 'black pool', somewhere in the Liffey estuary. This toponym is usually believed to denote a former widening in the River Poddle (near the site of present-day Dublin Castle, in the city centre). The *longphort* of Dublin was a Norwegian settlement. The *longphort* belonged to the *finn gbaill*, which means that it basically was a Norwegian settlement. In 853, after two successive defeats against Danish Vikings who were cruising the Irish Sea at this time, Norwegian presence was greatly strengthened by the arrival of Olav, who as mentioned above, was a king's son from *Laithlind*. He must have been accompanied by a considerable force, because the Vikings who had already settled in Ireland recognized his overlordship and the Irish (that is to say part of them, for at this stage Ireland was still divided up in many kingdoms) paid him tribute. Although it is not certain to what region *Laithlind* refers – whether to Norway or to a specific Norwegian territory – Olav's father can not have been king of all Norway, because the country had not been unified yet. Several scholars have identified the Dublin Olav with Olav Geirstad, king of Vestfold. Olav became king of Dublin, that is one of its kings, for

⁴ Oftedal 1976, 'Scandinavian place-names in Ireland', p. 126.

⁵ Blindheim, 'Trade problems in the Viking Age', 1978, p. 166. Martens, 'Vikingetogene i arkeologisk belysning', 1960, p. 94. Shetelig, 'The Viking graves', 1954, pp. 56-57.

⁶ Shetelig, 'The Viking graves', 1954, p. 57. De Vries, *De Wikingen in de Lage Landen bij de zee*, 1923, pp. 144-145.

during the third quarter of the ninth century two or even three Dublin based Viking kings were operating at the same time. Olav is frequently named together with Ivar, who – for very dubious reasons – is often identified with the Danish saga hero Ivar Boneless. Olav and Ivar not only campaigned in Ireland, but also in Scotland and probably in England too. Their Irish territory must have consisted of a rather small nucleus from which they controlled a number of tributary Irish kingdoms.

The last time Olav is mentioned in the Irish annals is in 871, when he and Ivar return from Britain with a fleet of two hundred ships, bringing with them a large group of Anglo-Saxon, Scottish and Welsh prisoners who doubtlessly were destined to become slaves. The annals do not mention his obit, which indicate that he had already left Ireland, as Irish annals rarely omit the death of an Irish Viking king. According to the *Fragmentary Annals*, a set of Irish annals which consist both of genuine annalistic entries and saga-like epics, he sailed back to Norway to lend military support to his father. Nowadays, however, this piece of information is regarded with much scepticism.

During the last quarter of the ninth century the Viking kingdom of Dublin was weakened by internal conflicts. The *longphort*-episode finally ended in 902, when the kings of Leinster and Brega destroyed it and drove its inhabitants out of Ireland. They settled overseas in Scotland and England. Yet apparently the Emerald Isle was still luring them, for in 914 the Vikings returned to Ireland and soon Vikings resettled in the Liffey estuary. This new settlement remained Scandinavian until the Anglo-Normans captured it in 1170 and expelled the inhabitants to the other side of the Liffey. During the period 1961-1986 the tenth-century settlement was the focus of a series of excavations. The site of the ninth-century *longphort*, which existed for a period of about sixty years, is still unknown. Some scholars believe it was situated near the latter settlement, in other words beneath the centre of present-day Dublin, but the majority believes its remains are to be found near the Viking cemeteries of Kilmainham/Islandbridge, about two kilometres upstream off the later settlement.

The fact that the Vikings who were already in Ireland recognized Olav's overlordship, implies the involvement of at least two different

Norwegian factions: one represented by the recent arrivals under Olav, the other one represented by the Vikings who were already living there. It might well be that these two groups originated from different parts of Norway and had a different material culture.

Size and nature of the Kilmainham/Islandbridge cemeteries

To my knowledge there are only two (possibly three) weapon graves of the Kilmainham/Islandbridge cemeteries of which the inventory has been established in a reliable way. We know of a documented burial from c. 1836 which contained a full complement of (offensive) weapons, that is, sword/spear/axe (and probably shield). Then there is the only excavated weapon grave, from 1934, containing the combination sword/spear. Possibly another grave with a complete weapon set may be added to this. It was discovered during the lay-out of the War Memorial Park in 1933, but in this case the find-circumstances do not appear to be fully reliable.⁷ The exact size of the cemeteries will always remain unknown, as only part of the dug up artefacts has been preserved. Besides, it is impossible to tell how many burials the artefacts in fact represent. We can only try to assess the very minimum. Elizabeth O'Brien believes the artefacts represent at least forty-eight male burials and at least eight female burials.⁸ The ratio is also uneven: 6 : 1. Yet it is very common that male burials outnumber the female ones. An extremely uneven ratio is to be found in the Isle of Man, where of over forty known Viking burials there is no more than one female burial!⁹ In most Norwegian counties, however, the ratio is about 3 : 1, in Østfold and Vestfold the ratio is even more balanced.¹⁰

⁷ Cf. O'Brien, 'Viking burials at Kilmainham and Islandbridge', 1998, p. 211.

⁸ O'Brien, 'Viking burials at Kilmainham and Islandbridge', 1998, pp. 213-217.

⁹ Richards, *Viking Age England*, 1991, pp. 102-103. This has given rise to the presumption that the Viking colonization of Man has not been a peaceful family affair so to speak, but a military enterprise, and that the Viking warriors had married local, Christian women (Graham-Campbell & Batey, *Vikings in Scotland*, 1998, p. 111).

¹⁰ Forseth 1993, *Vikingtid i Østfold og Vestfold*, pp. 74-76. Solberg, 'Social status in the Merovingian and Viking Periods in Norway from archaeological and historical

Until recently the finds were attributed to one extensive Viking burial ground. However, O'Brien's detailed map of the find plots show however that there were actually two cemeteries: one associated with the monastic site of *Cell Maignenn* (in Anglicized form *Kilmainham*), another one situated about eight-hundred metres to the west, at Islandbridge, near a former ford in the Liffey¹¹ It also indicates that near the Viking burials were burials unaccompanied by grave-goods and orientated west-east (skull to the west). These were obviously Christian burials.¹² O'Brien concluded that the Vikings of the *longphort* probably had buried their dead in a native Irish cemetery.

As Ragnall Ó Floinn already has pointed out, inhumation burials were the rule. He refers to Worsaae, who stated that the workmen unearthed "whole rows of skeletons".¹³ To this we may add that a substantial number of the artefacts still showed organic material. According to Bøe's corpus, twelve spears had fragments of the wooden shaft preserved inside the socket and three swords showed remains of wooden covering on the grip. Besides, some of the oval brooches showed traces of textile. Obviously these artefacts come from inhumation graves, as wood and textiles would have perished in the flames of the funeral pyre. On the other hand, the Norwegian archaeologist Haakon Shetelig already accounted for the possibility that there might have been some cremation burials as well. According to Shetelig "cremation may have occurred in exceptional cases, as a sword and some of the spear-heads must have been intentionally bent before burial, a custom which in Norway was strictly confined to cremation burials."¹⁴ In fact, Bøe even listed three bent swords in his corpus¹⁵ in

sources', 1985, p. 75.

¹¹ Worsaae (*Minder om de Danske og Nordmændene*, 1851, p. 411) mentions the probable presence of Viking burials at the monastic cemetery of Cell Maignenn.

¹² Possibly a part of the Christian graves represents inhabitants of the *longphort*. There must have lived a considerable number of slaves and there is evidence of intermarriage at an early stage.

¹³ Ó Floinn, 'The Archaeology of the Early Viking Age in Ireland', 1998, pp. 134-135. Worsaae's statement in Henry, *Viking Ireland*, 1995, p. 60.

¹⁴ Shetelig, 'The Viking graves', 1954, p. 83.

¹⁵ Namely Wk. 9, 10 and 17. Already Coffey & Armstrong ('Scandinavian objects found at Island-Bridge and Kilmainham', 1910, p. 122) commented on the three

the nineteenth century, Another piece of evidence is shield-boss Wk 4 which seems to have been exposed to fire.¹⁶ The small number of cases where the orientation of the skeleton has been recorded makes it impossible to draw any conclusions. Two accompanied skeletons are known to have been orientated west-east (head to the west), whereas one, namely the only excavated weapon grave, was orientated south-north (head to the south).¹⁷ Most if not all burials appear to be flat graves since no burial mounds have been reported. This means that either they never existed or they were very low and have been eroded away or levelled out in the course of time.

The Viking burials from Ireland, Scotland, England and Iceland too show a predominance of inhumation and flat graves.¹⁸ Viking Age Norway, on the contrary, generally showed a mixture of burial customs: both inhumation and cremations, both flat graves and *haugbegravelser* (graves under a burial mound). Some regional differences can be observed though. Østfold, for instance, is almost completely dominated by cremation graves and has yielded hardly, if any, flat graves. Vestfold too show predominantly cremation graves, but here inhumation burials account for one-third of the burials.¹⁹ The burials from Aust-Agder on the other hand are mainly inhumations. Here the ninth-century burials from the coastal region are all covered by a mound, whereas the inland region show a mixture.²⁰

The surviving weapon material from the Kilmainham/Islandbridge cemeteries consists of 42 swords, 34 spearheads, 3 axeheads and 25 shield-bosses. The total amount is 105, of which eighty are offensive weapons (this is excluding the shield-boss). The share of each offensive weapon type is as follows: sword 53%, spear 43%, axe 4%. Compared to

bent sword blades.

¹⁶ Boe, *Norse antiquities in Ireland*, 1940, p. 33.

¹⁷ Cf. Boe, *Norse antiquities in Ireland*, 1940, pp. 25-60. Briggs, 'A neglected Viking burial with beads from Kilmainham', 1985, p. 96. Coffey & Armstrong, 'Scandinavian objects', 1910, p. 111.

¹⁸ Eldjárn, 'Graves and grave goods', 1984, pp. 4-5. Graham-Campbell & Batey, *Vikings in Scotland*, 1998, pp. 144-145. Richards, *Viking Age England*, 1991, pp. 114-115.

¹⁹ Forseth, *Vikingtid i Østfold og Vestfold*, 1993, pp. 166, 185, 194.

²⁰ Larsen, 'Graver fra sen hedensk tid i Aust-Agder', p. 179.

the figures from contemporary Norway this is a remarkable outcome. Seventy ninth-century weapon graves from Gloppen, northern Sunnmøre and Sogndal (in the counties Sogn of Fjordane and Møre og Romsdal), producing a total amount of 104 offensive weapons, showed the following ratio: axe 39% (41), sword 36% (37) and spear 25% (26).²¹ So the axe, being the most common weapon of Vestlandet, was definitely rare in contemporary graves from the Kilmainham-Islandbridge area! This outcome is matched by the finds in the Isle of Man. There twenty-one offensive weapons show the following ratio: sword 52% (11), spear 43% (9), axe 5% (1).²² Possibly the paucity of the axe is partly due to the popularity of the sword, which to some extent might have replaced the axe.

The swords from the Kilmainham-Islandbridge cemeteries

The sword certainly was the most prominent Viking weapon. The term 'Viking sword' refers to the large and heavy sword types which were in use during the Viking Age. Quite a few of these were not 'Viking' in the sense that they were exclusively used by Vikings or were developed and produced in Scandinavia. Although such sword types do exist, the Vikings imported many swords from the continent or copied their 'home-made' swords after continental examples. The continental swords mainly came from the Frankish Empire, notably from Rhineland. During the Early Viking Age the Vikings used both single-edged and double-edged swords. The single-edged sword is considered to be a relict from the Merovingian Period; it became obsolete in the course of the ninth century.

In 1919 the Norwegian archaeologist Jan Petersen published *De norske vikingesverd*, a typology of the Norwegian Viking swords. This work is still widely in use. Petersen classified the swords according to the form of the hilt, especially the pommel, ignoring the blade. In fact blade and hilt are to some extent independent entities, as the blade,

²¹ Cf. Solberg, 'Social status in the Merovingian and Viking Periods in Norway', 1985, p. 73, table 4.

²² Cf. Cubbon, 'The archaeology of the Vikings in the Isle of Man', 1983, p. 17, fig. 3.

when damaged, could easily be replaced. Petersen distinguished twenty-six *hovedtyper* 'main types'. Swords which only occurred in a very small number he called *særtypen* 'special types'; there were twenty of them. As we will see the sword types from the cemeteries date back mainly to the early Viking Age, the period when the *longphort* was in existence. For the ninth century Petersen distinguished four categories: the Types C-G representing the earliest Viking Age, the Types H and I covering the period from c. 800 until c. 950, Type K and its ninth-century *særtypen*, and finally the Types L-N representing the second half of the ninth century.

Almost all surviving swords and sword fragments from the Kilmainham/Islandbridge area have ended up in the National Museum of Ireland. The National Museum of Denmark has another two swords in its collection, thanks to Worsaae. Finally there is some documentary evidence concerning swords from the Kilmainham area which seem to be lost.

The swords and sword fragments in the National Museum of Ireland range from complete specimens to heavily corroded fragments. The smallest two swords measure c. 73-74 centimetres, the largest is about a metre. In his corpus Bøe ascribes thirty-nine preserved swords and sword fragments to the Kilmainham/Islandbridge area. To these we may add sword Wk. 6 (cf. note 31), but on the other hand fragments Wk. 44 and 1818:363 really represent one sword since they are supposed to belong to the same hilt.²³ The two swords in the National Museum of Denmark result in a total number of forty-one swords. The material includes thirty-five blades, eight (23%) of which are single-edged, and twenty-seven (77%) of which are double-edged.²⁴ Unfortunately I am not able to classify these eight confidently, since Walsh's article does not provide a specified classification. I suggest, however, there are (or were?) nine instead of eight single-edged swords, including one single-edged Type D sword. These nine swords might be

²³ Briggs, 'A neglected Viking burial from Kilmainham', 1985, p. 99. Walsh, 'Viking Age swords in Ireland', 1998, pp. 228-229.

²⁴ Reported by Bøe as being single-edged are Wk. 1, Wk. 8, Wk. 12, Wk. 14, Wk. 20, Wk. 23, Wk. 31 and Wk. 36.

be classified as follows: Type C: 5 swords, Type D: 1 sword, Type F: 2 swords, Type H: 1 sword.²⁵

Unfortunately Bøe did not provide a consequent classification. He compared the objects either by referring to Rygh's *Norske Oldsager* or by referring to an illustration from Petersen's *De norske vikingesverd*, but did not mention the actual type. Sometimes he refers to both works at the same time or does not classify a sword at all and only gives a description of the object. I will rely on Walsh's article, which gives a straightforward classification on the basis of Petersen's typology and besides has one sword extra. His classification does not fully correspond with Bøe's. Yet, as Walsh does not give a specified account, it was not possible to compare the two classifications in detail.

Walsh's survey of the surviving Viking Age swords from Ireland, ninety in all, include seventy-one Viking swords, ten Anglo-Saxon and nine unclassifiable swords. Of the seventy-one Viking swords he could confidently ascribe forty-two swords to the Kilmainham-Islandbridge area, all but one classifiable. His classification runs as follows: Type C: 6 swords, Type D: 3 swords, Type E: 3 swords, Type F: 3 swords, Type H: 16 swords, Type I: 2 swords, Type K: 5 swords, Type X: 3 swords, Not classified: 1 sword. Thus the sword material from Kilmainham/Islandbridge area covers eight different types. Bearing in mind that Petersen has given his types the letters of the alphabet, in chronological order and skipping the letter J, the types of the Kilmainham/Islandbridge finds represent a continuous series, especially when taking into account that the absence of Type G need not surprise us because it is such a rare type. The odd one out is Type X, to which I shall return later. Types M, O and R are not

²⁵ Type C: cf. Shetelig, 'The Viking graves', 1954, p. 104. The only double-edged Type C sword is Wk. 16. (cf. Walsh, 'Viking Age swords in Ireland', 1998, p. 227, fig. 8.1). Type D: According to Walsh ('Viking age swords in Ireland', 1998, p. 226) there are five Type D swords known from Ireland, three of which come from the Kilmainham/Islandbridge cemeteries. Four of the swords are said to be double-edged, the fifth is unclassifiable. However, Worsaae (*Minder om de Danske og Nordmændene i England, Skotland og Irland*, 1851, p. 406, fig. 1) has depicted a single-edged Type D sword from Dublin. Petersen (*De norske vikingesverd*, 1919, p. 73) compares this sword, as well as Wk. 33, with the Norwegian find C 16276 from Moss, Østfold. Type F: cf. Walsh, 'Viking Age swords in Ireland', 1998, p. 229.

represented in the Kilmainham/Islandbridge material, even though these types have been found in other places in Ireland.

Type C

Petersen Type C has a flat, triangular pommel. The sides of the pommel are rectangular, not rounded. Petersen dated its introduction to the beginning of the ninth century and believed that the type was used until the middle of the century. In fact, it is characteristic of the very beginning of the Viking Age. According to Petersen the type originated in Norway, where it was rather common. He listed 110 Type C swords from Norway, the majority with a single-edged blade (63%, n=107).

Type D

Petersen Type D has a three-lobed pommel, the central part being the highest. Both crossbars and pommel are richly decorated with metalwork, consisting of alternating sunken and raised plates made of various precious metals. The tang is often covered with the same sort of metalwork. Petersen dated this type to the first part of the ninth century. He listed eleven Type D swords from Norway. Their find spots are evenly spread over the country. In all nine cases where the blade survived, the sword was double-edged. Petersen believed this type originated abroad and was, when manufactured in Norway, sometimes adapted to local taste. Petersen distinguishes a Norwegian-Irish subgroup, which has a pattern of small knobs in the form of animalheads.

Type E

Petersen Type E developed from Type D. All swords of Type E have a pattern of circular or oval pits in the hilt in common. Petersen mentioned thirty-one examples from Norway, the majority being double-edged (81%, n=26). He believed the type originated in Norway during the beginning of the ninth century. Yet in Trøndelag it was known from the second part of the century too; a few finds even dated from the tenth century. Type E has an interesting distribution, as by then there were no finds from the counties Buskerud, Telemark, Aust-

Agder, Vest-Agder and Rogaland. He found this highly remarkable for such a numerous type.²⁶

Type F

Petersen Type F makes an overall simple impression. Usually it has no decoration and the pommel – a small, square piece of iron – made Petersen even think of a provisional replacement. He listed eighteen Norwegian Type F swords against only one foreign (Swedish) sword. He assumed it was an indigenous type. Remarkably the county of Oppland in Østlandet on its own yielded half of the sixteen provenanced Norwegian Type F swords, whereas the entire westcoast yielded a mere two, both from Sogn. According to Petersen the type mainly belongs to the first part of the ninth century. More than half of the swords are single-edged (59%, n=17). Walsh has classified three swords from the Kilmainham-Islandbridge area as Petersen Type F, that is, he distinguished one prototypical Type F sword as well as two apparent hybrids of the Types F and H.

Type H

Petersen Type H has a triangular pommel with rounded, not rectangular sides. The hilt is often decorated with vertical strips of precious metals. The crossbars are heavy and oval shaped in cross section. The majority of the blades is double-edged (73%, n=194) Petersen believed that Type H had already been introduced just before the Viking Age and was most popular in the first half of the ninth century. Since it was still in use during the beginning of the tenth century, this means that Type H had a dating range of about one and a half century! The Norwegian archaeologist Charlotte Blindheim has tried to restrict this exceptionally long period on the basis of the artefactual evidence from the Kaupang-excavations, but she arrived at the same chronology. As Petersen only knew a few finds from the continent which did not seem to be related to Viking presence he assumed Type H to be of native origin. However, the Swedish archaeologist Holger Arbman believed it

²⁶ Petersen, *De norske vikingesverd*, 1919, p.77.

most probably originated on the continent, particularly in the Rhineland area,²⁷ a view now widely held.

Type I

Petersen Type I has a thinner pommel than its predecessor, Type H, though sometimes it may be hard to tell the difference between these two types. Petersen assumed Type I had developed from Type H during the second half of the ninth century and presumably lasted until the mid-tenth century. He listed sixteen Type I swords from Norway, which were almost all double-edged (93%, n=14). Contrary to Type H, the type seems to be limited to the eastern part of the country. Petersen did not know the type from Southwest-Norway. The number of finds was however too small to allow for more detailed conclusions.

Type K

Petersen Type K has a five-lobed pommel, of which the middle one may be somewhat more prominent. Its crossbars are always straight, the cross section however rounded at the end. Petersen listed thirteen finds from Norway, not one was single-edged (n=9).²⁸ Type K is generally regarded as a ninth-century Frankish sword.²⁹ It was introduced in Norway during the first half of the ninth century and was primarily used before 900.

Type X

Bøe's classification of the Kilmainham-Islandbridge swords does not refer to Petersen Type X (i.c. Petersen, figs. 124-127) or its equivalent Rygh nr. 509. This type has a semi-circular pommel.³⁰ Shetelig, who must have relied on Bøe's corpus when writing about the Kilmainham-Islandbridge cemeteries, does not mention the type either. So it came as

²⁷ Arbman, *Schweden und das Karolingische Reich*, 1937, p. 223.

²⁸ Petersen, *De norske vikingsverd*, 1919, pp. 105-107.

²⁹ Arbman, *Schweden und das Karolingische Reich*, 1937, pp. 225-226. Geibig, *Beiträge zur morphologischen Entwicklung des Schwertes im Mittelalter*, 1991, p. 161. Petersen, *De norske vikingsverd*, 1919, p. 108.

³⁰ Petersen's classification of the swords with a semi-circular pommel has received some criticism. Geibig has classified them under more than one type (cf. Geibig, *Beiträge zur morphologischen Entwicklung des Schwertes im Mittelalter*, 1991, esp. p. 59).

a surprise when Walsh assigned three swords to Type X.³¹ Their presence might modify the overall early dating of the cemetery, since – as indicated by the position of the X in the alphabet – Petersen considered this a late type. He believed it was only introduced during the first part of the tenth century and lasted until the very end of the Viking Age. Yet it is important to realize that Petersen's chronology relates to Norway. In Germany Type X came already in use during the second half of the ninth century. In the tenth century it was to become the most common sword on the continent. In Norway it did not become so popular: Petersen listed forty-nine finds for Norway. Type X must have been fairly common in Ireland too, for apart from the three swords from the Kilmainham-Islandbridge area Walsh lists another five Type X swords.^{32]}

The sword material from Kilmainham/Islandbridge comprises a high share of swords which belong to the early and mid-ninth century. The types C and H together account for over half of the classified material (54%, n=41). Remarkably, none of the types which in Petersen's chronology date from the second half of the ninth century (namely L, M and N³³) are represented. They certainly reached the Irish Sea region, as they are known from, for instance, the Isle of Man and

³¹ Wk. 6 is depicted in Walsh, 'Viking Age Swords in Ireland', 1998, fig. 8.1. It also appears on Plunket's watercolour which was presented to the "Royal Museum of Northern Antiquities" (National Museum of Denmark) in 1847. About a quarter or third of the blade is missing. According to Coffey & Armstrong (1910, p. 110) Wk. 6 was among the six swords which were found in a cutting of the railway. Bøe (1940, p. 84) mentions Wk. 6 mistakenly as a find from the River Blackwater in County Armagh. He compares it with Rygh nr. 509 as well as Petersen's fig. 103. Petersen's fig. 103 however does not show a Type X, but a Type L sword, which, like Wk. 6, has a rounded pommel attached to a straight upper crossbar. Type L swords mainly date from the second part of the ninth century.

³² These finds include the sword from an inhumation burial at the sea-side near Larne, County Antrim, which has been assigned a probable late ninth or early tenth century date (Fanning, 'The Viking grave goods discovered near Larne', 1970, p. 77.). To judge by Bøe, among the Type X swords from outside Dublin are Wk. 32 (Donnymount, Co. Dublin), Wk. 48 (River Bann, Ulster; cf. Ypey, 'Einige wikingerzeitliche Schwerter aus den Niederlanden', 1984, p. 220) and 1880:1543 (locality unknown).

³³ That is, provided Wk. 6 belongs to Type X, not to Type L.

from other find spots in Ireland. Very interesting indeed is the absence of Type M (Rygh nr. 489) as it was apart from Type H the most common sword of Viking Age Norway. It is a very simple sword, with straight or only slightly curved crossbars and without a pommel or decoration. According to Petersen it was introduced round the mid-ninth century and was used just into the tenth century, according to Shetelig it “covers the late ninth and the early tenth centuries.”³⁴ Petersen considered the type as characteristic of eastern Norway, especially of its inland counties.³⁵ However, since the Kaupang-excavations the number of Type M swords from the coastal county of Vestfold has increased considerably.³⁶ Petersen assumed that Type M had originated abroad, although he hardly knew of finds outside Norway.³⁷ Blindheim however, believes it probably originated in Østlandet.³⁸ We know for certain that Type M has made its way to the west, albeit in very small quantities. Swords of this type have been found in Ireland, England, the Isle of Man, Iceland, France, Germany and The Netherlands.³⁹ The only preserved Type M sword from Ireland is a bog find from County Tipperary. In her article on this find Ellen Prendergast draws attention to a record from the *Dublin Penny Journal* of August 25th 1832, about a sword which was found in Kilmainham at the end of the eighteenth century, at the former cemetery popularly known as “Bully’s Acre”. Judging by the drawing it had a double-edged blade, straight crossbars and apparently no pommel and thus could have been a Type M sword indeed. However, as Arbman has stated, one needs the original sword for a definite

³⁴ Petersen, *De norske vikingesverd*, 1919, pp. 121, 188. Shetelig, ‘The Viking graves’, 1954, p. 102.

³⁵ Petersen, *De norske vikingesverd*, 1919, p. 118.

³⁶ Blindheim *et al*, *Kaupang-funnene I*, 1981, p. 154.

³⁷ Referring to professor Gustafson’s notes, Petersen (*De norske vikingesverd*, 1919, p. 121) mentions a Type M sword in “the museum in Dublin”. But neither Coffey & Armstrong nor Bøe have listed a Type M sword.

³⁸ Blindheim *et al*, *Kaupang-funnene I*, 1981, p. 154.

³⁹ Cf. Arbman, *Schweden und das karolingische Reich*, 1937, p. 228, note 1. Petersen, *De norske vikingesverd*, 1919, p. 121. Shetelig, ‘The Viking graves’, 1954, p. 105. Ypey, ‘Einige wikingzeitliche Schwerter aus den Niederlanden’, 1984, p. 221.

classification of a Type M sword.⁴⁰ Many or even most Type H swords from Norway have lost their pommel and for that reason some may have been mistaken for Type M swords.⁴¹

The distribution of Early Viking Age sword types in Norway

According to Petersen's chronology, apart from Type X all swords from the Kilmainham-Islandbridge cemeteries may be dated back to the period of the ninth-century *longphort*. The presence of the three Type X swords at that time can be explained by assuming that the Dublin Vikings had imported them from the continent, as they had for example the Frankish Type K swords. Otherwise they have to be regarded as a younger element. The abundancy of both Type C and Type H swords in fact points towards the first half of the ninth century. This means that many of these swords probably belonged to the first generation immigrants and were brought over from their Scandinavian homeland. So they might tell us something about the place their owners came from.

Assuming that the Vikings sailed for Dublin before the introduction of Type M, it is interesting to find out if the characteristics of the sword material from Kilmainham-Islandbridge match with specific Norwegian territories. In order to make this comparison I will first discuss the ratio of the swords belonging to the Types C-K, then I will go on to the ratio of the Types C-N, that is including the Types L-N, which Petersen believed to be characteristic of the second part of the ninth century. The surveys of Østlandet and Sørlandet are mainly based on data from Per Hernæs' *De østnorske sverdfunn fra yngre jernalder*, the survey of Vestlandet is mainly based on data from Petersen's *De norske vikingesverd*. Petersen still referred to the *amt*, which used to be the name for the administrative district (county) until 1918. For easy reference these *amt* names have been substituted for the names of the corresponding *fylker*.

In Østlandet the wider region around the Oslo Fjord (Østfold, Vestfold, Oslo and Akershus) and the inland, more mountainous region

⁴⁰ Arbman, *Schweden und das karolingische Reich*, 1937, pp. 227-228.

⁴¹ Petersen, *De norske vikingesverd*, 1919, p. 90.

(Hedmark, Buskerud and Oppland), comprising several extended valleys like Hallingdal and Gudbrandsdalen, show an interesting difference in the sword ratio of the Types C-K. In the Oslo Fjord region, Type C swords represent 21% and Type H swords 54% of the material (n=85), whereas in the inland region these percentages are almost even: 35% and 38% (n=170). The most southern region of Norway, made up of Sørlandet (Aust-Agder and Vest-Agder) and Telemark, show exactly the same percentages as the Oslo Fjord region: Type C 21%, Type H 54% (n=80). However, here we must allow for a marked difference between the coastal and the inland area. Øvre Telemark does show a deviating picture indeed: there 21% of the swords from the Types C-K belong to Type C and 68% to Type H (n=28).⁴² Øvre Telemark shares this feature with the Norwegian westcoast. In Vestlandet Type H swords comprise 62% of the swords of the Types C-K (n=213). Type H really dominates the material from Sørvestlandet. Here, in the counties Rogaland and Hordaland, 70% of the classified ninth-century swords belong to Type H and another 25% to Type C (n=57). So together these types cover 95% of the ninth-century swords! Contrary to Kilmainham/Islandbridge, Sørvestlandet thus clearly shows a very poor selection of sword types. In the days of Petersen's it had yielded only one Type E sword and no Type F swords at all. In the rest of Vestlandet the Types C and H account for 78% of the material (n=156). This is still much higher than 54%, which is the figure for Kilmainham-Islandbridge. Type C swords comprise 19% of the swords, Type H 59%. The percentages in the four counties involved (Sogn og Fjordane, Møre og Romsdal, Sør-Trøndelag and Nord-Trøndelag) are very similar.⁴³

When also taking the Types L-N into account, there emerges a significant difference between Østlandet and Sørlandet on the one hand and Vestlandet on the other. This is due to the abundance of Type M swords in eastern and southern Norway. In Østlandet, Type M swords comprise 46% of the swords of the Types C-N (n=515). This applies both to the coastal and to the inland region. So Type M clearly

⁴² Cf. Hanssen, 'Studier i Øvre Telemarks vikingetid', 1972, table at p. 79 (corrected figures).

⁴³ The figures are taken from Petersen, *De norske vikingsverd*, 1919.

outnumbers Type H, which now comprises 21% of the material. In Agder and Telemark Type M is even better represented (52%, n=184). Now Øvre Telemark does not show a dissimilar pattern, but has a high percentage too (45%, n=51). In Vestlandet Type M is strikingly uncommon, though not really rare. The overall percentage is 16%. The differences between the various regions of Vestlandet are merely fractional: Sørvestlandet 17% (n=76), the counties Hordaland and Sogn og Fjordane 14% (n=77) and finally the counties Sør- and Nord-Trondheim 16% (n=115).

Finally, I will examine how the percentages of single-edged swords from the Kilmainham-Islandbridge cemeteries relate to the various Norwegian regions. Because of their abundance I shall focus on the Types C and H. The share of single-edged Type C respectively Type H swords from Kilmainham/Islandbridge is very different: of the Type C swords 83% is single-edged (n=6), of the Type H swords only 6% (n=16)! How do these figures compare to the figures from the various Norwegian regions? In Norway the single-edged Type C swords make up 61% of the total number of Type C swords (n=100). The percentages are: Østlandet 53% (n=45), Vestlandet 63% (n=41) and Agder and Telemark 79% (n=14). Because Petersen has recorded only one Type C sword from Agder, the last figure in fact concerns Telemark. Except for Telemark, also Sørvestlandet (Rogaland and Hordaland) has a percentage that matches the percentage from the Kilmainham-Islandbridge cemeteries: 85% (n=13). The extreme low share of single-edged Type H from Kilmainham/Islandbridge is however not matched by any of the Norwegian regions. The overall percentage is 27% and there are no marked differences between the various regions: Østlandet 24 % (n=58), Vestlandet 28% (n=115) and Agder and Telemark 36% (n=11).

Spearheads

Bøe ascribes thirty-four spearheads to the Kilmainham/Islandbridge area. About half of the artefacts have not been classified, because many spearheads were heavily corroded. Only four spearheads could be

compared with spearheads from Norway.⁴⁴ Most of the classifiable spearheads – at least twelve – belonged to a type unknown to Bøe. This type has a slender blade and socket and a sloping transition from blade to socket. No raised mid-rib was to be seen, and if it ever had existed (the spearheads were very corroded) it could never have been a prominent one. Apart from the Kilmainham/Islandbridge area it also has been found in other places in Ireland (e.g. the Larne burial). Bøe suggested that he was dealing with a new type of spearhead: “It may seem likely enough, considering the time, that the type was developed in Ireland, possibly under the influence of Celtic arms, a case analogous to what seems to have been the peculiar development of the shield-bosses.”⁴⁵ His suggestion has been taken up again with regard to similar spearheads from find spots in, for instance, the Isle of Man.⁴⁶

Axeheads

Petersen distinguished eight sword types in *De norske vikingsverd*. There are four axeheads recorded from the Kilmainham-Islandbridge cemeteries, three of which have survived and can be found in Bøe’s corpus.⁴⁷ They are small compared to the heavy battle axes from the later Viking Age: their lengths are 17.2, 19 and 17.3 centimetres, their cutting edges are 13.5, 13.6 and 14 centimetres. The blade is asymmetrical and the cutting-edge is nearly straight. It seems to me that all three resemble either to Petersen fig. 31 or 33 and thus belong to his Type D.⁴⁸ Petersen dates this type to the early til mid-ninth century, a few even to 900.

⁴⁴ Namely Wk 6, Wk 11, Wk 12 and Wk 14.

⁴⁵ Bøe, *Norse antiquities in Ireland*, 1940, p. 26.

⁴⁶ Hall, ‘A Viking-age grave at Donnybrook’, 1978, p. 70.

⁴⁷ Bøe, *Norse antiquities in Ireland*, 1940, pp. 32-33, 64.

⁴⁸ Bøe (*Norse antiquities in Ireland*, 1940, pp. 32-33, 64) wrote about Wk. 12: “rather like Petersen, figs. 31 and 32”, compared Wk. 13 with Petersen, fig. 32 and classified the axe that belongs to the set of artefacts numbered 1933:7-15 as Petersen, fig. 34. Petersen fig. 32 however shows a Type C axe that contrary to the axes from Kilmainham/Islandbridge has a straight upper edge while its shaft misses the upper protrusion.

Shield-bosses

The Vikings had circular wooden shields. The wood of the shields is hardly ever preserved, but the iron shield-bosses frequently do survive. The boss was nailed on the centre of the shield, to cover the hand holding the grip. When dealing with shield-bosses, Petersen has not worked out a special typology for shield-bosses in *De norske vikingesverd*, but he uses the typology from Rygh's *Norske Oldsager*. Rygh distinguishes four Viking Age types, namely R 562 - R 565.

Bøe attributes twenty-five shield-bosses to the Kilmainham-Islandbridge area. Surprisingly only five of these more or less resembled Norwegian shield-bosses. Three of these Bøe compared with R 562, which Petersen dated to the period c. 850-950. The two others he could not classify accurately. The bulk, twenty in all (80%), belongs to a conical type which had no Norwegian parallels. Not only is the conical shape peculiar, but they are also exceptionally small. Though Bøe was not familiar with Irish shield-bosses, he assumed that this conical type derived from an Irish prototype. Nowadays it is held that these shield-bosses make up a type of their own. It has been called an 'Irish Sea type', for it is found in the Irish Sea region. The conical shield-boss is known from the Viking boat-graves from Balladoole (Isle of Man), Ballinaby (Islay, Inner Hebrides) and Kiloran Bay (Colonsay, Inner Hebrides).⁴⁹ These burials probably date from the end of the ninth century or about the year 900, which means that they are more or less contemporary with the Kilmainham/Islandbridge cemeteries, or possibly somewhat younger.

Conclusions and discussion

At first sight the predominance of both indigenous 'Irish Sea' spearheads and shield-bosses contradicts an early dating of the cemeteries, as one in that case would expect a fair share of Norwegian types. But as both the early sword types, the 'Irish Sea shield-boss' and the 'Irish Sea spearhead' are so common, they must have been used together. Therefore the conical shield-boss and the slender spearhead

⁴⁹ Graham-Campbell & Batey, *Vikings in Scotland*, 1998, p. 120.

were probably introduced at an early stage. The reason for their early introduction might be that throwing-spears frequently were lost in battle and shield-bosses were easily damaged and thus had to be replaced quite often. In case a sword blade was damaged, a new one would have been attached to the hilt, so the hilt – and therefore the sword type, for that is after all the basis of Petersen's typology – would have lived on for a while.

Both the high share of swords, being the most prominent Viking weapon, and the presence of various high-status swords (notably those belonging to the Types D, E and K, though also swords of a generally more modest type like Type H sometimes come in impressive versions) suggest a rich society, or perhaps a martial society where weapons functioned as an important marker. Neither can we rule out the possibility that there have been certain regulations on the composition of one's personal weaponry, depending on (legal) status.

Because of the numerousness of the Types C and H, both uncommon in the eastern part of Norway, and the absence of Type M, which was rare in the western part, Walsh assumes "that the Vikings represented by the Kilmainham and Islandbridge burials came from the western part of Norway."⁵⁰ This might be true, though in that case we have to ignore the absence, or paucity, of the Types E, F and I in Vestlandet. These are all uncommon types, so this might not be significant. Crucial is whether the emigrants left before or after the Type M swords became popular. If they had left Norway when Type M already had reached its popularity, they would have been likely to originate from Vestlandet, most likely the northern part, because Sørvestlandet has such a small variety of sword types.

There is however another scenario, which points towards eastern Norway as the place of origin of at least part of the Dublin Vikings. Provided the weapons from Kilmainham/Islandbridge represent a more or less homogenous group of emigrants that originated from one particular Norwegian territory and provided these emigrants had left Norway before Type M became popular, they presumably came from the Oslo Fjord region and/or Sørlandet. The inland region of Østlandet

⁵⁰ Walsh, 'Viking Age Swords in Ireland', 1998, p. 235.

is an unlikely place of origin, because the ratio between the Types C and H does not match the sword material from Kilmainham/Islandbridge.⁵¹ Consequently the weapon material from the Kilmainham-Islandbridge area does not contradict the hypothesis that king Olav of Dublin is identical with Olav Geirstad, king of Vestfold.

Obviously, the culture of the Dublin Vikings is not a copy of the culture of their homelands. If the colonists came from Vestlandet this means that their weapon set clearly had changed, as the axe fell back from being the most common to the most rare weapon. Also the burial rites changed, as the Kilmainham/Islandbridge cemeteries clearly show a predominance of inhumation graves not covered by a mound. The same seems to apply to the Viking burials from Scotland, England and the Isle of Man. There must have been close contacts between the Viking settlers on either side of the Irish Sea. Part of the Viking burials in the Isle of Man and the Scottish Isles might actually belong to former Dublin Vikings who had been driven out of Ireland in 902. In this respect it is worth noticing that both the Viking colonization of the Isle of Man and the earliest Viking burials in north-west England are dated towards the very end of the ninth century or around the year 900.⁵² That the prevailing burial rites among the Viking colonists differed from the burial rites in Norway was certainly not the result of their conversion to Christianity, as this happened only in the second part of the tenth century or towards the year 1000. Often Christian influences are held responsible for the change in burial rites among the Viking colonists. If so, these influences must have become manifest already soon after the emigration and resulted in a preference for inhumation, but failed to bring the orientation of the corpse in accordance with Christian burial custom.⁵³ Yet, if the shift to inhumation is regarded as part of an assimilation process, it is peculiar that also Iceland shows

⁵¹ This outcome does not come as a surprise though, as one might expect a maritime power behind a large-scale overseas expedition to Ireland.

⁵² Graham-Campbell & Batey, *Vikings in Scotland*, 1998, p. 110-111. Shetelig, 'The Viking graves', 1954, p. 105.

⁵³ O'Brien ('Viking burials at Kilmainham and Islandbridge', 1998, p. 212) refers to a memorandum which indicates that the Viking burials in the War Memorial Park were "lying north and south", whereas in Scotland "orientation was variable" (Graham-Campbell & Batey, *Vikings in Scotland*, 1998, p. 145).

about the same pattern as the Irish Sea region, although it was apart from a handful of peregrinates a desert island when the Vikings colonized it around the year 900. This may be explained by the contacts between Iceland and the Irish Sea region or by the presence of settlers who previously had lived in Scotland or Ireland.

Walsh suggests a change in funeral practice among the Vikings in Ireland to explain the rarity or relative paucity of the sword types M and X.⁵⁴ These swords would mainly appear in low quantities because the number of grave-goods had fallen considerably during their life-span. The paucity of late types among the material from the Kilmainham-Islandbridge cemeteries is usually used to demonstrate the connection between the cemeteries and the ninth-century *longphort*, but this paucity does also apply to the entire Dublin area. If the Vikings still supplied their dead with grave-goods during the first half of the tenth century, when they still were 'pagan', one would expect to come across a reasonable amount of late swords. In the light of their obvious rarity a change in burial practices would provide a sufficient explanation. It would be another common feature of the Irish Sea region. James Graham-Campbell and Colleen Batey observe with respect to Scandinavian Scotland: "it seems probable that pagan burial practices were abandoned after only a generation or two in some areas and had completely ceased well before the 'official' conversion".⁵⁵ However, also in Norway did the pre-Christian burial practise not everywhere persisted into the eleventh century. In the coastal area of Aust-Agder for example the 'pagan' burial rite seemed to fall into disuse already during the first part of the tenth century or around 950, whereas in the inland region it continued well into the eleventh century.⁵⁶

One might be inclined to think that matters of life and death were surrounded by strict and highly ritualized traditions and consequently assume that these hardly changed over the ages. This however is not the case. The Germanic world showed a sequence of burial rites during prehistoric and early medieval times. It certainly did not require a

⁵⁴ Walsh, 'Viking Age swords in Ireland', 1998, p. 235.

⁵⁵ Graham-Campbell & Batey, *Vikings in Scotland*, 1998, pp. 47-48, 65.

⁵⁶ Larsen, 'Graver fra sen hedensk tid i Aust-Agder', p. 174, 178.

dramatic change in the fabric of society to break with a prevailing burial custom.

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