



Title	The discovery of Phocaeen Red Slip Ware (PRSW) Form 3 and Bii ware (LR1 amphorae) on sites in Ireland - an analysis within a broader framework
Authors(s)	Kelly, Amanda
Publication date	2010-04-19
Publication information	Kelly, Amanda. "The Discovery of Phocaeen Red Slip Ware (PRSW) Form 3 and Bii Ware (LR1 Amphorae) on Sites in Ireland - an Analysis within a Broader Framework." Royal Irish Academy, April 19, 2010. https://doi.org/10.3318/PRIAC.2010.110.35 .
Publisher	Royal Irish Academy
Item record/more information	http://hdl.handle.net/10197/8039
Publisher's version (DOI)	10.3318/PRIAC.2010.110.35

Downloaded 2026-06-23 01:21:48

The UCD community has made this article openly available. Please share how this access benefits you. Your story matters! (@ucd_oa)



© Some rights reserved. For more information

The discovery of Phocaean Red Slip Ware (PRSW) Form 3 and Bii ware (LR1 amphorae) on sites in Ireland—an analysis within a broader framework

AMANDA KELLY*

Classics Department, NUI Galway

[Accepted 16 September 2009. Published 19 April 2010.]

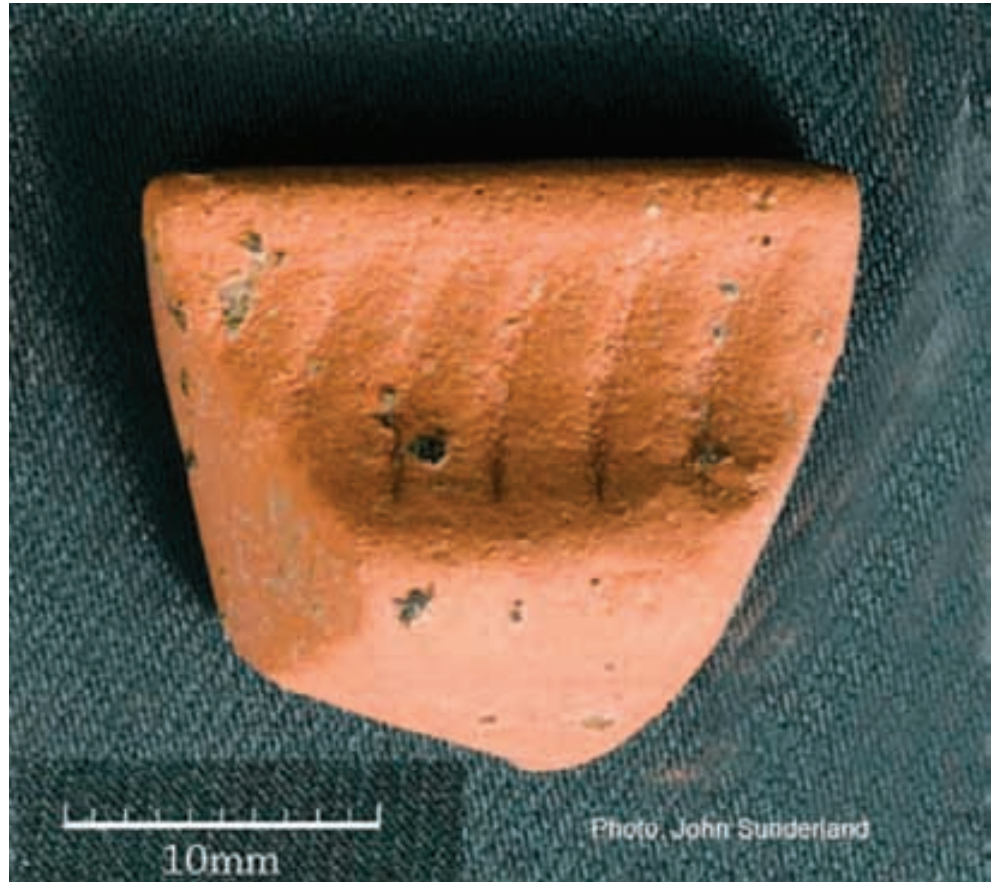
Abstract

‘Phocaean Red Slip Ware’ and Bii amphorae sherds have been identified, by the present author, at the site of Collierstown 1, Co. Meath. One of the advantages of discovering Phocaean Red Slip Ware Form 3 on sites in Ireland is that it is instantly datable—to the late fifth and early sixth century AD—a valuable asset in an early medieval context; however, the main benefit in identifying this ware in Ireland is that its manufacture can be accurately and exclusively attributed to a centre in Asia Minor (modern Turkey); a provenance that has major implications for long-distance connectivity in the early medieval period. Similarly, the Bii amphorae discovered in Ireland, manufactured in the wider Cyprio–Syrian catchment area, have never been published as a group before and the present study attempts to redress this in presenting sixteen find-spots of Bii amphorae in Ireland; a marked increase on the two sites included in Thomas’ 1959 catalogue reflective of Ireland’s recent intensive road building schemes. This paper addresses the complexity of the trade network between north-western Europe and the eastern Mediterranean (and, more locally, between Ireland, Britain and France) in the early medieval period, thereby presenting hypothetical intermeshing trading models.

Introduction

The subject of this paper is the result of the combination of the present author’s study of ‘Roman-Byzantine’ sites in the eastern Mediterranean for nearly two decades and the opportunity to direct excavations in Ireland in 2006, whereupon both fields, rather unexpectedly, converged. A rim sherd from Collierstown 1, sherd A008/015:69:2 #81, has been clearly identified, by the present author, as Phocaean Red Slip Ware (henceforth PRSW) Form 3—otherwise known as Late Roman C (Waagé 1933, 298; 1948, 51–2; see Hayes 1972, 323–70) or A ware (Raleigh Radford 1956, 61, fig. 13), the latter mostly used in Britain (Pl. I)—while nine further sherds from Collierstown 1 have been identified as potentially representing Bii ware (also known as Late Roman 1 amphorae, Ballana 6, Type LIII in Spain, and Class 44 amphorae in

* Author’s e-mail: amakelly@gmail.com
doi: 10.3318/PRIAC.2010.110.35



PL. I—Photograph of the PRSW rim sherd discovered at Collierstown 1, Co. Meath. (Photo: John Sunderland.)

Mediterranean contexts, amongst other terms),¹ at least five of which, if not all, represent the same pot (Pl. II).

Part 1

Characteristics of PRSW Form 3

PRSW belongs to a class of red-slipped fine wares, comprised of a large array of shallow bowls constituting the main contender to the African wares in the East from the late fourth century AD, and becoming extremely common throughout the eastern Mediterranean in the fifth–seventh centuries AD.

¹ It should be noted that the Collierstown 1 sherds were the only sherds physically examined by the current author and all other identifications are reliant on the published record. The term Bii is favoured in this article as it represents the preferred term used in published articles



PL. II—Photograph of the Bii ware sherds discovered at Collierstown. (Photo: John Sunderland.)

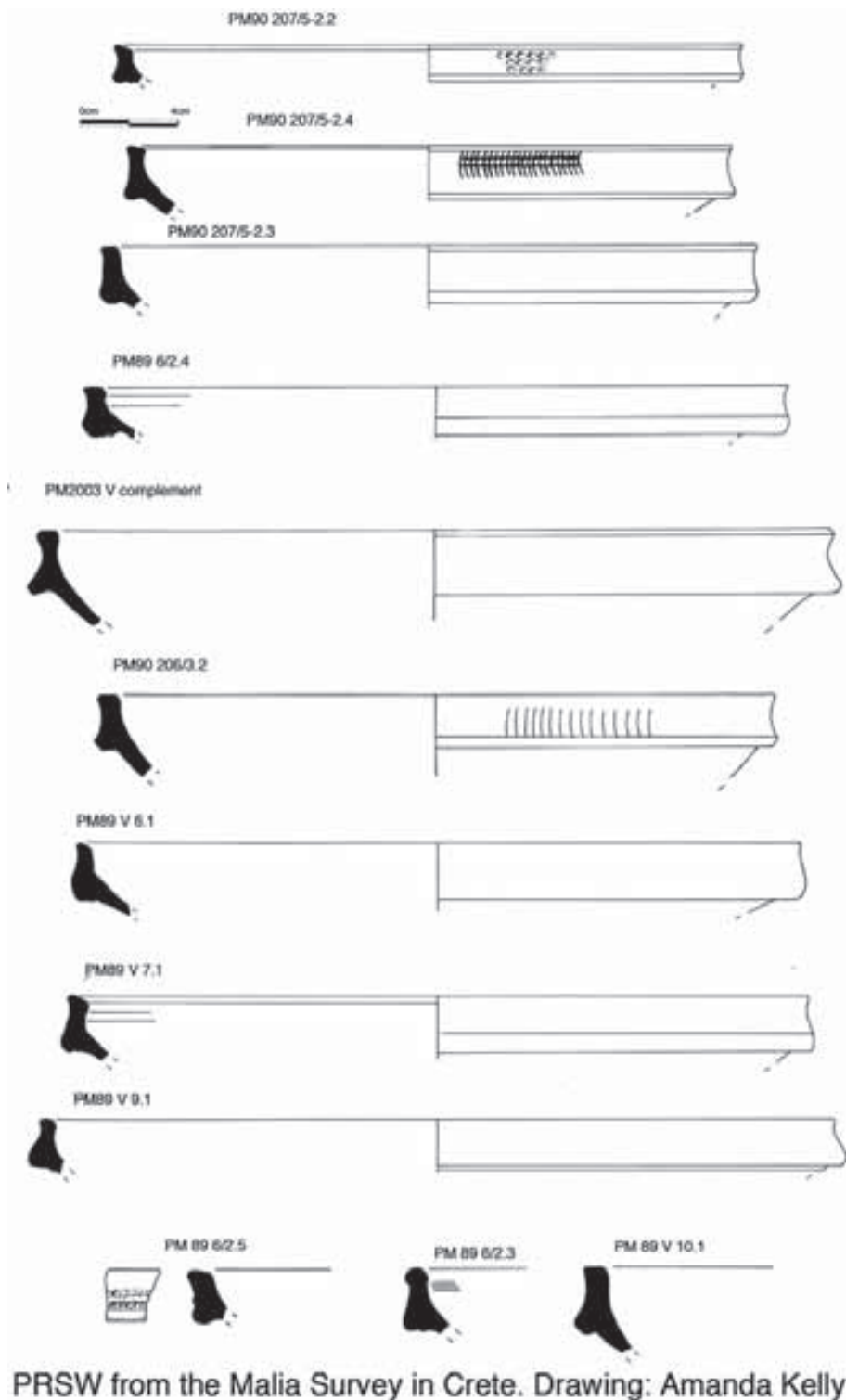
PRSW Form 3 is characterised by an upright, or slightly everted, wedged rim with a concave exterior surface. A pronounced ledge marks the juncture of the wedged rim with the body of the pot (Fig. 1). The complete vessel form is open with a curving wall descending to a low faint foot produced on the wheel. In terms of size range, the average-sized versions have diameters ranging between 19–36cm; the Collierstown 1 sherd has a diameter of 30cm (Fig. 2). The largest examples have diameters exceeding 32cm and almost all of the large forms represent Hayes' Form 3 type B (1972, 331–2).

Decoration commonly includes a stamped motif on the interior floor of the pot (Pl. III), often combined with grooves and rouletting on the exterior concave surface of the rim (as is clearly visible on Collierstown 1 sherd A008/015:69:2#81; see Pl. I and Fig. 2 in this paper). The rouletted decoration, characteristic of this ware in the fifth and early sixth centuries AD, was executed using a multiple pronged implement, simultaneously producing a series of impressions (Fig. 1). In some cases, application has exceeded the full circuit resulting in visible overlap on the surface of the rim.

Fabric of PRSW

The clay of PRSW is fine-grained and hard-fired. The firing is generally even, producing a uniform reddish colour throughout, whereby the colour range indicates

focussing on the British Isles. It should also be noted that Ian Doyle wrote a detailed analysis of A and B wares in Ireland in his unpublished Masters thesis in 1996 and this article serves to add to that corpus by incorporating a range of material from recent excavations and in providing an eastern perspective.



PRSW from the Malia Survey in Crete. Drawing: Amanda Kelly

FIG. 1—Illustrated examples of PRSW profiles from the Malia Survey in Crete. (Drawings: Amanda Kelly.)



FIG. 2—Illustration of the PRSW rimsherd discovered at Collierstown 1. (Drawing: Amanda Kelly.)

a firing temperature above that achieved for the African fine wares, and probably above 1,000°C. Darker tinges are occasionally visible along rims as a result of stacking the bowls in the kiln. The entire surface of the pot is coated in a fine film of red slip, which frequently fuses with the body clay.



PL. III—Stamped PRSW bowl depicting a stamped-deer motif from the Malia Survey in Crete. (Photo: Amanda Kelly.)

The fabric of Collierstown 1 sherd A008/015:69:2 #81 closely corresponds with the overall pattern for PRSW, as outlined above. The core fabric is a medium–fine grainy sand with tiny inclusions of feldspar, calcite, clay-stones and glassy quartz. Both the fabric and slip are reddish orange (2.5yr 6/8). The slip has fused with the body clay, although the surface of the sherd is very worn and trace elements of red slip only survive in the interior and along the grooves of the rouletting.

Chronology of PRSW

One of the main benefits of discovering PRSW on sites in Ireland is its inherently datable quality—a valuable asset in an early medieval context in Ireland. At least 50% of the overall production of the PRSW range of pottery can be categorised as PRSW Form 3. The development of the form, the stages of which have been outlined by Waagé and Hayes, can be traced with a degree of consistency over 150 years (Waagé 1948, 53; Hayes 1972, 329–38). In brief, this development involves a progressive reduction in the height of the rim and a correlated thickening in the ledge (Hayes 1972, 329).

Tracing the circulation of PRSW from its source of manufacture, the first notable influx of imports both in Italy and Portugal post-date AD 450, i.e. at Conimbriga, Portugal, it was reported in layers above the destruction levels of the city by the Suebi in AD 465 or 468 (Reynolds 1995, 117). PRSW forms dating to *c.* AD 450–80 are reported in relatively high quantities at Conimbriga (3B, 3C, 5A) where Forms 3B and 3C comprise almost half of the total PRSW corpus (44 rims), with Form 3E, of the late fifth and early sixth century AD constituting 30.5% of the total PRSW range, with 29 rims (Alarçao *et al.* 1976; Reynolds 1995, 35).

In Britain, PRSW Form 3C is the most commonly imported form. An example from Dinas Powis in Wales, dating to *c.* AD 460–90, represents the earliest of the series of Mediterranean imports found in British contexts, which Hayes regards as contemporary with, or slightly later than, the latest pieces in the Agora groups (Hayes 1972, 337, no. 12; 2008, 240–1; see Alcock 1963, 128–9, fig. 25, pl. VIIa).

In Ireland the published profile of the Garranes sherd, with three slight offsets visible at the juncture of rim and body, confirms its classification as PRSW Form 3, probably Hayes' Type F (Hayes 1972, 333–8; Ó Ríordáin 1942, fig. 23, no. 249; Doyle 1999, 72, pl. 1). The profile of the Collierstown 1 sherd, A008/015:69:2 #81, while closely comparable to several of Hayes' illustrated examples of PRSW Form 3, types C–D (1972, figs 68–9), is also similar to numerous examples found more recently throughout the Aegean (Figs 1 and 2), yet classified using a different system from that of Hayes, such as several examples from Eleutherna in Crete which date to the early sixth century AD (Vogt 2000, 55–60, fig. 5, no. 10–12, Type 12.11). On the basis of form and fabric alone, the production of the rim sherd at Collierstown 1 (i.e. sherd A008/015:69:2 #81) can be confidently dated to the late fifth or early sixth century AD. Moreover, this date closely corresponds to that attributed to the Garranes rim sherd on the basis of both its profile and its stratigraphic context, as corroborated through its associated finds—although the Collierstown 1 profile does not exhibit the slight offset marking the underside of the rim, which is characteristic of the early sixth century AD types (Hayes 1972, 338 and Fig. 2 in this paper). This chronology attests a tight sequentiality in both sherds' production in Asia Minor

(modern Turkey) and their movement through the Mediterranean and northwards along the western Atlantic coastline to Ireland.

The chronological gauge inherent in the discovery of imported pottery in Irish contexts is graphically conveyed in the case of Garryduff 1 where, despite the wealth of finds, it is the imported pottery on which O’Kelly relied to date the site (O’Kelly 1962–4, 117–18). At Garryduff 1, the dominance of E ware in the ceramic profile pointed to a date range in the late sixth or seventh centuries AD; the dating, however, is as much based on the presence of E ware as on the absence of PRSW and B wares and twice O’Kelly states that the latter two are ‘very definitely absent’ (1962–4, 105 and 117).

O’Kelly deduced from the absence of PRSW that a later date, concurrent with the E wares, was applicable for the site and categorised the one ‘problematic’ red sherd as G ware—in accordance with the description of this ware published by Thomas at this time (1959, 110)—or even an heirloom. O’Kelly’s observations are worth quoting in full:

No. 79 (fig. 23), a G-ware bowl, represented by one sherd found on an upper level pavement in the southern part of the enclosure. It is, therefore, attributable to Period II. The sherd is from the rim and side of the vessel and is different, both in profile and ware, from everything else on the site. All edges of the sherd are rounded off as if it had been water-rolled or used for drawing as with a piece of chalk. Colour is red, the paste is fine, quite gritless and soft enough to be used for chalking. On the external surface in the sheltered area at the junction of the rim and side there is definite evidence of a slightly darker red slip or wash showing a slight burnish. This has obviously been flaked or worn off the rest of the sherd. Were it not for the peculiar profile, it could be argued that this is **Ai** or **Aii** of the Garranes type or, indeed, that it is an heirloom survivor from a Samian vessel, or that it is some sort of pseudo-Samian ware, all of which suggestions have been made to us by various colleagues in the course of discussion of the piece. It seems to fit best, however, in the ‘late colour coated’ group G of Thomas’ classification. Because of the worn condition of the sherd great accuracy in the reconstruction of the diameter of the edge of the rim is not possible, but this measurement was not less than 35cm (about 14 inches). Height of the vessel cannot be reconstructed but it seems likely that it was a rather shallow bowl.

(O’Kelly 1962–4, 110–11)

Moreover, O’Kelly remarked that ‘one sherd of red ware, which he [Thomas] would place with his late colour-coated class G material; and we would agree with him in this ascription’, a statement from which the reader might infer that Thomas had seen the sherd by this time (1962–4, 117). It comes somewhat as a surprise then to learn that in 1981 Thomas classified the Garryduff sherd as PRSW Form 2 (1981, 7); thereby implying that O’Kelly’s use of the conditional tense may be borne of the fact that Thomas had not yet viewed the sherd in the early 1960s. Interestingly, following O’Kelly’s own rationale, the potential presence of PRSW, even one sherd at Garyduff, could push the date back to the late fifth or early sixth century AD.

O’Kelly’s classification not only had chronological repercussions but also carried economic, geographic and social implications as the following commentary conveys: ‘[did] the absence of A- [in this case PRSW] and B-ware from Garryduff and Ballycatteen necessarily mean ... that a Mediterranean salesman found his way to Garranes, but did not know of or bother to go to the other two southern sites?’; thereby demonstrating the weight once levied on these ceramics (1962–4, 117; see also Ó Ríordáin and Hartnett 1943).

Campbell posits that this Mediterranean trade ended in the AD 540s, coinciding with the outbreak of plague in the eastern Mediterranean (2007, 132). He cites entries in the *Annals of Ulster*, referring to epidemics in AD 545, 549 and 554, as reflecting the importation of this disease by merchants from the eastern Mediterranean². His resulting supposition that Byzantine merchants effectively killed off their élite clients in the north-west of Europe is, as acknowledged by Campbell, perhaps too simplistic an interpretation (2007, 132), but clearly devastation at the source of production would filter through to the furthest markets, whereby reductions in productivity would severely restrict the acquisition of these prestige goods and, ultimately, obscure visible hierarchical insignia within an Irish social context.

Area of PRSW production

A considerable benefit in identifying PRSW in Ireland is that its manufacture can be accurately and exclusively attributed to a locale in western Asia Minor; a provenance that has major implications for long-distance connectivity in the early medieval period. The ceramic type is named after a major production centre (probably *the* production centre) at Phocaea. A single centre of production is supported by the uniformity of the fabric evidenced through the entire range of PRSW. Examples from Eleutherna in Crete were originally thought to represent Cretan imitations but fabric analysis confirmed their production in Asia Minor and it was subsequently concluded that they represented true PRSW (Vogt 2000, 56)³.

Broader circulation of PRSW

While PRSW is generally accepted as exclusively manufactured in western Asia Minor, the main concentration of PRSW pottery focuses on the wider Aegean area. Traditionally, a distribution density is apparent within a regional catchment stretching from Sicily to Syria, and from the Black Sea to North Africa (specifically Cyrenaica). Ceramic deposits from Athens, Thessaloniki and Istanbul indicate that from the mid-fifth to early sixth century AD, the ware dominated (indeed, almost

² Baillie couches these phenomena within the widescale impact of a volcanic cataclysm which he traces both scientifically and with reference to texts from Cassiodorus through to Michael the Syrian who, although a much later source, specifically refers to sour wine produce (1995, 93–4).

³ Lab-based petrographic analysis has yet to be conducted on the sherds from Irish contexts and is a prerequisite step for any further investigation.

monopolised) the fine-ware trade in the Aegean region. Its distribution pattern points to sea-dependent trading; in the East, it features predominately in the ceramic assemblages of major relatively coastal metropoleis, such as Antioch and Tarsus, while in Egypt, it did not filter beyond the delta.

The western ambit of this trade demonstrates movement along the Mediterranean coast, moving through the Straits of Gibraltar and, subsequently, northwards along the Atlantic coastline (Reynolds 1995, 164, fig. 162). One of the most significant concentrations of PRSW outside of the Mediterranean was discovered at Conimbriga, where notable quantities of the ware were located (Alarçao *et al.* 1976). The concentration in this locale, which is prominent among a growing number of discoveries in Portugal, represents a vital bridge between the Mediterranean distribution and its presence, previously detached from any plausible trade route or distribution pattern, on sites in Ireland and Britain (Hayes, J. 1980, lix).

Consequently, Reynolds, following Hayes, has outlined the general distribution of PRSW in western Europe—travelling from Italy (with concentrations in south-eastern Sicily) to southern France (Marseille), towards the south-eastern coast of Spain (Valentia, Alicante, Murcia and Baelo) and, on through the straits, northwards along the coast of Portugal (represented by Conimbriga) and, ultimately, to Ireland and south-western Britain (Reynolds 1995, 35 and 164, fig. 162; Hayes 1972, map 15). The overall distribution of PRSW emphasises a predilection for coastal (indeed, the northern coastline of the Mediterranean), over riverine, trade, indicating a passage along the coast of Portugal reaching northwards to Ireland and Britain.

Thomas' distribution map of PRSW in Britain depicts clusters throughout the south-west peninsula (1976, fig. 1). The once-isolated example from Garranes in Cork was originally believed to represent a possible extension of the spread in Britain (Thomas 1976, 247–8), reflecting direct lines of contact between southern Ireland and south-western Britain—a theory which perhaps pertains more to the literary accounts, referring to the colonisation of areas of south-western Britain by the Déisi of southern Ireland (Thomas 1973, 5–13; 1994, 41–9; Mytum 1992, 33–4), than any ceramic analyses. Nonetheless, it is still relevant, in this context, that Hencken noted the comparability of the overall pottery range from Garranes to that of Tintagel, Cornwall (cited in Ó Ríordáin 1942, 126; Ralegh Radford 1956, 59, fn. 2), particularly as the Cornish site is the one with the largest amount and array of imported ware in Britain; 'lacking only Class E and probably Gaza or Bvi' (Thomas 1981, 4).

In Britain and Ireland the first well-documented find of PRSW ware was an example discovered at Tintagel in 1936, while the first piece to be published was a rim sherd found at Garranes *c.* 1942 (Ó Ríordáin 1942, 132–3). In the 1970s the Garranes rim sherd was classified as 'A ware' and, even by then (more than 30 years after its discovery), it still remained a unique find of this category in Ireland (Thomas 1976, 247–8, fig. 1).⁴ Indeed, Ó Ríordáin's illustrated profile of the Garranes rim

⁴ Thomas identified the rim as Aii in 1959 but reclassified it, in 1981, as Ai ware (1959, 90; 1981, 7); thereby demonstrating a degree of confusion regarding Ai and Aii classifications. Hayes, citing Waagé, classifies Aii as both Late Roman B (i.e. African Red Slip) and Late Roman C (i.e. Phocaean Red Slip Ware) while Ai as a derivative class which was then exclusive to Tintagel (1972, 7).

sherd remained the only securely stratified published example of PRSW found in Ireland (Ó Ríordáin 1942, fig. 23, no. 249; the same sherd was republished by Doyle in 1999, 72, pl. 1) until the recent discoveries at Mount Offaly Cemetery in Dublin and at Collierstown 1 in Meath. By 1981 Thomas had compiled a combined catalogue of 15 sites in Ireland and Britain yielding PRSW.⁵ Of these, only two find-spots were located on the island of Ireland (i.e. Clogher and Garranes) and the list has since been shown to represent only a small percentage of the combined corpus on these islands. It should also be noted that, with the growing corpus of PRSW in Ireland, a direct movement via Portugal and the western Atlantic seaboard to Ireland gains ground.

Circulation of PRSW in Ireland

Most recently, PRSW has been identified, by the present author, at Collierstown 1 in Co. Meath, however, from a review of the published record, other sites in Ireland yielding PRSW include Garranes in the Cork Harbour area, Clogher in Co. Tyrone and Mount Offaly Cemetery at Cabinteely in Co. Dublin (Fig. 3).⁶ Garryduff 1, as aforementioned, represents a more problematic case whereby a potentially PRSW sherd was originally classified as G ware (O’Kelly 1962–4, 110–11, 117).⁷

Clogher, Co. Tyrone

The ring-ditch enclosure at Clogher, measuring 50m in diameter, is defined by a small external bank and an internal palisade or wall trench (Warner 1979, 37). The wider landscape includes a 2km long linear feature, which connects with peripheral ring-forts; a physical manifestation of the site’s integration within its hinterland (Warner 1988, 62). The last fill of the ring-ditch, layer 7 (i.e. the final context of ring-ditch occupation), was associated with large-scale industrial activity, including working in iron, bronze, glass and gold (as attested by clay moulds and crucibles identified amongst the debris attributed to a zoomorphic penannular brooch workshop).

⁵ PRSW find-spots in Britain include foci such as Phillack, Gwithian, Perran Sands, Tintagel (80 vessels, including stamped examples), Trethurgy and Grambla (possible example) in Cornwall; Cadcong and South Cadbury (including stamped examples) in Somerset; Dinas Powys in South Glamorgan; Dinas Emrys in Gwynedd (stamped); Longbury Bank Cave in Pembrokeshire; Coygan Camp in Carmarthenshire; and Iona in the Inner Hebrides (Thomas 1981, 6–7).

⁶ Broader and more generally extensive distributions might also include potentially late Roman sherds from Ballybunion Sandhills in Co. Kerry (Ó Ríordáin 1947, 66; cited in Bateson 1973, 87) and a sherd from a secondary context discovered in the High Street excavations in Dublin, which was classified as potential Argonne Ware (Reg. No. E43: 267; cited in Bateson 1973, Addendum, 87, no. 1; see also Chenet 1941).

⁷ As previously noted, Thomas viewed a potential example of PRSW from Garryduff 1 in 1973 and classified it as PRSW Form 2 (1981, 7). Nonetheless, O’Kelly had already labelled the same body sherd as ‘G-ware’, ironically citing Thomas’ publication of 1959 in attributing the body sherd to Period II at Garryduff (O’Kelly 1962–4, 110–11). It is difficult to confirm either classification since neither the rim nor base survives (and Thomas also notes that the body sherd was then quite worn), yet, as noted, the potential presence or absence of PRSW at Garryduff 1 carries great significance for the interpretation of the site.

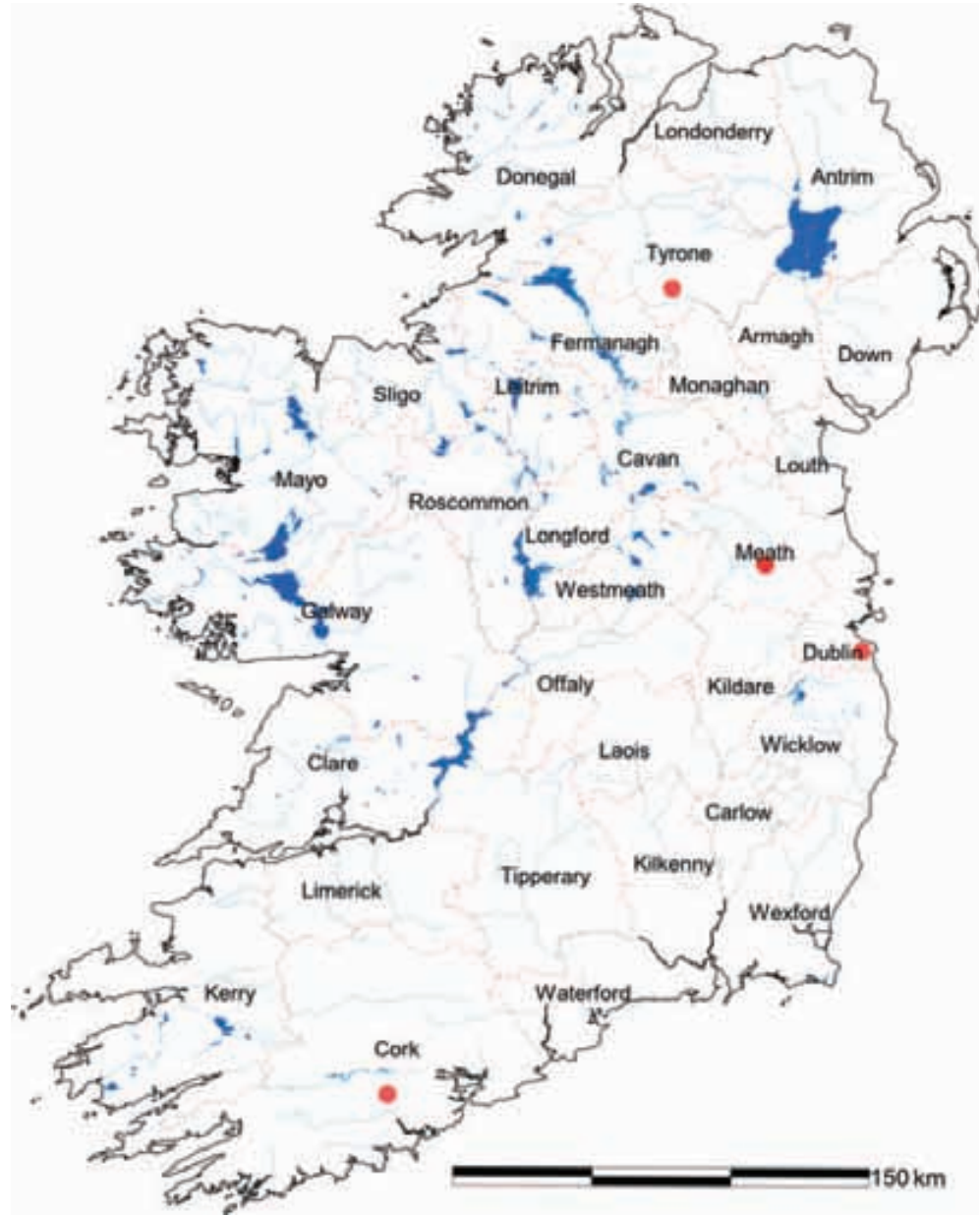


FIG. 3—PRSW distribution in Ireland (map contours after O’Sullivan, 1998, 2, fig. 1).

Warner noted ‘two fairly certain, but indistinctive, pieces of Thomas’ A ware [specifically PRSW] and a possible further 11 sherds of a flat-bottomed small red dish which might be allied to A ware’ (1979, 38); however, Doyle contests that PRSW has been found at Clogher at all, despite its previous identification by Thomas and Warner (Doyle 1996, 117; Thomas 1981, 7; Warner 1979, 38). B ware and evidence for the brooch workshop were associated with the upper fill of the ring-ditch (Warner 1979, 37 and 39, fig. 1; R.B. Warner pers. comm. cited in Bourke 1994, 170), which, consequently, was dated to the fifth and sixth centuries AD.

Moreover, a C¹⁴ date, from a furnace in an area of extensive metal-working deposits within the fill of the hillfort ditch, provided a date of AD 400–610. On this basis, the metalworking within the hillfort ditch was thought to be contemporary with the last layer of activity associated with the ring-ditch containing the majority of the amphorae sherds i.e. layer 7 (R.B. Warner pers. comm. cited in Bourke 1994, 170; O’Kelly 1989, 325, 349).

A yellow layer, used to level the site, separated the ring-ditch from the ring-fort. The ring-fort (with a diameter of 70m) was cut directly over this layer and contained two glass fragments, which were dated to the late fifth and early sixth centuries AD (Bourke 1994, 170, 198, no. 17 and 24) suggesting a tight transition from ring-ditch to ring-fort (Warner 1979, 38). Consequently, Bourke noted that, in some cases, the upper fill of the ring-ditch was loosely contemporary with the ‘Early Christian’ occupation inside the ring-fort (1994, 199, nos 26 and 27); however, the clear distinction between layers containing B ware and those containing E wares would refute this and suggest some degree of sequence, however marginal. The ring-fort pottery assemblage was entirely comprised of E ware. The Mediterranean pottery was contained within the last layer of ring-ditch occupation, i.e. layer 7 (Warner 1979, 37; although layer B8 is also included in a pers. comm. of R.B. Warner cited in Bourke 1994, 197), comprised seven amphorae including Bi, Bii and B-misc vessels.

The longevity of Clogher’s prominence seems to be reflected in the literary and subsequent cartographic record whereby Clogher potentially represents one of the sites cited as *regia* in Ptolemy’s mid-second-century AD *Geographia* and its associated maps (despite competition from a range of contenders—see Ptolemy *Geographia* II i); an inclusion that would intimate a level of status powerful enough to resonate through to the geographers of High Imperial Rome (Halpin and Newman 2006, 128). Prolonged high standing is attested in the later literature where Clogher is traditionally interpreted as the seat of the Síl nDaimíni, of the Airgíalla, a people initially affiliated with the Ulaid, but who subsequently switched allegiance to the Northern Uí Neill (Halpin and Newman 2006, 128; Comber 2001, 87) while, from at least as early as the sixth century AD, Clogher was also the capital of the Uí Chrimthainn (Warner 1988, 55). The material assemblage supports such consistent elevated status, as confirmed by the presence of PRSW (identified by Warner and cited by Thomas 1981, 7—albeit subsequently refuted by Doyle 1996, 117), potentially Syrian (or, allowing for a broader source, Cyprio-Syrian) wine amphorae (i.e. Bii ware), and the accoutrements of a specialist metal workshop, producing, amongst other artefacts, decorated bronze penannular brooches (Warner 1973, 10).

Garranes, Co. Cork

The site of Garranes, within the wider Cork Harbour area, is a substantial trivallate ring-fort (measuring over 100m in diameter and therefore twice as large as Clogher), representing a high-status site associated with secular activity. The physical scale and elaboration of the site’s demarcations are notable (Ó Ríordáin 1942, 140). Ó Ríordáin remarked that ‘The fort known as Lisnacaheragh at Garranes is an unusually large example of Irish ring-fort, which was well defended by its earthworks and gates’ (1942, 143); a structural elaboration representative of its status.

Ó Ríordáin's excavations yielded extensive metal-working debris leading the excavator to propose that:

All the evidence of the finds points to a specialised occupation—of craftsmen engaged in metal-working and allied pursuits (1942, 141) ... [it] was occupied during the latter half of the 5th and the early part of the 6th centuries by a community of craftsmen who had trade relations and interchange of artistic motifs with Gaul and Britain.

(Ó Ríordáin 1942, 143)

In terms of specialised workmanship, Carroll associated the early use of *millefiori* at Garranes with the presence of Mediterranean pottery and noted that a piece of inlay at Garranes was imported from the eastern Mediterranean (1995, 51 and 53). Guido drew parallels between the introduction of B wares from the eastern Mediterranean and glass manufacture in Ireland and envisaged the introduction of skilled glass workers or glass-wares, which could be imitated, between AD 500 and 700 (1978, 41).

Ó Ríordáin had already made these broad connections in the 1940s when he noted that:

the early introduction of the millefiori technique at Garranes travelled along the trade lines that brought the Roman pottery ... that it was actually practised at Garranes there can be no doubt, in view of the finding there of single-coloured rods of glass, such as would be combined to form a millefiori pattern.

(Ó Ríordáin 1942, 143)

Ó Ríordáin clearly understood the significance and value of the ceramic imports and, consequently, in 1942 divided the pottery into three clear categories: (1) cooking pots (7 sherds); (2) amphorae (comb-surfaced (8 sherds) and other amphora fragments (*c.* 200 sherds)); and (3) 'Red Ware' (*c.* 40 sherds). These sherds can now be classed as PRSW, Bi and Bii wares, amongst a range of other forms:

There are fragments (about forty) of ware of finer paste, better baked, than the amphorae. The colour varies from a dark red to a light brownish red. The surface is slightly friable though in two cases (e.g. 249 [clearly PRSW Form 3 from its published profile in fig. 23, no. 249]) there is a suggestion of these vessels having had a slip or wash similar, but inferior to that on Samian pottery.

(Ó Ríordáin 1942, 132–3)

Throughout later literature, the enclosure at Garranes is traditionally identified as Rath Raithleann or Raithliú, a royal site of the Uí Echach Muman, associated with Eóganacht Raithlind. The third quarter of the fifth century AD represents the *floruit* of Eochu, which roughly concurs with the original date attributed to the

site by Ó Ríordáin; while a late sixth century AD date would point to the tradition of Feidhlimidh mac Tighernaigh.

Mount Offaly Cemetery, Cabinteely, Co. Dublin

The site of Mount Offaly Cemetery, Cabinteely, is located along the N11 as it approaches Dublin, 700m south-west of Cabinteely Village. The site was resolved in 1998 by Malachy Conway of Margaret Gowen & Co. Ltd. in advance of the development of a filling station for Esso Ireland Ltd. Excavations revealed a ditched enclosure associated with a complex sequence of burial, beginning *c.* the fifth or sixth century AD and culminating *c.* the eleventh or twelfth century AD. At least 1,553 individual burials were uncovered, along with numerous deposits of disarticulated remains and two charnel pits. Six broad phases of burial were proposed for the cemetery (Conway 2009). It is not evident from the published report of 1999 to which stratigraphic phase the PRSW belongs but E ware is attributed to Phase 2 while the material from the inner ditch on the site was attributed to the late fifth or early sixth centuries AD (Conway 1999, 23–4). This observation in the published report would suggest that the PRSW and Bi wares found on the site can be associated with the earlier phase of the cemetery defined by the inner ditch.

Phase 1 included the remains of 20 individuals (seven of which had distinctive grave cuts and two of which were in elm-lined graves). They consisted of well-spaced supine interments with the heads to the west. Conway reasonably interprets the presence of elm lining as a mark of status since the wood was sufficiently rare at the time to constitute a valued commodity (Conway 1999, 22).

Phase 2 included the remains of 48 individuals (only 3 of which had distinctive grave cuts and 1 other was interred in a stone-lined grave). The inner enclosure ditch was functioning during this phase and was only backfilled at the end of this period (Conway 1999, 23). The primary fill of the ditch contained a bone pin, the second phase contained E-ware ceramics, while the upper levels contained a mixture of disarticulated human and animal bone. In addition, two ‘curious pot lids which, while unique in an Irish context were recovered in association with several fragments of E-ware’ (Conway 1999, 24). The upper fill also yielded a double-sided bone comb with two decorative panels.

The excavator reported that the pottery assemblage, associated with the burial series within the enclosure ditch, included PRSW, Bi amphorae, D ware (which, as far as I am aware, represents the first and only find of D ware in Ireland, although an example from Clogher has also been proffered), E ware and several perforated ‘lids’ of unknown origin (Conway 1999, 27, 41; 2000, 37).⁸ Conway rightly interprets the presence of the sixth–seventh century AD imported wares as indicators of high status (2000, 37);⁹ however, the rich ceramic profile serves to emphasise the apparent absence of Bii ware in the reports as a surprising omission.

⁸ E ware is favoured in Ireland and in Atlantic coastal France (O’Donnell 1984) over D ware (a produce either imported from the Bristol-Channel region (Thomas 1959, 95) or the Bordeaux-Loire area (according to Hollindrake 2007, 337; Edwards 2004, 73)).

⁹ Conway also adds the rider that burial on the site may date back to the fifth century AD (2000, 37).

Mount Offaly Cemetery is not a recognised 'royal site', yet it shares several features with Collierstown 1, in terms of its range of imports and site morphology, while its proximity to Dalkey Island (Liversage 1968; Doyle 1998), which was clearly a trading station, is also relevant.

Collierstown 1, Co. Meath

The site of Collierstown 1 lies along the route of the M3 Clonee–North of Kells motorway scheme and was tested by Linda Clarke in 2004 and resolved by Rob O'Hara of Archaeological Consultancy Services (ACS) Ltd on behalf of the National Roads Authority (O'Hara 2008, 367).¹⁰

The preliminary analysis concluded that the site developed from an Iron Age ring-ditch (Phase 1) incorporating a number of inhumations and possibly cremations, into an early medieval cemetery (Phase 2–4) with subsequent post-medieval activity (Phase 5). The imported pottery was shown to the present author to be studied and is listed in the appendix. The presence of PRSW, coupled with the relative density of Bii ware, in layers attributable to Phase 2 is highly significant for the dating of the overall site whereby the identification of these Mediterranean imports secures a late fifth–/early sixth century AD date.

In total, 62 articulated inhumations were identified, including burials in stone-lined, wood-lined or pit graves. A sherd of Bii ware, A008/015:286:1 (from the fill of ditch C283), was found in a Phase 1A context. Nonetheless, the majority of burials (Group 3) appear to be associated with a series of segmented ditches (Phase 2) that have been dated to the early sixth century AD by the presence of eastern Mediterranean pottery. Finds from Phase 2C include a sherd of PRSW Form 3, A008/015:69: 2 #81, a rim sherd of E ware (the E ware was identified by Ian Doyle pers. comm.), A008/015:69:1 #80 (from the fill of ditch C409), and sherds of Bii ware; A008/015:208:1 (from the fill of ditch C261), and joining Bii ware sherds, A008/015:207:1 and 3 (from a charcoal dump layer in ditch C261). Finds from Phase 2E include a sherd of Bii ware, A008/015:247:1 (from the fill of ditch C196), which also joins with a Bii sherd from the topsoil A008/015:4:79 and a miscellaneous sherd A008/015:131:2 (from the fill of L-shaped linear C132). Other finds include iron objects, slag and a bone comb side-panel embellished with ring-and-dot motifs (O'Hara 2008, 371).

A fourth group, of up to 12 burials, was probably associated with a secondary circular enclosure (Phase 3), approximately 40m in diameter, which replaced the earlier Phase 2 complex. The size of this Phase 3 enclosure marks a significant increase in the potential scale of the cemetery, yet the enclosure ceased functioning as a cemetery shortly thereafter. Finds from Phase 3 include two sherds of Bii ware: A008/015:267:1 (from the fill of grave cut C266) and A008/015:379:2 (from the fill of ditch C370) and miscellaneous sherd A008/015:376:3 (from fill of ditch C370). The Phase-3 enclosure was replaced and enlarged by another enclosure in Phase 4; finds from which include one Bii ware sherd A008/015:456:1 (from the fill of ditch C360).

¹⁰ I am indebted to the site director Rob O'Hara of ACS Ltd for sharing his knowledge of the site with me and all mention here to context or stratigraphy is made in relation to the imported Mediterranean pottery and with reference to his reports.

Site types in Ireland yielding PRSW

It would seem, even from the limited distribution of sites yielding PRSW in Ireland (i.e. Garranes, Clogher, Collierstown 1—in the wider hinterland of Tara, Co. Meath—and Mount Offaly Cemetery), that long-distance foreign trade was associated with high-status settlement sites, often interpreted as royal sites.

The sites are either elaborate ring-forts or ditched enclosures; a correlation which gains fortitude when the study is extended to encompass Bii-ware distributions (as discussed below). Doyle comments on the association between imported Mediterranean pottery and ring-forts and cashels, observing that ‘allowing for the evidence of high status and possibly royal occupation from several crannógs, the lack of such pottery may appear glaring’ (1996, 87). The absence of the crannóg, as a site type, might seem surprising in light of their traditionally strong association with royal seats; however, recent excavations have shown any *absolute* correlation between crannóg site types and high-status activity to be erroneous. The excavation at Sroove Crannóg in Co. Sligo, amongst others, has effectively undermined any such exclusive interpretations (Fredengren 2002, 244–5; Boyle 2004, 91–3).

Doyle tentatively explains the crannóg’s absence from Mediterranean ceramic distributions in Ireland through recourse to dendrochronological evidence supplied by Baillie which intimates a sudden intensity of crannóg construction, albeit one of a series of phases (and a surge which may be overemphasised through a preference for oak timber samples; see Crone 1993, 249–51), in the late sixth and seventh centuries AD (Baillie 1979, 82). The association of E ware—a ware which is generally considered slightly later in date than PRSW and loosely assigned a date range after AD 600 and through the seventh century AD (according to Thomas 1981, 27)—with crannógs seems to support this sequence. This date complements the administrative framework for the island outlined in the earliest Irish legal tracts of the seventh century AD; presenting 150 *túatha* or minor kingships, each presided over by a secular authority—albeit a sovereign who was also probably invested with a degree of sacral jurisprudence (Byrne 2001, 7; Newman 1998, 132; Lydon 1998, 5). The combined evidence presents a secondary staggered phase (represented by a peak in crannóg construction and the use of E ware), following the initial introduction of PRSW and B-ware ceramics to Ireland, which is closely affiliated with ditched-enclosure sites.

Wailes, who outlined the main characteristics of ‘royal sites’, observed that ‘at high-status residential sites of the period we might expect some residue of high-status living, such as gold, glass, or enamel ...’ (Wailes 1982, 7–8; 1995; and cited in Bhreathnach 1995, 30). Evidence of expert craftworking (especially in glass and metal) at Clogher and Garranes is in keeping with their élite status; moreover, Mount Offaly Cemetery was not exclusively funerary in nature with finds and features (such as a millstone, furnaces and large quantities of animal bones) pointing to industrial and agricultural activity on the site (Conway 1999, 34). Similarly, it might be suggested that the iron objects and slag retrieved from Collierstown 1 are indicative of metalworking in the vicinity of this site.

In terms of activity (beyond their association with external trade, and, to a lesser extent, expert craftworkers) Collierstown 1 and Mount Offaly Cemetery differ radically from the royal sites in that they are primarily associated with inhumation burial,

although, a broader landscape approach may serve to contextualise these cemeteries within a framework of associated settlement. At Collierstown 1, O’Hara distinguishes the third burial group, the last of Phase 2, as the period during which the cemetery was formally Christianised; it represents a phase, which is associated with prestige goods (2008, 371). Such early Christian activity is not, however, overtly recognisable in the material culture on the site; the presence of a concentration of postholes in the centre of the site is not necessarily an indication of a clustering of wooden crosses—the deduction is a veritable leap of faith (O’Hara 2008, 371). On the contrary, O’Hara refers to ‘ostensibly pagan practices’—including the presence of antler tine, thought to be deliberately deposited as a grave good (2008, 371–2). By the same token, the Christian association applied to Mount Offaly Cemetery is not convincingly explained in the reports (Conway 1999, 40–1) and simply cannot be imposed, or projected back, on the earliest phases of activity at the site on the strength of the material evidence.

O’Brien and Doherty have outlined the ambiguity between pagan and Early Christian burial practices, illustrating the difficulty in assigning this Mediterranean trade a definitive or absolute affiliation—either secular or sacred, pagan or Christian (O’Brien 1992, 2009; Doherty 2005, 8–9). The nascence of Christianity in Ireland in the late fourth and fifth centuries AD in Ireland presents an ideological watershed (which at best might survive as a trace element of some watershed in the archaeological record), thereby presenting a dichotomy between the materiality and the earliest textual sources, and, indeed, the earliest physical evidence for church architecture, albeit Ó Carragáin’s fieldwork clearly narrows this margin (2003a, 127–9; 2003b, 130–3).

Perhaps, rather than looking for tangible archaeological codifiers for embryonic Christianity in Ireland, which by virtue of their recognisable character are likely to represent anachronisms, perhaps a more productive approach would be to analyse anomalies within the material record, irrespective of the nature or manifestation of this shift.¹¹ A clear sequence of events, as evidenced at Clogher and at Lusk (introduced in the discussion of Bii wares below), whereby E wares reflect a wholly separate phenomenon from that of the Mediterranean wares in the stratigraphic profiles pertaining to both sites, indicates some degree of distinction in the material record (albeit only discernable in select instances).¹² The implication of the ceramic record from Garranes and Clogher, at least, is that the Mediterranean imports reflect long-distance

¹¹ The interface between sacred and secular architectural contexts was not clearly defined in the early history of Christianity in the east, with baptisms often conducted in Roman baths in the second century AD (White 2000, 738). The *Martyrdom of Justin*, relating to the mid-second century AD, reveals that the Christians customarily met in rooms above the Roman baths and it has been suggested that the associated baptisms occurred downstairs in the pools of the bathhouse (cited in White 1990, 110).

¹² Edwards views the distribution of A and B wares as distinct from that of E ware, whereby the latter demonstrates a notable spread into Northern Ireland and Britain—and a corresponding notable dearth in south-western Britain (2004, 70). Clearly, a wider range of sites, in terms of both wealth and site type, is represented by E ware in Ireland with over 30 sites represented. E ware is, however, often found on sites yielding PRSW and Bii wares, an association that pushes its earliest dates to the later period of the Mediterranean trade, although continuing on into the seventh, and possibly the very early eighth, century AD (Thomas 1981, 27).

trade amongst the secular élite, at a period immediately preceding a phase of more inclusive social influence from Continental Europe, as expressed through the presence of E ware.

Irish trading centres in the late fifth and early sixth centuries AD

Royal sites exerted both centripetal and centrifugal dynamics in terms of trading networks; the former relating to long-distance importation, while the latter pertains to secondary localised redistribution.¹³ Garranes and Clogher are generally viewed as high status or royal sites and both represent ring-forts. Similarly, the presence of PRSW at Collierstown 1 cannot be assessed without reference to Tara—the major royal site controlling the movement and exchange of foreign and prestige goods within this landscape (as explored below).

Royal sites have been classified as gateway sites, by virtue of the fact that they regulated the filtering of prestige goods and foreign imports throughout their satellite communities (Comber 2001, 87). The redistributive role administered by these foci thereby consolidated their prominence within a decreasing hierarchical network within their broader hinterlands. This selective interface would undoubtedly ensure a heightened demand for such *exotica*, prompting local emulation of foreign prototypes (perhaps best demonstrated through glass-working), thus infusing insular style with foreign flavours resulting in innovative hybrid types executed in local media.

Such dynamics may be visible in the wider landscape of Clogher where a 2km long linear feature connects the focal site with a series of ring-forts (Warner 1988, 62). Similarly, in the case of Garranes the elaborate trivallate enclosure lies within a landscape densely clustered with smaller ring-forts. Ó Riordáin originally suggested that ‘the fort would serve as a refuge for the inhabitants of the surrounding area in times of danger and also would act as a meeting place on special occasions’ (1942, 141); observations which not only ascribe a potentially sacral aspect on the activities therein but demonstrate the framework through which such *emporia*, reinforced societal order throughout their hinterlands in acting as trading posts for commercial exchange. Mount Offaly Cemetery too should be interpreted within a wider context of inland trade emanating from the *emporium* at Dalkey Island.

With regard to this model, Collierstown 1’s proximity to Tara cannot be over-emphasised and its physical connectivity to this focal point makes the site an expected addition to the PRSW distribution.¹⁴ O’Hara, the excavator of Collierstown 1,

¹³ This centripetal effect is attested diachronically by a network of prehistoric sites located throughout the hinterland of Tara. Newman lists a mound at Collierstown as one of seven earthen mounds to survive in the broader study area while a further eight, which feature in the cartographical record, can be added to the category (1997, 183–4, see fig. 66, no. 32:39); these sites, like the later enclosures, shared a symbiotic relationship with the focal establishment.

¹⁴ The traditional accounts of the kings of Tara preceding the historical lineage of kings, which has been loosely attributed to the latter half of the sixth century AD with the reign of Diarmait mac Fergusa Cerrbéoil, are rooted in folklore and pseudo-history. Nonetheless, during the fifth and early sixth centuries AD, the period that corresponds with our ceramic

notes that the site lies in close proximity to a variety of early medieval sites and monuments (2008, 378), being less than 2km from enclosed settlements at Skreen (ME 032:032), Cabragh (ME 032:054), Collierstown (ME 038:003), Ross (ME 038:001) and Baronstown (A008/017). The connection with Tara, however, is perhaps not sufficiently emphasised, despite its being situated a mere *c.* 2.7km to the north-west of Collierstown 1.

Collierstown 1 is located on the gently sloping, relatively low-lying terrain slightly south of Skreen, on a low ridge to the east of the Gabhra River. The Gabhra feeds into the River Skane to the north-west of the Hill of Tara and, not only does it constitute a direct artery between the two sites, but it also presents a direct line of communication for any contemporary site along the Gabhra. It would be logical to assume that the earlier evidence for long-distance trade, represented by the material from the Rath of the Synods (Evans 2008, 123–6, pls 2 and 3; Grogan 2008, 119–220), continued within the broader complex at Tara, and that the site's prominent position within an extended trade network persisted into the late fifth and early sixth centuries AD.

PRSW as an indicator of status in Irish sites

The apparent social complexity of sites engaging in long-distance exchange at this juncture affords an interpretation of Irish society beyond that of Wickham who claimed that 'Ireland often perplexes: its written evidence seems to point to social structures that could hardly work in practice at all' (2006, 51). While on a wider European scale, Wickham's models are thoroughly applicable, the presence of imported ceramics from the eastern Mediterranean on Irish sites strongly refutes his interpretation of a 'simplicity of Irish exchange networks', which is based on the misguided claim that 'the sites that have been excavated—even royal ones—routinely show a very simple material culture' (Wickham 2006, 51, 816). Royal sites are stamped with the insignia of high status, even if their elevated status is only relative to their local social contexts.

Boyle notes that in early medieval Ireland 'every person's rank in society was codified in documents and visibly apparent by their material possessions' (2004, 85); ownership which incorporates a range of materials, from brooches and glassware to various *exotica*. The PRSW discovered in Ireland, where it features as exotic and specialised ware within a largely aceramic period—the following 'souterrain ware' being wholly unable to compete on either an aesthetic or technological level (see Edwards 2004, 73–5)—constitute a high-status commodity whereby a hierarchy of trade is discernable through the ceramic record.

evidence, Tara is traditionally associated with Lóegaire mac Néill who was succeeded by his son Lugaid (mac Shamhráin and Byrne 2005, 174–5 and 178; Bhreathnach 1995, 98). According to the literary tradition, Lugaid's reign was followed by one of the Northern Uí Néill, Muirchertach mac Erca, and, subsequently, by Óengarb and Áed (mac Shamhráin and Byrne 2005, 179–92; Bhreathnach 1995, 99).

Distributions of PRSW ware (and indeed B ware, which I discuss below) do not exist in isolation but dovetail with distributions of various foreign imports and prestige goods. Counties Cork, Meath and Down/Tyrone (broad regional groups, which correspond with distributions of imported Mediterranean ceramics) yield concentrations of sites showing evidence of precious metalworking (Comber 1997, 101). Moreover, there is a striking overlap in distributions of sites yielding Bii-ware amphorae and sherds of imported glass cone-shaped drinking vessels and glass bowls—specifically of Harden’s types IIIId-e and XIb; see Bourke 1994, 167–71—the significance of which I examine below.

Elsewhere in Europe, indeed, in regions closer to its source of manufacture, the presence of PRSW can be interpreted within a framework of regular trade. In the eastern Mediterranean, civic and/or ecclesiastical sites, often with known foundation dates, and privileged status, have long provided valuable evidence for trade in the early medieval period. Nonetheless, Vogt explains the high concentration of PRSW at Eleutherna, in Crete (where it is associated with a large basilica), in more practical terms, due to their possible use as ballast in ships, which were carrying, on their outward journey, some eastern food products (including wine, oil or even grains) and, on their way back, some Cretan items (such as honey, dairy products, wines and olive oil) (2000, 55).

Naturally, the circulation of PRSW in the Mediterranean piggybacked on trade in other commodities (such as wines, oils or other luxury items) and the framework for trade in Ireland should not deviate wildly from this rationale. The surviving Mediterranean material is sufficiently varied to suggest regular trade, while the exponentially rising numbers of PRSW in north-western Europe weaken any claims that A and B wares are so rare that they represent the cargo of a single ship, but rather their proliferation points to an established trade network (Thomas 1988; Laing 2006, 136). The presence of PRSW in Ireland has significant and highly specific implications for communication and trade between Ireland and the fringes of western Continental Europe and the Mediterranean in the late fifth and early sixth centuries AD, and, in more localised terms, its presence at Collierstown 1, by association, on the status of Tara as a trading centre or *emporium*.

Regardless of the exact nature of the exchange, or the specific trade route to Ireland, the red-slipped sherds discovered at Collierstown 1, and indeed Garranes, Clogher and Mount Offaly Cemetery, were produced in Asia Minor in the late fifth or early sixth centuries AD and their presence in Ireland represents the controlled movement of goods through the Mediterranean and along the western Atlantic seaboard. It is perhaps important to note that these bowls were not containers *per se* and were not being traded for their associated contents; rather, they had an intrinsic value as luxury items. The presence of this imported pottery in Ireland is undeniably a signature of prestige, since what is easily acquired, commonly used and ultimately banal in one society, acquires status in another through novelty, rarity, distance from source of manufacture and complexity in mode of acquisition.

Part 2

The categorisation of the sherds from Collierstown 1 as Bii wares rests mainly on fabric analysis (and necessarily so as they represent ribbed body sherds) but is also

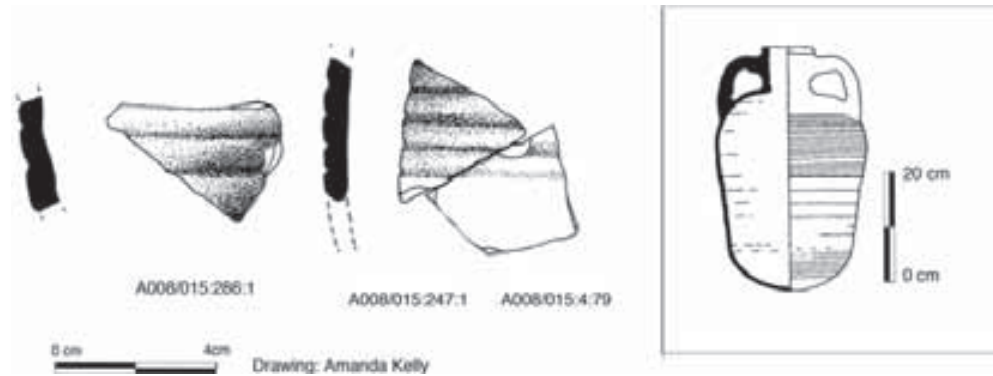


FIG. 4—Illustrations of the Bii ware sherds from Collierstown 1. (Drawing by Amanda Kelly.)

dependent on analogies drawn with Thomas' classifications of the Garranes' material (1981, 11–13).

Characteristics of Bii-ware amphorae

Bii ware represents a type of transport amphora (Decker 2001, 69–86). The curved handles on either side of the neck, connected to both neck and shoulder, are generally short, thick and roughly fluted. The height of these amphorae ranges between 39–48cm with a maximum interior diameter of 21–2cm, resulting in a capacity of 16.54 and 26.4litres (Decker 2001, 76). Thomas describes the body of Bii pots as more globular than Bi—an observation that is not immediately apparent but is perhaps relevant with regard to their bases which are rounded rather than pointed; Bi usually incorporates a faint central basal knob (1956, 12–13; 1959, 92). Doyle and Decker both describe Bii amphorae as cylindrical amphorae with rounded bases and broad tubular necks (Doyle 1996, 24; Decker 2001, 76). Laing describes Bii ware as 'jars ... with very globular profiles [and admittedly they are if viewed in relative terms, especially when compared to Biv types] and irregularly spaced ridges and fluting' (2006, 343).¹⁵

In general, the surface of a Bii-type amphora is decorated with rounded or flattened horizontal ribs, about 4mm wide, which are produced on the wheel by applying a wooden utensil to the wet clay (Fig. 4). The horizontal ribbing clusters at the base and neck to create a rippled effect that gradually drift apart to intervals of about 5cm at the widest point of the body (Thomas 1959, 92).

¹⁵ The variable descriptions are not helped by the fact that Mytum has mislabelled Bii and Biv in his illustration (1992, 255, fig. 7:3). Moreover, Mytum favoured Biv (Class 45) over Bv amphorae in his overall analysis (1992, 253–5, fig. 7:3) while Edwards refers to Bv (Class 34/Africano Grande) in her discussion (2004, 69, fig. 25) citing Bv ware on the promontory fort of Loughshinny, Co. Dublin, and B misc at Navan (2004, 70). In the specific site assessments, there is further confusion, as, in the report of Mount Offaly Cemetery of 1999, although Bi ware is cited in the text, the accompanying image depicts both Bi- and Bii-ware forms, while the glossary distinguishes the Peloponnese as the origin of all B ware, rather than specifically indicating the production zone for Bi (Conway 1999, 34 and 44).

Bii amphorae are distinctive from Bi amphorae primarily in terms of form; however, when dealing with body sherds, typologies can also be deduced, albeit with a lesser degree of certainty, through an analysis of their fabric formation and surface treatment. Peacock and Williams state that, in the case of Bi amphorae, ‘the upper part of the body is decorated with deep horizontal grooving set close together which may be close or undulating’ (1986, 182). Thomas observes that the surface treatment appears as closely spaced, horizontal grooving produced with a comb (1959, 91). Consequently, Bi ware is best classified as comb-surfaced ware, according to Thomas (1959, 92), as opposed to Bii amphorae, which are more lightly ribbed.

The distinction was made by Ó Ríordáin at Garranes as early as the 1940s, where the B-ware assemblage was comprised of coarse wares with *either* a horizontally combed or a ribbed surface, resulting in either pointed or curved ridges. Ó Ríordáin distinguished two major classifications among this corpus of B wares; he separated a subset (albeit comprised of small vessels) from the comb-surfaced ware pieces and labelled it ‘other amphorae’ (1942, 129, figs 21 and 22). Subsequently, Thomas categorises these ribbed sherds from Garranes as Bii ware (1959, 92; 1981, 13). According to Thomas, this relatively large group of sherds at Garranes, comprising up to 200 sherds of the total ceramic assemblage, represents only three vessels in the corpus (1981, 13).

Thomas classifies Ó Ríordáin’s comb-surfaced sherds, originally constituting category 2a from Garranes, as Bi amphorae (1981, 11; see Ó Ríordáin 1942, 127, figs 19, 20, including a typical rim illustrated in fig. 22, no. 622). Thomas identifies only one Bi amphora represented by the numerous comb-surfaced sherds. Bi ware (Class 43/LR 2) has only been reported from four sites in Ireland: at Garranes, Clogher, Mount Offaly Cemetery (Thomas 1981, 11; Mytum 1992, 253; Conway 2000, 37) and Stalleen (Mandy Stephens pers. comm.).

Fabric of Bii ware

The entire range of Bii ware from Collierstown 1 (nine sherds) share virtually identical fabric matrices, which strongly suggests that they represent only one pot (Pl. II). At Collierstown 1, the sherds represent buff plain ware (5yr 7/6) comprised of medium coarse sand, with a grainy texture featuring inclusions of quartz, chert, clay-stone, limestone and occasional serpentine (as identified using a panasonic FF-393 30× pocket light microscope). These components comply with thin-section samples of Bii ware, from across the spectrum, where the major inclusions are frequent pieces of limestone with a scatter of pyroxene and serpentine (Peacock and Williams 1986, 187).

In terms of colour, Thomas notes that the paste of the Bii-ware fabric, both surface and body, ‘is a light red or a reddish buff, rarely with an orange tone, and exhibits a visible sprinkling of white sand in the fabric’ (1959, 92). Decker observes that the fabric is generally described as sandy and gritty, covering a spectrum of colours from pinkish cream, yellowish and grey (2001, 76) while Ó Ríordáin describes the Garranes group of ‘other amphorae’ as ‘buff in colour, about half are a somewhat deeper red in shade than the remainder’ (1942, 132). The University of Southampton’s *Roman amphorae: a digital resource* is a useful on-line resource providing, amongst other things, a clear breakdown of the ceramic matrix of Bii amphorae (there referred to as LR1) and the geological inclusions therein (see University of Southampton, 2005).

Chronology of Bii ware

Pottery assemblages from Tocra, Libya; Berenike, Egypt; Carthage, Tunisia; and Marseille, France; show that the classic form of this amphora type was exported throughout the Mediterranean world, especially in the fifth and sixth centuries AD (Decker 2001, 77). According to Laing, Bii ware is roughly contemporary with PRSW (2006, 343), but it is perhaps more accurate to say that in north-western Europe it is dated mainly through its association with PRSW, as the form survives from the third to beyond the seventh century AD.

At Collierstown 1 both Bii ware and PRSW have been found in levels attributed to Phase 2C (stratigraphic information courtesy of Rob O'Hara of ACS Ltd); consequently, we can date this phase to the late fifth and early sixth centuries AD. Similarly, at Garranes, Ó Ríordáin concluded that the cumulative evidence for the finds, which included PRSW and Bii wares, pointed to occupation during the latter half of the fifth and the early part of the sixth century AD (1942, 140–1). At Dalkey Island, Site II, the imported pottery (including Bii and E wares) sealed beneath the promontory fort rampart, served as a *terminus post quem* for the rampart's construction (Doyle 1996, 87; 1998, 95; Edwards 2004, 42, 70).

Area of Bii amphora production

The form belongs to a type of ribbed amphora manufactured in the broader Antioch region, i.e. northern modern Syria/south-western Turkey, although other sources in the eastern Mediterranean have also been suggested, encompassing a geographical range including Cyprus and Rhodes (Thomas 1981, 11; Peacock and Williams 1986, 185–7; Decker 2001, 77; Vroom 2004, 296). Kiln sites along the coastal zones of the Roman provinces of Cilicia and Cyprus present a strong case supporting production in these regions (Empereur and Picon 1989; Demesticha and Michaelides 2001; Demesticha 2003); however, all the true kiln sites for Bii amphorae in Cyprus represent sixth and seventh century AD variants and not their predecessors. Until a more specific zone is located, a Cyprio–Syrian catchment area can be considered in terms of production centres.

Doyle is geographically specific when stating that Bii amphorae derive from a production zone in the Antioch region while Bi amphorae appear to have been manufactured in the Peloponnese (1999, 71). Laing is less constrained when claiming that Bii ware came 'from the same general area as Bi and imported around the same time' (2006, 343).

Clearly, the Antioch region was agriculturally rich during the late fourth century AD, as is attested by the writings of Libanius (*Oration XI 20, XXXI 20*, cited in Norman 2000, 11, 75), who informs us that the region already processed an array of produce, including wine and oil, which were exported in vast quantities to all quarters in merchant ships (*Oration XI 20*). The status of the city in the fourth or fifth century AD is also conveyed iconographically on the *Tabula Peutingeriana* where the centre is personified as an enthroned queen (Finkelstein 1979, 27–34). Vignettes of bustling daily civic life in Antioch are portrayed along the border of the *Megalopsychia Hunt Mosaic*, also illustrating a range of public and private architectural structures, including an athletic stadium and private baths (housed in the Antakya Museum, Turkey; Browning 2003, 90, fig. 18). The mosaic has been

attributed to the reign of Justinian I in the late fifth and early sixth centuries AD (prior to the plague of AD 540), when the region was extremely prominent and the civic centre regarded as one of the three greatest cities of late empire.

Circulation of Bii ware in Ireland¹⁶

From an examination of the published record Bii ware can be ascribed to the following sites in Ireland (Fig. 5):

1. The ring-fort site of Clogher in Tyrone (Warner 1973, 1979, 2000; Thomas 1981, 13; Doyle 1996, 116–21).
2. The trivallate ring-fort at Garranes in Cork (Ó Riordáin 1942, 77–150).
3. The trading point on Dalkey Island in Dublin (Liversage 1968, 166–7, fig. 19, no. EC 3, pl. X; Doyle 1998, 95).
4. The ditched enclosure and cemetery at Collierstown 1 near the Hill of Tara in Meath (O’Hara 2008, 367–73).
Nine sherds discovered here, examined by the present author, potentially belong to the same vessel, as listed in the appendix.
5. The ditched enclosure and cemetery complex at Colp West in Meath.
The cemetery within this deep-ditched enclosure yielded over 100 burials but the primary phase was concentrated within a small penannular enclosure measuring 15m in diameter (O’Brien 1992, 133; 1993, 98). The site showed signs of pre-cemetery habitation. B and E wares were reported as retrieved from the deep-enclosing ditch fill (Gowen 1988, no. 51; Gaimster *et al.* 1989, 227–8, no. 260; Doyle 1996, 124–5).
6. The cemetery at Randalstown in Meath.
Kelly reports B ware and E ware and a rim fragment of Merovingian glass from excavations conducted on the site of the later ecclesiastical church and holy well (Kelly, E. 1978, no. 32; Moore 1987, 104, 142; Doyle 1996, 175–6). Twenty burials were excavated but, despite the imported finds, the excavations did not establish a clear chronology (Kelly, E. 1978, 32).

¹⁶ This article presents sixteen published find-spots of Bii ware in Ireland, but it is expected that this statistic will rise exponentially as familiarity of this ware grows among Irish archaeologists and as reassessments of excavated *corpora* from key sites are conducted. In addition to the sixteen sites listed here, Richard Warner has informed me of the presence of B-ware sherds from the excavation at Crossnacreevy ring-fort in Co. Down (Richard Warner pers. comm.) while B ware has also been cited at The Point, Lambay Island, Co. Dublin (Cooney 1995, 100), but which specific type of B ware is represented has not, as yet, been affirmed. Edwards cites Bv ware on the promontory fort of Loughshinny, Drummanagh Headland, Co. Dublin, and B misc at Navan (2004, 70). Bi sherds are found at a series of five sites throughout the country (i.e. Garranes, Clogher, Mount Offaly Cemetery, Dalkey Island and Stalleen). In 1959 Thomas recorded Bii ware at only two sites in Ireland (1959, 108). In 1982 James noted that ‘almost none of the class A and B pottery ... has been found since Ó Riordáin’s excavations at Garranes’ (1982, 382). According to my assessment of the current published record in 2009, B ware (regardless of type) has been cited at 22 sites in Ireland (excluding the find-spot of the late Roman lamp at Rathgurreen, the manufacture of which precedes this trade in Bii ware).

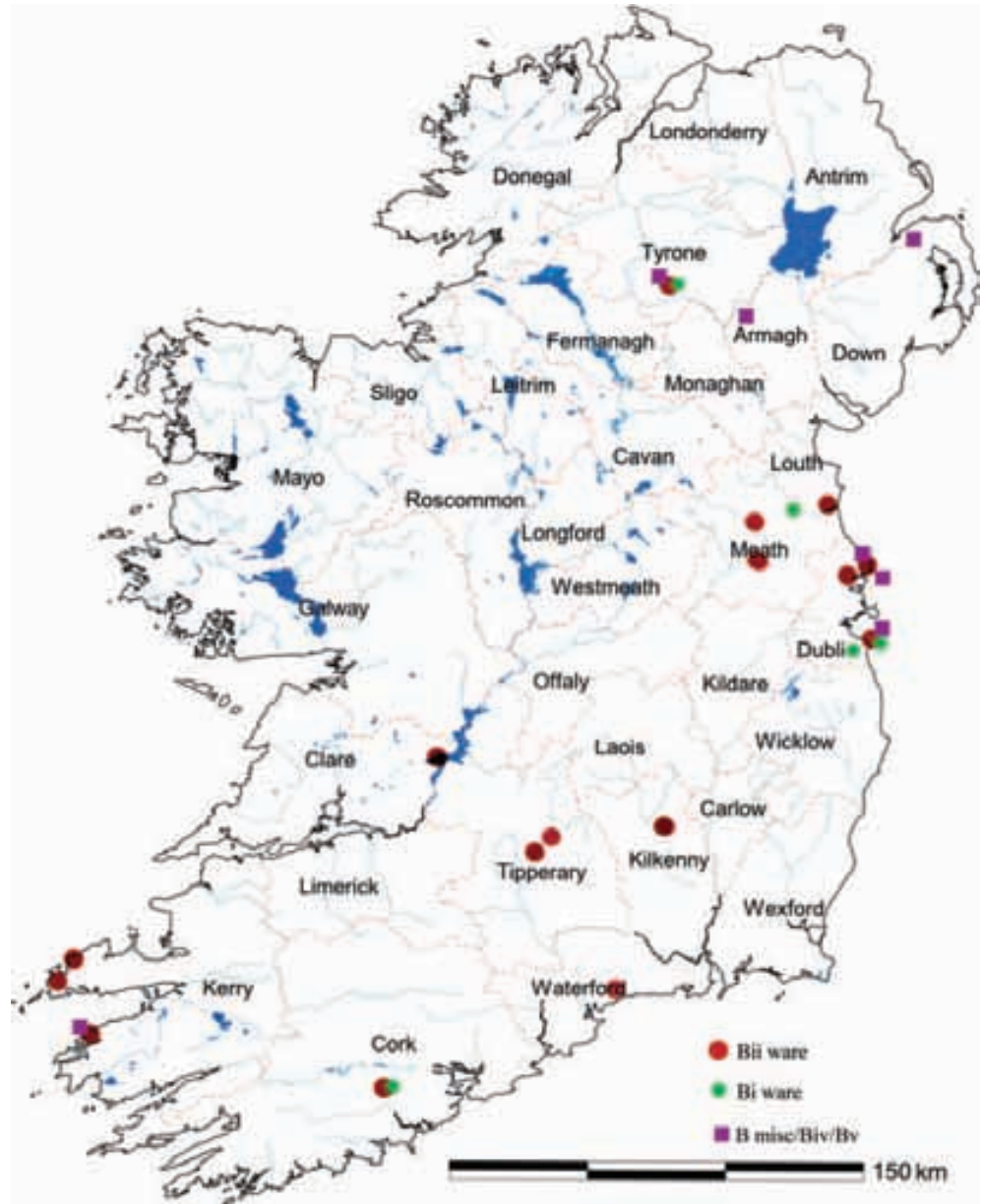


FIG. 5—Bii ware distribution in Ireland (map contours after O’Sullivan, 1998, 2, fig. 1).

7. Lusk

The site is located due east of the centre of Lusk on the new Eastern Bypass, just north of the Rush road intersection (site licence number 02E1529). The site was resolved by Stephen Johnston of Arch-Tech Ltd (as cited in Clabby 2008, 5). Doyle identified two joining Bii ware sherds (02E1529:266:1–2) from a single amphora from the upper fill of the enclosure ditch (context 15) (Stephen Johnston pers. comm.). Other finds from the site included a penannular brooch from a different

- fill of the same enclosure ditch and eighteen E-ware sherds from a separate feature.
8. The cemetery site at Gracedieu in Dublin.
At Gracedieu, 65 burials (including some 'lintel type' graves in the south-eastern area) were associated with a double-ditched enclosure (Gaimster *et al.* 1989, 228). In the report, small finds recovered from the fill of one of the ditches included E ware and B ware and a quantity of animal bone (Gowen 1990, 228, no. 262; Doyle 1996, 167–8).
 9. The scattered cemetery at Inishcealtra (Holy Island) in Clare, site 5.
The area to the north of St Caimin's Church and the Saints' Graveyard contained scattered burials associated with an enclosure (de Paor 1978; Thomas 1981, 13; Doyle 1996, 169–70). Amphora sherds were reported from the 'drift surface' (de Paor 1975, no. 0009).
 10. The cemetery at the cashel at Reask in Kerry (Fanning 1974, no. 18; 1978, no. 21; 1981, 114–15, fig. 17, nos 144, 176, 133, 175, 276, 278).
The pottery from Reask was associated with a small cemetery of lintel graves, which may predate the construction of the oratory and underlay the oratory walls (Doyle 1996, 78). A layer of soil *c.* 30cm thick separated the lintel graves and the basal courses of the oratory.
 11. The cemetery associated with the cashel at Caherlehillan in Kerry.
At Caherlehillan, sherds of E and B wares were recovered from cutting 3, context 28, which consisted of an organic-rich soil layer (Sheehan 1995, no. 118; 2004, no. 0771; O'Sullivan and Sheehan 1996, 263–5, no. 934; Doyle classifies the amphora as B misc—1996, 107–08). In addition to the imported pottery (E and B ware), context 28 produced a range of finds including whetstones, spindle-whorls and metal slag (Sheehan 1999, no. 326).
 12. The bivallate ring-fort of Leggetsrath West/Blanchfieldsland in Kilkenny.
Doyle identifies two sherds of Bii ware, from a single amphora, at Leggetsrath where they were found in the inner ditch of a bivallate ring-fort (cited in Lennon 2004, no. 0868).
 13. Cashel in Tipperary (reported by Hodkinson 1994, 167–74; Doyle 1996, 112–14).
 14. A U-sectioned ditch at Derrynaflan, Lurgoe in Tipperary.
Ó Floinn reported numerous sherds of imported Bii ware in a U-sectioned ditch south of the area of the hoard (1985, no. 53; 1987, no. 44).
 15. The cashel at Cathair Fionnúrach at Ballynavenooragh in Kerry.
A rim sherd, identified as B misc, and sherds of Bii ware were found in disturbed contexts, and may relate to an early phase of activity (Cuppage *et al.* 1986, 192, no. 547; Gibbons 1995, no. 116; 1998, no. 228; Doyle 1996, 106).
 16. Kilgrovan, Dungarvan in Waterford.
The upper fill of one of three probable kilns (associated with a church site listed in the *Record of Monuments and Places* (RMP), of which no visible trace remained, although geophysical survey results suggest a double-ditched subcircular enclosure) yielded several sherds of Bii ware (Purcell 2003, no. 1882).

Site types in Ireland yielding Bii ware

The discovery of Bii ware at Clogher, Garranes, and Collierstown 1 is not surprising in light of their élite material assemblage. Clogher, Garranes and Tara (as represented by Collierstown 1) may all incorporate gateway site dynamics, as indicated by their broad material assemblage, which features both Bii ware and PRSW, while the discovery of Bii ware at Cashel constitutes a fitting addition to the group in view of the site's traditional association with Conall Corc and the Eóganachta Chaisil (Byrne 2001, 176–201). The offshore trading post of Dalkey Island is somewhat comparable to that of the Scilly Isles, which has been viewed as a type of *entrepôt* from which goods were dispersed (Campbell 2007, 128).

There is clearly an overlap in site typologies associated with Mediterranean amphorae. The types of sites yielding Bii ware, included cashels (arguably the stone version of the ring-fort) located at Reask, Cathair Fionnúrach and Caherlehillan while several of the sites (such as Colp West, Inishcealtra, Reask, Caherlehillan and Randalstown) are, or developed into, substantial ecclesiastical centres (see Ó Carragáin 2003a, 127, fn. 1).¹⁷ Cemeteries yielding Bii ware include Collierstown 1, Colp West, Randalstown, Gracedieu, Inishcealtra, Reask and Caherlehillan, thereby representing the predominant site type amongst the find-spots. The ambiguity between pagan and Early Christian burial practices, as attested in both the literary and material culture record, however, complicates any definitive or absolute affiliation for the Mediterranean trade (O'Brien 1992). Nonetheless, while the find-spots of Bii ware in Ireland include both pagan or secular and ecclesiastical sites, Doyle has shown that in terms of quantity, the secular sites yield the greater bulk of pottery, specifically in the case of Garranes, Clogher and Dalkey Island (1996, 70). Furthermore, with regard to the correlation between glass vessels and Bii-ware find-spots in Ireland, it may be significant to note that, with the exception of the glass vessel found at Reask (which was retrieved from a disturbed context), no glass vessels have been found on ecclesiastical sites in Ireland (Bourke 1994, 180)—although the sherd from Randalstown might constitute a contender.

Moreover, at least in one case, where Bii ware has been found in an ecclesiastical locale in Ireland, its stratified context at least seems to predate any ecclesiastical foundation. This is argued for Reask, on the north-western tip of the Dingle Peninsula, where the stratified lower contexts for Bii ware were thought to predate the stone wall partition of the ecclesiastical complex composed of a cemetery, cross slabs, an oratory and several other structures (Doyle 1996, 78). Doyle observed that at Reask seven (including five joining pieces) of the overall twelve Bii-ware sherds were associated with an occupation layer stratified beneath the interior dividing wall of the circular stone enclosure (1996, 93). The remaining five sherds were found in disturbed and secondary contexts, with one sherd discovered in a disturbed level within the burial area, another from near the burial area and three adjoining sherds were found within the upper fill of a slab shrine (which Doyle interprets as a secondary deposition—1996, 93).¹⁸

¹⁷ Imported ceramics found at the early medieval sites of Leggettsrath, Derrynaflan, Kilgrovan are less specific in their overarching contextual affiliation.

¹⁸ A hearth, associated with postholes, in the centre of the site produced a C¹⁴ date of 385± 90 AD, which Fanning viewed as appropriate for the earliest activity on the site but suggested a broad fourth–seventh century AD date for the early occupation layer at the site (1981, 103–04, 155, 164).

At Colp West, the distinction between secular, pagan, Christian and ecclesiastical is not archaeologically clear, as the Mediterranean pottery comes from the deep enclosure ditch, the overall context of which cannot be assigned a specific character. Moreover, O'Brien attributes a possible Anglo-Saxon influence to the primary burial phase at Colp due to its containment within a penannular enclosure measuring only 15m in diameter; an interpretation that prompts a more nuanced reading of the site (1992, 133; 1993, 98; 2009, 203).

Circulation of Bii ware in Ireland

Mapping these distributions traces navigation along the southern and eastern coasts of Ireland, with trade along the south-western coastline represented by the four sites in Cork and Kerry, while Inishcealtra in Lough Derg, Co. Clare (within the lower reaches of the Shannon), reflects riverine traffic from the south-western seaboard. Movement along the east coast is detected as far south as Dalkey Island and Mount Offaly Cemetery, in the Dublin Bay area, and as far north as Colp West, in Meath, with the sites of Lusk and Gracedieu in north Co. Dublin located approximately midway between these two coastal sites.¹⁹ B ware of a non-specified nature has also been noted on Lambay Island (Cooney 1995, 100) while Bv ware has been assigned to the promontory fort of Loughshinny, Co. Dublin (Edwards 2004, 70). If we combine the distributions of reported PRSW with those of all the different types of B ware, the clustering of find-spots along the coast of Co. Dublin indicates a density of traffic in this area worthy of a considerable port (see Fig. 5).

On late medieval maps of Ireland, derived from Ptolemy's *Geographia* (II i), the prominence given to the islands off the east coast, labelled *Adros* and *Limnos* (most likely representative of Lambay and Dalkey respectively), and the promontory of *Isamnion* (perhaps relating to Loughshinny (Drumanagh promontory), although *Emain Macha* is favoured etymologically by Toner 2000 and others), intimates a considerable degree of trade along this shoreline as early as the High Imperial period.²⁰ The late medieval maps are graphic expressions of the textual source, which reifies a familiarity earlier conveyed by Tacitus when he claimed that Ireland was

¹⁹ The absence of Bii ware (in favour of Bi cited in the report) from Mount Offaly Cemetery is surprising in light of the site's impressive ceramic range (Conway 1999, 34; 2000, 37). If Bii ware were identified here in the future, it would further endorse a route into the Dublin area, as is already indicated by the presence of PRSW at the site.

²⁰ Talbert 'rejected some etymologically and archaeologically tempting identifications—such as *Isamnion* with Navan (Irish *Emain*) ... which are at odds with Ptolemy's locations' and any classifications as a cape or *akron* in the later manuscripts (2000, 18). One possible, although tentative, cross-reference can be made with an entry elsewhere in Ptolemy's *Geographia*, where he refers to a coastal cape in Crete as *Samonion* (Ptolemy III xv 4). Strabo and Pliny, amongst other sources, make several references to the Cretan cape in a host of derivatives such as *Salmonion*, *Salmonie*, *Sammonion* and *Samonion* and it is tempting to view *Isamnion* as another version (Apollonius Rhodius *Argonautica* IV 1688–93 (*Salmonion*); Luke, The Acts of the Apostles XXVII vii (*Salmonie*); Strabo II 106; X iii 20

well-known to merchants—‘*aditus portusque per commercia et negotiatores cogniti*’: ‘we are better informed, thanks to merchant trade, regarding the approaches to the island and its harbours’ (Tacitus *Agricola* 24.2).

The presence of Bii ware at Colp West both signifies movement along the eastern coast and constitutes a station-point at which river trade commenced along the Boyne. That the River Boyne was already an established route in the High Imperial period of Rome is also suggested by its inclusion in Ptolemy’s *Geographia*, where it is cited as ‘*Buvinda*’, and by the roughly contemporaneous material from the Rath of the Synods (Evans 2008, 123–6, pls 2 and 3). Moreover, the recent discovery of a Bi-ware sherd at Stalleen, located to the south of the Bend in the Boyne, serves as an interim location for this later trade along the river *en route* to Randlestown (1km from the Boyne) and Collierstown 1 in the wider Tara region. In the early medieval period, the site at Stalleen consisted of a souterrain and boundary ditches, incorporating evidence for cereal and textile processing/production (Mandy Stephens pers. comm.). The sherd of Bi ware (identified by Ian Doyle) was located in an early medieval boundary ditch, within which associated animal bone yielding a C¹⁴ date range between AD 600 and AD 676 is perhaps suggestive of a secondary context (Mandy Stephens pers. comm.).

Cashel and Derrynaflan in Tipperary, Leggetsrath West in Kilkenny and Clogher in Tyrone represent landlocked sites and serve to highlight the role of navigable rivers in inland trading networks in Ireland. Cashel and Derrynaflan would have been accessible via the River Suir and Leggetsrath West via the River Nore (possibly the ‘*River Birgos*’ in Ptolemy’s gazetteer), both emptying into Waterford Harbour.²¹ These distributions effectively extend the coastal route from the south-west of Ireland—passing Kilgrovan at Dungarvan—to Waterford Harbour in the south-east, from where it could continue northwards along the coast to Dublin.

Reaching Clogher in Tyrone is more problematic; the site may have been accessed via Lough Foyle, as Doyle suggests (1996), yet it clearly represents an extension of the neat coastal/riverine pattern, as presented thus far, and it is worth noting that the site was also located along an important land route connecting the eastern and western areas of Ulster. Nonetheless, if the River *Vidva* on Ptolemy’s

(*Salmonion*), X iv 2, X iv 3, X iv 12 (*Samonion*); Pliny IV xii 60, 61). With regard to the Cretan cape, it has been suggested that the name *Sammonicus*, both associated with the Severan Roman savant and occasionally appearing in inscriptions in the Bordeaux region (CIL xiii 832), represented a geographical cognomen, analogous to *Atticus* or *Italicus* as deduced from the earlier reference to *promuntorium Samonium* in Crete (Champlin 1981, 206).

²¹ A rim sherd of African Red Slip Ware, Form 91C, has recently been identified, by the present author, at the multi-ditched enclosure of Kilree 3, near Kilkenny City, along the N9/N10 Rathclogh to Powerstown (excavated by Patricia Lynch of Irish Archaeological Consultancy Ltd on behalf of the National Roads Authority). The proximity of the site to Leggestrath West, where two Bii sherds have been found, suggests a common access route along the River Nore, thereby representing an integrated Mediterranean trade model (Kelly, A. 2009). The find refutes the reported absence of African Red Slip Ware in the Irish ceramic record (Edwards 2005, 290) and promotes a review of the ceramic corpus of Samian ware in the country.

map does refer to the River Foyle, it suggests that this too was already a major navigation artery in the Roman period (Condit and Moore 2003) and, similarly, if Clogher represents one of the sites marked as *regia* on the map, its inclusion confirms its royal association as both long-lived and far-reaching (Halpin and Newman 2006, 128). Moreover, the potential presence of B-ware sherds from the ring-fort of Crossnacreevy in Co. Down (Richard Warner pers. comm.) serves to extend the reach of this trade into the northern fringes of Ireland.

While the distribution of imported eastern Mediterranean pottery may favour a primarily coastal, a secondary riverine trading pattern is evident along the Atlantic seaboard and through distributions in Ireland. It may be relevant in this regard that Bourke interpreted the distributions of imported glass vessels as a reflection of sites wealthy enough to import wine and other foreign commodities, rather than representative of sites that were aligned on a particular trade route (1994, 180; Thomas 1990, fig. 7). It is possible that key elite sites instigated and commanded such strong magnetism that their accessibility via water, in terms of coastal proximity, was no longer of primary concern; yet, accessibility and wealth are undeniably closely correlated and it is not coincidental that the most prosperous sites were situated along routes of communication and any dismissal of this correlation would be tantamount to a denial of the social advantages in engaging in trade and exchange.

From the Irish distributions, it seems that the most accessible coasts were, logically enough, the south-west, south, south-east, east and north-east. The redistribution of goods in smaller locally used vessels serves as a prerequisite for the degree of riverine traffic employed to reach some inland sites; a phenomenon, which may be specific to north-western Europe (as evidenced along the Loire and the Montego Rivers). The riverine site locations suggest the redistribution of goods in small locally used craft; a marked deviation from the primarily coastal aspect of the Mediterranean trade. The increase in find-spots for Bii ware in Ireland commands a revision of the trade models posited by several authors, including that of McCormick (2001, 53–63) and Wickham (2006, 355–6), amongst others, while the density of Campbell's distribution map of imported pottery in Britain and Ireland in the seventh-century AD is now more suitable for the late fifth and early sixth century AD in light of the recent findings in Ireland, as presented here (see Campbell 2007, 125, fig. 80).

What impetus transported these amphorae from so far afield?

In terms of imported consumables, Thomas argues that most of the B-ware amphorae are more likely to have contained olive oil than wine but concedes that at least a proportion of B-ware amphorae were used to transport wine (1990, 16; Decker 2001, 69–86). Doyle suggests that the presence of Bii amphorae relates to the upsurge in olive-oil production in the hinterland of Antioch in the late Roman period but acknowledges that this exclusive interpretation does not allow for a wider area of production and may be too overly simplistic (1996, 28; Peacock and Williams 1986, 187). Clearly, amphora content is a complex issue as they are often reused, and such reuse is usually traceable through their stoppers (Thomas, R. 2008, 99). Wooding

notes that amphorae stoppers from British sites suggest that they were filled in the Mediterranean and not used to store other goods *en route* (2002, 19).

Contrary to Doyle and Thomas, I would argue that if olive oil was transported from Syria in Bii amphorae, their high concentrations in north Africa, a thriving oil-producing region, are difficult to explain. Williams and Carreras interpret the presence of north-African amphorae (as distinct from Bii wares) in some numbers at Tintagel as clear evidence of the continued trade in north African olive oil (1995, 240). In Ireland, Bii ware is the predominant amphora type with only one potentially imported north African amphora, i.e. Bv ware (Class 34), cited on the promontory fort of Loughshinny, Co. Dublin (Edwards 2004, 70). Moreover, only one sherd of African Red Slip Ware has been securely identified in the country (Kelly, A. 2009; although Thomas does mark their presence at Garranes in his distribution map of A wares, yet does not reference this in his text—Thomas 1976, fig. 1). Evidently, whatever north African wares were reaching the fringes of north-western Europe were clearly outweighed by the eastern Mediterranean Bi and Bii amphorae types (Peacock and Williams 1986, Classes 43 and 44; Fulford 1989, 1–6; Thomas 1981).

Piéri holds that wine was the main content of Bii amphorae (2005) while Karagiorgou, in support of a viticultural association, argues that their relatively diminutive size (to that of Bi/Class 43/LR2) is more appropriate for wine since their relatively smaller capacity may reflect a precautionary measure guarding against the detrimental impact of oxygen on the flavour and body of wine (2001, 149). By the same token, the larger capacity of Bi amphorae, which have also been cited in Ireland (but to a lesser degree), is representative of olive oil's long shelf life. Karagiorgou deduces that the viticultural contents of Bii amphorae had to be consumed relatively quickly once opened, while olive-oil-carrying Bi amphorae (although admittedly versatile in terms of contents through time) could serve longer as storage vessels (Karagiorgou 2001, 149).

Bi fragments are rare in Ireland but examples have been cited at Garranes, Clogher and Mount Offaly Cemetery (Thomas 1981, 11; Mytum 1992, 253; Conway 2000, 37) and Stalleen in the Bend of the Boyne (Mandy Stephens pers. comm.). We might deduce that Mediterranean oil was reaching Ireland but in smaller quantities than that of wine; a ratio that is perhaps represented in the ceramic profile at Garranes. The oil lamp found at the ring-fort of Rathgurreen, Co. Galway (Comber 2002, 173, fig. 15), remains a unique find in an Irish context but we can nonetheless assume that it was fuelled using olive oil, following the Mediterranean tradition. The lamp can be classified within a broad category of lamps in the eastern Mediterranean dating from the late third to the early fifth century AD (comparable to Bailey's Type R, which he describes as 'Fat Globule Lamps'; Bailey 1980, 377–81).

The viticultural association with Bii amphorae is supported by the presence of pitched lining, a sealant, which is usually associated with wine carriers. It has been detected in some Bii amphorae at Ballana in Egypt; while actual resin linings have been observed in examples from Tarragona and Amathous (Williams 2005, 161). Resins have been traced on amphorae from the seventh-century AD Yassi Ada wreck in Turkey, which also yielded grape seeds from intact amphorae suggesting that most, if not all, of the amphorae had been full and were carrying wine (Gould 2000, 170). Of the 970 sufficiently complete amphorae (which demonstrate a similar

form to that of the earlier Bii wares) retrieved from the ninth century AD Bozburun shipwreck, preliminary analysis suggests that the majority contained wine, as was deduced from their contents comprised of *vitis vinifera* grape seeds and a red pulpy fluid (Gorham 2000, 11–12).

The greater numbers of Bii amphorae found on sites in Ireland (and the heightened presence of PRSW from Asia Minor, as distinct from African Red Slip Ware from Tunisia), suggest that the main cargoes of wine (and to a lesser extent olive oil) were loaded in the eastern Mediterranean, picking up a subsidiary cargo in north Africa, on their way through the straits and into the Atlantic to Ireland and Britain—a model endorsed by both Fulford (1989, 1–6) and Williams and Carreras (1995, 141).

But it is not just the amphorae that indicate such trade in Syrian wine, the literary sources attest the already wide exportation of Syrian wines in the fourth century AD, as referred to by Libanius (*Oration XI 20; XXXI 20*, cited in Norman 2000, 11, 75), and textual sources reveal that by the mid–late sixth century AD Syrian wine was a familiar beverage in Gaul, at least in relatively élite circles. Gregory of Tours (c. 538–594), a man of obvious high position, sent to a wine shop to procure some Syrian wine for a guest; an anecdote which portrays Syrian wine-drinking as a social indulgence in sixth-century AD France (Gregory of Tours *Decem Libri Historiarum VII xxix*). Gregory mentions that Syrian wine was exported from the port of Gaza, and, as it features in his accounts pertaining to both Tours and Lyon, we can deduce that it must have been traded in great quantities along the Loire and the Rhone Valleys.²² He mentions a widow in Lyon who took two gallons of Syrian wine to her husband's tomb every day (Gregory of Tours *Liber in Gloria Confessorum, c. 64*), which, while an obvious aggrandisement, is an illuminating vignette in its implications for ostentatious display and ritual in Merovingian Gaul. The popularity of Syrian wine in Gaul, as attested by the written sources, serves to complement the presence of Bii amphorae in Ireland, which, in itself, signifies a demand for eastern Mediterranean wine.

The implications for post-Roman trade are significant and as early as 1984 Keay noted that the relative surge in eastern Mediterranean amphorae in the west attests that the Vandals upheld the maritime commerce of the Imperial period, beyond the fracturing of the western empire in AD 475, and actively fostered a level of sea trade in prized eastern produce (1984, 268–78 and 434). Keay posits that eastern merchants profited from the dissolution of centralised political power in the western Mediterranean, which opened up trading opportunities with various Barbarian markets (1984, 434); a model that is worthy of closer scrutiny.

If, as is argued here, Bii ware is representative of a predilection for eastern Mediterranean wines in the late fifth and early sixth centuries AD, then an array of complementary wine-drinking accoutrements might also be expected. There is a striking overlap in distributions of sites yielding Bii ware and sherds of imported-glass cone beaker vessels and bowls (Bourke 1994, 167–71). Glass vessels seem

²² For episodes of besotted inebriation see Gregory of Tours *Decem Libri Historiarum IV 12; VI 13; VII 22; VIII 18, 34; IX 27, 37; X 14, 22*.

to represent the trappings of wine consumption and it has been argued using textual evidence that glass vessels have a closer correlation with wine than pottery vessels (Atkinson 1901, 409). Cone beaker vessels, as their name suggests, were not designed to sit freely on their bases, instead they constitute hand-held drinking glasses, which, only when completely drained of their contents, could be upturned to rest on their rim (Bourke 1994, 171). As such, their shape may purposely inform the behaviour of the user in promoting a specific tradition of conviviality.

Cone beaker sherds, of Harden's III d and III e types, dating to the fifth–sixth centuries AD, have been found at Garranes, Clogher, Randlestown (Kelly, E. 1978, no. 32) and Dalkey Island (Bourke 1994, 171).²³ Moreover, Frankish glass bowls, of Harden's Class XI b, dating to the fifth/sixth centuries AD, have been found at Garranes, Clogher, Reask, and Dalkey Island (Bourke 1994, 167–73). In the Merovingian period glass vessels were common in western France; with large yields from the great cemetery of Herpes near Rouillac in Charente, reflecting a prolific use of glass in a catchment area extending from Saintonge to Poitou (Delamain 1889; cited in Bourke 1994, 178). The occurrence of these glass imports on sites in Ireland is strongly indicative of contact with post-Roman Gaul in the late fifth and early sixth centuries AD and emphasises connections between the inhabitants of high-status sites in Ireland and Gaul during this period (Bourke 1994, 168). The occurrence of glass vessels, specifically the glass cone beakers and bowls cited above, on sites producing B ware in Ireland suggests a close relationship between Frankish glass and wine from the eastern Mediterranean region (Bourke 1994, 178).

Wine produced in Gaul

The élite of Gaul may have valued choice Syrian wine, but Syria did not monopolise the market. In addition to wine from the zone encompassing Cyprus and Syria (as represented by Bii ware), textual evidence suggests that Gaulish wine was also clearly produced, traded and in demand. Unwin states that 'viticulture was well established in much of Gaul to the south of a line joining the mouth of the Loire, Paris and Tours apparently well before the middle of the fifth century ... despite the political and economic turmoil of the earlier Germanic invasion of the third century' (1996, 144). He refers to 'numerous examples of the establishment and maintenance of vineyards within France by bishops, monks and the secular nobility between the 6th and the 9th centuries' (Unwin 1996, 147; Dion 1959; Lachiver 1988). Venantius Fortunatus, writing in the sixth century AD, describes the umbral vineyards of the Cariacus demesne adjacent to the Loire, property of Felix, the Bishop of Nantes (*Carmina*

²³ At Dalkey Island glass cone beakers, dating to the late fifth and early sixth centuries AD, were found in the trial cuttings (Bourke 1994, 171). At Garranes, glass cone beakers were also found in association with B ware, E ware and an early ring-pin (cited in Bourke 1994, 171). Two fragments of glass cone beakers associated with the ring-fort at Clogher are dated to the fifth or sixth century AD (R.B. Warner as a pers. comm. cited in Bourke 1994, 170, 198, nos 17 and 24).

miscellanea V vii 1–12), which Lachiver identifies as having been located at Saint-Rémy-la-Varenne (1988). Several bishops even moved their Episcopal seats so that they would reside in places more favourable to viticulture; Gregory of Tours in his *Decem Libri Historiarum* (III 19) relates how his great-grandfather, Gregory, Bishop of Langres, chose to reside at Dijon, where vines were more easily cultivated. In Merovingian times the Bishop of Augusta Veromanduorum (Saint-Quetin) apparently moved his seat to Noyon as a result of its suitability for viticulture (Dion 1959; Lachiver 1988).

It is important to note that Unwin, while citing a range of episcopal vineyards, still credits the secular nobility in Gaul with the control of viticulture in the centuries following the collapse of the western empire as it was they who granted lands, including expansive vineyards, to the monasteries during the eighth and ninth centuries AD (1996, 147). Wine produced in Gaul was clearly also reaching Ireland and entering the monasteries, albeit possibly only gaining popularity at a slightly later stage as the ceramic profile suggests. Whether we can invest any historical credence in the late text of the *Life of Ciarán of Clonmacnoise* (which is purportedly set in the sixth century AD) is tenuous, despite the serendipitous reports of bringing wine from Gaul to the monastery ('*mercatores cum vino Gallorum venerunt ad S. Kiaranum*': 'merchants with Gaulish wine came to S. Kieran's'; *Life of Ciarán of Clonmacnoise* c. 31 (*Vit. S. Kierani* c. 31), Cod. Marsh fol. 147 66; cited in Doherty 1980, 77).²⁴

The accounts of Columbanus' departure from Luxeuil in Gaul (c. AD 610), however, relate that his voyage was facilitated by a trading ship. He was taken to the port at Nantes to embark on a vessel, at a location frequented by Irish merchants and before leaving, he was given gifts of 100 measures of wine, 200 measures of wheat and 100 measures of beer to which was added a further 100 measures of wheat by a lady named Doda (*Vita Columbani* I.23; cited in Doehard 1978, Doherty 1980, 77 and Coffey 1910, 97).

Wines produced in Gaul, as the documentary sources attest, and pottery (such as E ware, probably manufactured in Aquitaine, perhaps near Saintonge)²⁵ are reaching Ireland too, but perhaps at a slightly later stage and facilitating a different, more inclusive, demographic than its eastern Mediterranean counterpart. At some key sites, however, Thomas noted an association of E ware (table ware) with Bii ware and suggests that trade in Mediterranean pottery and wine/oil may always have been via the Atlantic coastline of France (1976, 251). In contrast, O'Kelly noted that 'if, as supposed, the A-B wares come from the Eastern Mediterranean and the E-G wares

²⁴ This entry, ultimately transcribed in a fifteenth-century manuscript in Marsh's Library, is considered an anachronistic reference more appropriate for the medieval wine trade with France than a sixth-century AD context (James 1982, 375; Thomas 1990, 4); however, there is no reason to doubt the popularity of wine in France in the sixth century AD, in light of the range and quantity of textual testimonies, or to deny the likelihood of its reaching Ireland. It is possibly in light of the perishable nature of the traditional containers, such as wooden barrels, that this trade has such a low profile archaeologically.

²⁵ Although the Loire Valley, Charente and even Rouen have also been suggested as sources (Hollinrake 2007, 337).

from the Rhineland, it is unlikely that the two types travelled together or that they were peddled by the same entrepreneur' (1962–4, 117). While O'Kelly's remarks are of some merit, a more fluid and nuanced interpretation might also be proffered whereby the Gallo–Hibernian trade in E-ware, glass cone beakers and Gallic wine were all either exchanged directly and independently between these two specific zones, or, this trade represents a fringe activity which follows on from, and dovetails with, an overarching trade movement fuelled by eastern Mediterranean *emporia*.

Pilgrims and long-distance trade routes

The early medieval period was clearly a busy maritime epoch, echoing Juvenal's earlier claims that the merchants were so greedy that there were more men afloat than on shore (*Satire XIV 276*). Gaulish sailors did not limit themselves to trade to the north, and travelled far afield, as is implicit in Adomnán's claim that prophetic news of a major volcanic eruption in Italy was confirmed by Gaulish sailors who landed at the Scottish shores in a *barca* '*Gallici nautae de Galliarum provinciis adventantes*' 'Gallican sailors shall come here from the provinces of Gaul' (*Vita Columbae I 22*; cited in Richter 1999, 153; see also *De locis Sanctis III vi 1–3*).

Early pilgrims travelling from western Europe, no doubt, availed of long-distance merchant traffic and, as early as the fourth century AD, Bordeaux was the point of departure for pilgrims to Jerusalem, a role it retained in subsequent centuries (Doehaerd 1978, 199).²⁶ Alternatively, the lives of Saint Patrick and Saint Germanus claim that in the Merovingian age people embarked in Ireland for the mouth of the Loire (Doehard 1978, 199), which would complement references to Nantes and Noirmoutier Island in association with voyages to Ireland in *Vita Columbani* (I.23) and *Vita S. Filiberti* (42). Joseph Raftery includes Enda, Finian of Clonard, Cumman, Finnbar, Senan, Laserian, Flannan and Ciaran in a list of pilgrims to Rome during the sixth century AD, albeit the repetitive nature of such references hints at their value as a literary trope (1965, 203–04; Moran 1864).

It is feasible that the ceramic profile in Iona in Scotland (which includes PRSW, as cited in Hayes 1972, 422) may reflect a degree of pilgrimage, as complemented by various episodes in Irish–Scottish manuscripts; however, at Iona, the much smaller quantity of imported pottery, relative to local wares, led Sharpe to question whether the monks made less use of it than the occupants of secular or royal sites (1995, 290). This secular association seems to be played out on a range of sites in Ireland while at Tintagel, although the exact nature of the site is still debated, the early monastic interpretation has been abandoned prompting a more secular dynamic for its far-reaching trading network (Thomas 1981, 4; Turner 2003, 176).

²⁶ Thomas suggests that the occurrence of the toponym '*Bordgal*' (Burdigala) in Westmeath, and occasionally elsewhere, in Ireland may reflect a link with the wine trade of Bordeaux (1976, 253); however, the word *Bordgal* is not exclusively associated with wine but has a wide range of meanings such as famous resort, gathering, assembly, meeting place, goal of pilgrimage (cited in Doherty 1980, 77–8).

Nonetheless, it is reasonable to envisage trading routes facilitating the circulation, not only of prestige goods and commodities, but also of religious ideology and artistic influence (both architectural and artefactual) from the east.²⁷ According to Adomnán's accounts, Arculf, a monk from Gaul, drew a depiction of the Church of the Holy Sepulchre on a small wax tablet on his return from Palestine in the late seventh century AD, presumably after its restoration by Heraclius (*De locis sanctis* I i; Woods 2002, 32).²⁸

While the Constantinian complex may have been damaged during the Persian invasions of AD 614, its sixth-century AD image on the *Madaba Map Mosaic* in Jordan remained intact and served as a poignant symbol to pilgrims to the Middle East. Jerusalem was clearly the focus of pilgrimage in the sixth century AD, as is explicit in the iconography of the *Madaba Map Mosaic* where the Holy City is the largest and most detailed portrayal of the civic or sacred centres (Donner 1992, 19). The main source for the *Madaba Map Mosaic* is the famous fourth century AD *Onomastikon* (of Biblical Locations) of Eusebius, Bishop of Caesarea. Of the 157 inscriptions on the fragmentary map, 61 are copied directly from Eusebius, and the mosaicist often repeated his errors, or expressly corrects them on the map (Donner 1992, 23; see Eusebius *Onomasticon* 42:1). Avi-Yonah argues that the *Onomastikon* itself had been accompanied by a map, to which the *Madaba Map* mosaicist had access (cited in Bowersock 1983, 172). If so, then the *Madaba Map Mosaic* must constitute a subsequent consolidated version of a former portable prototype catering for the needs of Christian pilgrims who visited the Holy Land; a purpose that is clearly attested by the preponderance of churches and shrines over other public buildings depicted and the attention to relative spatiality in the geographic positioning of sites on the map.

The depiction of Jerusalem on the mosaic map includes the main road dissecting the city (the colonnaded north–south *cardo*) with the western side of the city dominated by the ‘Divine Work’ built by Emperor Constantine over the Tomb of Christ, as described by Eusebius and later referred to by Adomnán through the medium (and perhaps even, literary vehicle or trope) of Arculf. This sanctuary consisted

²⁷ Hillgarth argues that these trade-routes facilitated the transportation of manuscripts (1961–3, 168, 177) while the stamped motifs which generally adorn the bowls of PRSW may have had an influence on early medieval art in Ireland.

²⁸ Mention of images of Jerusalem depicted on wax tablets, accompanied by verbal descriptions of the city, as cited in the manuscript tradition, would have had a profound impact on their far-removed audience. On face value, it can be deduced from Adomnán's account that such a complex architectural icon could be condensed into a depiction on a small wax tablet and, depending on the accuracy of the portrayal of events, it could be inferred that the architectural image was reduced to a series of recognisable symbols to create a miniature motif or schematic representation, as already achieved on the *Madaba Map*—I am indebted to Conor Newman of NUI Galway for his insightful observations regarding schematic recognisable imagery in early Irish art and to Jacopo Bisagni, also of NUI Galway, for drawing my attention to the textual reference. That wax tablets were carried and used in Ireland in the early 7th century AD is evidenced through the discovery of tablets in the Springmount Bog in Co. Antrim which have been dated, through their impressed text, as early as AD 600 (Armstrong and Macalister 1920, 160–6; McNamara 2000, 32–33).

of the Anastasis, or a domed circular building situated over the tomb, an internal porticoed courtyard surrounding the Rock of Calvary and the Basilica or Martyrion with its elaborate façade (consisting of a triangular pediment and three doors preceded by an elaborate *propylaea*) which faces onto the *cardo* (Dunbabin 1999, 202). The mosaicist depicted the complex from an eastern perspective using an ‘exploded’ view, in deliberate contrast to the surrounding architecture. The depiction includes the essential ingredients of the shrine, with the crown of the dome of Anastasis highlighted in yellow tesserae, the courtyard with one row of black tesserae and the basilica, complete with a pitched roof. The vignette is an important contemporary source for the Constantinian complex which was badly damaged in the Persian invasions of AD 614, prior to Arculf’s pilgrimage to the Holy Land; a voyage which could only be facilitated through the existing trade routes.²⁹

Exchange commodities produced in Britain and Ireland

It has been argued here that the most logical interpretation for the presence of Bii-ware amphorae in Britain and Ireland is a demand for eastern Mediterranean wine by the secular élite. In terms of what is being exchanged for these eastern Mediterranean goods in Britain, the distribution strongly suggests that the trade concentrates on the tin industry (Wilkes 2007, 13). In Britain, Bii ware enjoys a wide circulation, mainly in the south-west, and is found on the Isle of Scilly (Samson and Tean); in Cornwall: Gwithian, The Kelsies, Tintagel and Trethurgy; in Devon: Bantham, Mothecombe and High Peak; in Somerset: Cannington, Cadcong, Glastonbury Tor, Glastonbruy Mount and South Cadbury (Alcock *et al.* 1995); in South Glamorgan: Dinas Powys (Alcock 1955, pl. viii, a, 5 and 6); and in Scotland: Dunbarton Rock (Thomas 1981, 11–13). This geographic clustering is also complemented textually whereby the Cypriot, Leontius, in his accounts of the deeds of the Patriarch John ‘the Almsgiver’, records a long-distance sea voyage from Alexandria to Britain exchanging corn for tin (*Vita S. Iohannis Ellemosynarii* S10). Regardless of any historical accuracy, Leontius’ accounts, at the very least, convey aspects of daily-life in seventh-century AD Alexandria where voyages from Alexandria to Britain, hauling cargoes of tin, feature as credible vignettes (Wilkes 2007, 13; Campbell 2007, 131; Hillgarth 1961–3, 178–9, fn. 57).

In Ireland, as early as 1942, Ó Ríordáin was already making the major overarching connections through his analysis of the material assemblage of Garranes. He noted that:

the most important group of material found is the pottery which ... makes clear a connection with the Roman world at about the second half of the 5th century. Trade in some commodity as wine or oil is vouched for by the

²⁹ As such, the depiction presented in the mosaic serves as an interesting eastern forerunner for the plan added to the 9th century copy of Adomnán’s *De Locis Sanctis* (Vienna, Österreichisches Nationalbibliothek, Codex 458, f. 4v.), and gains importance in light of the significance of resurrection in Irish hagiography (as outlined by Ó Carragáin 2003b, 142–3).

amphorae or lagenae found at Garranes. Such evidence for trade fits in with the historical evidence which has been collected by Zimmer relative to the same period. The occurrence of similar wares in Cork and Cornwall points to a common source of supply for both places.

(Ó Riordáin 1942, 142; see also Zimmer 1909–10)

Yet, what is being exchanged in Ireland is not clear archaeologically. This dearth in the archaeological record suggests perishable materials, as was attested by the written sources, where animals and farm products (including cereals, beer and clothing, such as animal hides and textiles) were regularly exchanged (Doherty 1980, 72; Doyle 1996, 84). A text relating to events in the seventh century AD (*Vita S. Filiberti—Life of St Philibert of Noirmoutier* – 42) mentions a ship coming to Noirmoutier Island from Ireland with clothes and footwear (*Nec multorum post Scottorum [i.e. Irish] navis diversis mercimoniis plena ad litus adfuit, qui calciamenta ac vestimenta fratribus larga copia ministravit—‘Not much later an Irish ship filled with various merchandise came to shore and supplied the brothers with an abundance of shoes and clothing’*).³⁰

Conclusion—a model for Ireland’s engagement with long-distance trading networks

The complexity of the trade network between north-western Europe and the eastern Mediterranean (and, more locally, between Ireland, Britain and France) allows for several hypothetical intermeshing trading models. Between Conimbriga and Cork there is still a hiatus of sites yielding PRSW and the theory of coastal connectivity seems to run aground³¹; however, when we combine the distributions of Bii ware with the glass cone beaker trade, the implication is that Gallo–Hibernian trade piggy-backed onto a much wider shipping network, albeit one perhaps waxing as the other waned (much in the same way that north African wares represent secondary commodities picked up en-route).

In order to convey the complexity of commerce at this critical juncture in Ireland’s cultural development, corresponding trading hypotheses need to be flexible, layered and nuanced. It is perhaps reasonable to propose that the ships, embarking originally from the eastern Mediterranean, travelling eastwards through the Straits of Gibraltar, were relieved of much of their remaining cargo along the Portuguese coast and any residual goods on the eastern Mediterranean galleys were redistributed among smaller local vessels (*barca* or *scafa*), possibly in the ports of western France, from whence they sailed to southern Britain and Ireland. The

³⁰ Trading in slaves cannot be completely ruled out as there are numerous records to raids resulting in enslaved captives in the lives of the saints and in the law tracts where slaves were traded to settle local disputes (Kelly, F. 1988, 95–7, 112–13; McCormick 2001, 738–9).

³¹ A hiatus which seems to be paralleled in Hillgarth’s model for manuscript transmission (1961–3, 172–3).

relays of *barca* that effectively served to apportion the residual *exotica* of the larger galleys would have operated amongst a flotilla of localised independent trading vessels. The completion of the last phase of the journey using local vessels would be necessary to facilitate the final riverine transportation. At the final destinations these smaller vessels were probably completely emptied and restocked with largely perishable materials to distribute on their return journeys, where, at some large port (Wooding suggests Tintagel as a primary landfall—2002, 20—although I would support a harbour further south), they reconnected with the larger sea galleys of the long-distance network.³²

Despite the variety of permutations in trading possibilities, we can be confident that trade with the Mediterranean was facilitated by high-status secular centres along the Atlantic seaboard, creating an interface, beyond which a hierarchy of sites existed. The initial acquisition of foreign imports by gateway sites was followed by a secondary redistribution to satellite sites in their hinterlands, in turn instigating a variety of local imitation and emulation. This model seems to be reflected in the distributions of PRSW and B wares at sites where it is associated with glass cone beakers, specialised metalworking and prestige objects and, possibly on a relatively lower rung of the scale, and/or at a slightly later stage, the association of E ware with sites operating a type of kinship-based exchange. Whatever the model, the findings suggest (even at this early stage) a revision of views that ‘Ireland either could not, or chose not to, import the most expensive status goods that were normal everywhere else, and hardly sought even to imitate them’; thereby challenging widely held views of Ireland as a wholly insular and marginal contender in the Early Middle Ages (as suggested most recently by Wickham 2006, 355–6). It is in light of this knowledge that we can redress the then-reasonable denial of ‘any contacts at all between the island in the west and the faraway eastern Mediterranean, separated by thousands of miles’ (Raftery 1965, 199).

It is perhaps only the upper stratum of Irish society that could indulge in imbibing eastern Mediterranean wines from delicate, impractical, and rather large, glass vessels from Gaul. The divide between social groups, as expressed by the presence or absence of such *exotica* may not be so clear-cut or exclusive, but expensive eastern Mediterranean wine (or indeed oil), slipped fine tablewares from Asia Minor and Frankish glass drinking vessels seem to, at least on occasion, decorate the tables at high status sites in Ireland in the late fifth and early sixth centuries AD. Such ostentatious dining displays serve to consolidate strict social hierarchical frameworks, effectively distinguishing the highest stratum of society, in terms of materiality, and simultaneously connecting them with a network running from Gaza to Garranes.

Acknowledgements First and foremost I would like to thank the director of Collierstown 1, Rob O’Hara, for his generosity with the excavation material and for communicating his site report to me prior to publication. I also extend this appreciation to Maria Lear of Archaeological Consultancy Services Ltd who gave me access to the pottery and

³² Moreover, a Continental port might provide for ballast in a large vessel more easily than an island anchorage.

to Dr Maria Fitzgerald, then of the National Roads Authority, who first showed me sherds A008/015:69:2 #81. I am indebted to Mary Deevy, senior archaeologist with the National Roads Authority, for her encouragement in publishing my analysis, and to John Sunderland who allowed me to include his photographs of the Collierstown 1 sherds (i.e. Pl. I and Fig. 3). I owe considerable thanks to Elizabeth O'Brien for a copy of her forthcoming article and for her generous academic spirit. I must extend this thanks to Edel Bhreathnach for her invitation to share my findings at the Heritage Council INSTAR Project conference 'Mapping Death: People, Boundaries and Territories in Ireland 1st to 8th centuries AD' in November 2009. I owe a debt to Mandy Stephens of Cultural Resource Development Services (CRDS) Ltd, the director of excavations at Stalleen, for providing me with information on her findings prior to publication. I extend this gratitude to Sarah Cobain who first alerted me to the Stalleen material. I am also grateful to Stephen Johnston of Arch-Tech Ltd for last-minute communications regarding his recent excavations in Lusk as I was delighted to add the site to the distribution list. I am most grateful to Richard Warner and Conor Newman who greatly encouraged my pursuit of this topic. I must thank Pádraic Moran of the Classics Department at NUI Galway for steering me away from some anachronistic pitfalls within the manuscript tradition and for correcting my Irish onomastic inconsistencies. I would especially like to thank the Royal Irish Academy's anonymous referee and in-house editors, especially Lucy Hogan, whose insightful comments and suggestions enhanced the contents of this paper considerably. I also thank my brother Alan for taking the time to read an early draft of the paper and guiding me along the right path. Any remaining errors are, naturally, mine alone. I should lastly, but by no means least, extend my deepest thanks to the British School at Athens for awarding me the Richard Bradford McConnell Fund for Landscape Studies in 2008, which afforded me the opportunity to conclude an intensive study of the PRSW from Malia, graciously facilitated by Sylvie Müller-Celka, École Française d'Athènes, which launched me on a course of research from which my corresponding investigations in Ireland were borne.

References

Primary Sources

Adomnán, *De locis Sanctis*

Meehan, D. M. (ed. and trans.) 1958 *Adamnan's De Locis Sanctis (Scriptores Latini Hiberniae III)*. Dublin. Dublin Institute for Advanced Studies.

Apollonius, *Rhodus Argonautica*

Seaton, R. C. (trans.) 1912 *Apollonius Rhodus Argonautica*. Loeb Classical Library. London, William Heinemann Ltd.

Eusebius *Onomasticon* (of biblical locations)

Notley, R.S. and Safrai, Z. 2005 *Eusebius, Onomasticon. A Triglott edition with notes and commentary*. Jewish and Christian Perspectives Series 9. Leiden. Brill.

Gregory of Tours

Krusch, B. (ed.) 1885 *Gregorii episcopi Turonensis opera, Miracula et opera minora. Monumenta Germaniae Historica. Scriptores Rerum Merovingicarum 1.2. (MGH SRM 1.2)*. Hannover. Impensis Bibliopolii Hahniani, Hahn.

Krusch, B. and Buchner, R. (eds) 1977 *Gregorii Episcopi Turonensis, Historiarum libri decem. Ausgewählte Quellen zur deutschen Geschichte des Mittelalters* 2–3. Darmstadt. Wissenschaftliche Buchgesellschaft (WBG). (See *Bibliotheca Augustana—Historia Francorum* www.hs-augsburg.de/~harsch/Chronologia/Lspost06/Gregorius/gre_hi00.html, last accessed 9 December 2009).

Juvenal, The satires of Juvenal
The satires of Juvenal. Loeb Classical Library. London. William Heinemann Ltd.

Pliny, *Naturalis historia* (Natural history)
Pliny: Natural history (37 vols). Loeb Classical Library. London. William Heinemann Ltd.

Michael the Syrian, *The chronicle*

Chabot, J.B. (ed. and trans.) 1899–1910 *Chronique de Michel le Syrien, Patriarche Jacobite d'Antioche, 1166–1199* (4 vols), vol. 2, 220–1. Paris. Académie des Inscriptions et Belles-Lettres.

Ptolemy, *Geographia*

Stückelberger, A. and Graßhoff, G. (eds) 2006 *Klaudios Ptolemaios: Handbuch der Geographie*. Griechisch-Deutsch. Vol. 1: Einleitung und Buch 1–4. Vol. 2. Buch 5–8 und Indices. Basel. Schwabe Verlag.

Strabo, *Geographica* (The geography of Strabo)

Strabo: Geography (17 vols). Loeb Classical Library. London. William Heinemann Ltd.

Tacitus, *Agricola*

Ogilvie, R.M., Warmington, E.H. and Winterbottom, M. (eds) 1914 *Tacitus Agricola*. Loeb Classical Library. London. William Heinemann Ltd.

Venantius, Fortunatus, *Carmina Miscellanea*

Berlin, F.L. (ed.) 1881 *Carmina Miscellanea* (11 vols), VII Item ad Felicem episcopum Namneticum. Berlin; (last accessed www.hs-augsburg.de/~harsch/Chronologia/Lspost06/Venantius/ven_ca05.html#07, last accessed 9 December 2009).

Vita S. Kieran (Life of Ciarán of Clonmacnoise)

MS. Cod. Marsh, C. Plummer (ed.) 1910 *Vitae sanctorum Hibernae* (2 vols), vol. 1, 200–16. Oxford. Clarendon Press.

Vita Columbae (Adomnán's Life of Columba)

undated *Vita sancti Columbae*, MS. Schaffhausen, Stadtbibliothek Generalia 1.

Vita Columbani (Life of Columbanus, Jonas of Bobbio)

Krusch, B. 1902 'Ionae Vitae Columbani'. *Monumenta Germaniae Historica, Scriptores Rerum Merovingicarum* IV (MGH SRM IV). Hannover. Impensis Bibliopolii Hahniani, Hahn.

Vita S. Filiberti (Life of Saint Philibert)

Levinson, W. (ed). 1910 *Vita S. Filiberti Abbatis Gemeticensis et Heriensis. Monumenta Germaniae Historica, Scriptores Rerum Merovingicarum V* (MGH SRM V). Hannover. Impensis Bibliopolii Hahniani, Hahn.

Vita S. Johannis Ellemosynarii (Life of John ‘the Almsgiver’, Leontius of Neapolis)

Festugière A.-J. and Rydén, L. (ed. & French trans.) 1974 *Léontios de Néapolis, Vie de Syméon le Fou et Vie de Jean de Chypre*, 343–524. Paris. Geuthner.

Secondary Sources

Alarçao, J., Delgado, M., Mayet, F., Moutinho Alarçao, A. and Da Ponte, S. 1976 *Céramiques diverses et verres. Fouilles de Conimbriga VI*. Paris. M.A.F.P. / M.M.C.

Alcock, L. 1955 The Hill-Fort in Cwrt-Yr-Ala Park, near Dinas Powis (Glam.): 1 The Defences, 242–50.

Alcock, L. 1963 *Dinas Powys : an Iron Age, Dark Age, and medieval settlement in Glamorgan*. Cardiff. University of Wales Press.

Alcock, L, Stevenson, S.J. and Musson, C.R. 1995 *Cadbury Castle, Somerset. The early medieval archaeology*. Cardiff. University of Wales Press.

Armstrong, E.C.R. and Macalister, R.A.S. 1920 Wooden Book with leaves indented and waxed found near Springmount Bog, Co. Antrim. *Royal Society of Antiquaries of Ireland* **50**, 160–6.

Atkinson, R. (trans. by John O’Donovan and Eugene O’Curry) 1901 *Ancient laws of Ireland*. Volume V (Uraicecht Becc and certain other selected Brehon Law Tracts). London. HMSO.

Bailey, D.M. 1980 *Catalogue of lamps in the British Museum II. Roman lamps made in Italy*. London. British Museum Publications.

Baillie, M.G.L. 1979 An interim statement on dendrochronology at Belfast. *Ulster Journal of Archaeology* **42**, 72–84.

Baillie, M.G.L. 1995 *A slice through time: dendrochronology and precision dating*. London. B.T. Batsford Ltd.

Bateson, J.D. 1973 Roman material from Ireland: a re-consideration. *Proceedings of the Royal Irish Academy* **73C**, 21–97.

Bhreathnach, E. 1995 *Tara. A select bibliography*. Discovery Programme Reports 3. Dublin. Royal Irish Academy.

Bourke, E. 1994 Glass vessels of the first to ninth centuries AD in Ireland. *Journal of the Royal Society of Antiquaries of Ireland* **124**, 163–209.

Bowersock, G. 1983 *Roman Arabia*. Harvard. Harvard University Press.

Boyle, J.W. 2004 Lest the lowliest be forgotten: locating the impoverished in early medieval Ireland. *International Journal of Historical Archaeology* **8.2**, 85–99.

Browning, R. 2003 *Justinian and Theodora*. New Jersey. Gorgias Press LLC.

Byrne, F.J. 2001 *Irish Kings and High-Kings* (2nd edn). Dublin. Four Courts Press.

- Carroll, J. 1995 Millefiori in the development of early Irish enamelling. In C. Bourke (ed.), *From the isles of the north: early medieval art in Ireland and Britain. Proceedings of the third international conference on insular art held in the Ulster Museum, Belfast, 7–11 April 1994*, 49–58. Belfast. HMSO.
- Campbell, E. 2007 *Continental and medieval imports to Atlantic Britain and Ireland AD 400–800*. Report 157. York. Council for British Archaeology Research.
- Champlin, E. 1981 Serenus Sammonicus. *Harvard Studies in Classical Philology* **85**, 189–212.
- Chenet, G. 1941 *La céramique gallo-romaine d'argonne due IV siècle et la terre sigillée décorée à la molette*. Mâcon. Protat Frères.
- Clabby, G. 2008 Axes, warriors & windmills. *Heritage Outlook Summer/Autumn*, 5. (www.heritagecouncil.ie/fileadmin/user_upload/heritageoutlook/Outlook_Summer-Autumn08.pdf, last accessed 15 December 2009).
- Coffey, G. 1910 Archaeological evidence for the intercourse of Gaul with Ireland before the first century. *Proceedings of the Royal Irish Academy* **28C**, 96–106.
- Comber, M. 1997 Lagore Crannog and non-ferrous metalworking in early historic Ireland. *Journal of Irish Archaeology* **8**, 101–14.
- Comber, M. 2001 Trade and communication networks in early historic Ireland. *Journal of Irish Archaeology* **10**, 73–92.
- Comber, M. 2002 M.V. Duignan's Excavations at the Ringfort of Rathgurreen, Co. Galway, 1948–9. *Proceedings of the Royal Irish Academy* **102C**, 137–97.
- Condit, T. and Moore, F. 2003 *Ireland in the Iron Age: map of Ireland by Claudius Ptolemaeus c. AD 150*. Archaeology Ireland Heritage Guide **21**. Bray. Archaeology Ireland.
- Conway, M. 1999 *Director's first findings from excavations in Cabinteely*. Transactions 1. Dublin. Margaret Gowen & Co Ltd.
- Conway, M. 2000 Mount Offaly, Cabinteely, no. 124. In I. Bennet (ed.), *Excavations 1998: summary accounts of archaeological excavation in Ireland*, 36–7. Bray. Wordwell.
- Conway, M. 2009 (last updated) Pre-Norman cemetery in south County Dublin (written in 1999). (www.mglarc.com/index.php/dublin-based/91-pre-norman-cemetery-in-south-county-dublin-.html, last accessed 04 December 2009).
- Cooney, G. 1995 The Point, Lambay Island. Human burial site. O305504. 95E 140, 100. (See www.excavations.ie, last accessed 18 November 2009).
- Crone, B.A. 1993 Crannogs and chronologies. *Proceedings of the Society of Antiquaries of Scotland* **123**, 245–54.
- Cuppige, J., Bennett, I., Cotter, C., O Rahilly, C. *et al.* 1986 *Archaeological survey of the Dingle Peninsula. A description of the field antiquities of the Barony of Corca Dhuibhne from the Mesolithic Period to the 17th century A.D.* Balylferriter. Oidhreacht Chorca Dhuibhne.
- Decker, M. 2001 Food for an empire: wine and oil production in North Syria. In S. Kingsley and M. Decker (eds), *Economy and exchange in the east Mediterranean during late antiquity. Proceedings of a Conference at Somerville College, Oxford, 29th May, 1999*, 69–86. Oxford. Oxbow Books.

- Delamain, P. 1889 Le Cimetière Merovingien d'Herpes. *Nouvelles Archéologiques et Correspondance. Revue Archéologique* **14** (July–December), 162–5.
- de Paor, L. 1975 *Inis Cealtra (Holy Island). Clare. No. 0009. R698850* (www.excavations.ie/Pages/Details.php?Year=&County=Clare&id=5606, last accessed 4 December 2009).
- de Paor, L. 1978 *Inis Cealtra (Holy Island)*. In T.G. Delaney (ed.), *Excavations 1975–1976: summary accounts of archaeological excavation in Ireland, no. 9*, 8–9. Belfast. HMSO.
- Demesticha, S. 2003 Amphora production on Cyprus during the Late Roman period. *Actes de VIIème congrès international sur la céramique médiévale en Méditerranée. Thessaloniki, 11–16th October 1999*. Athènes. Ministère de la Culture, 469–76.
- Demesticha, S. and Michaelides, D. 2001 The excavation of a Late Roman 1 amphora kiln in Paphos. In E. Villeneuve and P.M. Watson (eds), *La céramique Byzantine et proto-islamique en Syrie-Jordanie (IVe–VIIIe siècles apr. H.-C.)*. *Actes du colloque tenu à Amman. Institut Français d'Archéologie du Proche-Orient. Bibliothèque Archéologique et Historique* **159**, 289–96. IFAPO. Beirut.
- Dion, R. 1959 *Histoire de la Vigne et du Vin en France des Origines au XIXe siècle*. Paris. Flammarion.
- Doehard, R. 1978 *The Early Middle Ages in the West: economy and society*. Amsterdam. North-Holland Pub. Co.
- Doherty, C. 1980 Exchange and trade in early medieval Ireland. *Journal of the Royal Society of Antiquaries of Ireland* **110**, 67–89.
- Doherty, C. 2005 Kingship in early Ireland. In E. Bhreathnach (ed.), *The kingship and landscape of Tara*, 3–31. Dublin. Four Courts for the Discovery Programme.
- Donner, H. 1992 *The Mosaic Map of Madaba. An introductory guide*. Kampen, The Netherlands. Kok Pharos Publishing House.
- Doyle, I.W. 1996 *Imported Mediterranean pottery in the early medieval Ireland (A and B wares)*. Unpublished MA Thesis, University College Cork.
- Doyle, I.W. 1998 The early medieval activity at Dalkey Island, Co. Dublin: a reassessment. *Journal of Irish Archaeology* **9**, 89–103.
- Doyle, I.W. 1999 A 'ceramic platter' of Mediterranean origin from the ringfort at Garranes, Co. Cork. *Journal of the Cork Historical and Archaeological Society* **104**, 69–76.
- Dunbabin, K.M.D. 1999 *Mosaics of the Greek and Roman world*. Cambridge. Cambridge University Press.
- Edwards, N. 2004 *The archaeology of early medieval Ireland*. London. Routledge.
- Edwards, N. 2005 The archaeology of early medieval Ireland, c. 400–1169: settlement and economy. In D. Ó Cróinín (ed.), *A new history of Ireland 1: prehistoric and early Ireland*, 235–300. Oxford. Oxford University Press.
- Empereur, J.-Y. and Picon, M. 1989 Les régions de production d'amphores imperiales en Méditerranée orientale. *Amphores romaines et histoire économique: dix ans de recherche. Actes du colloque de Sienne (22–24 mai 1986). Collection de l'École Française de Rome* **114**, 223–48.
- Evans, J. 2008 The Roman pottery from the rath of the synods. Appendix G. In E. Grogan (ed.), *The rath of the synods, Tara, Co. Meath: excavations by Seán*

- P. Ó Ríordáin*, 123–6. University College Dublin (UCD) Archaeological Monographs. Dublin. UCD Press.
- Fanning, T. 1974 *Reask, Kerry. No. 0018. Q365043*. (www.excavations.ie/Pages/Details.php?Year=&County=Kerry&id=5555, last accessed 4 December 2009).
- Fanning, T. 1978 *Reask*. In Delaney (ed.), *Excavations 1975–1976*, no. 21, 12–13.
- Fanning, T. 1981 Excavations of an early Christian cemetery and settlement at Reask, Co. Kerry. *Proceedings of the Royal Irish Academy* **81C**, 67–172.
- Finkelstein, I. 1979 The Holy Land in the *Tabula Peutingeriana*: an historical-geographical approach. *Palestine Exploration Quarterly* **111**, 27–34.
- Fredengren, C. 2002 *Crannogs: a study of people's interaction with lakes, with particular reference to Lough Gara in the north-west of Ireland*. Bray. Wordwell.
- Fulford, M. 1989 Byzantium and Britain: a Mediterranean perspective. *Medieval Archaeology* **33**, 1–6.
- Gaimster, D.R.M., Margeson, S. and Barry, T. 1989 Medieval Britain and Ireland in 1988. *Medieval Archaeology* **33**, 161–241.
- Gibbons, E. 1995 'Cathair Fionnúrach', Ballnavenooraigh. In I. Bennett (ed.), *Excavations 1994: summary accounts of archaeological excavation in Ireland*, no. 116, 42–3. Bray. Wordwell.
- Gibbons, E. 1998 'Cathair Fionnúrach', Ballnavenooraigh. In I. Bennett (ed.), *Excavations 1997: summary accounts of archaeological excavation in Ireland*, no. 228, 80–1. Bray. Wordwell.
- Gorham, D.L. 2000 Grapes, wine, and olives: commodities and other cargo of the Bozburun Byzantine shipwreck. *Institute of Nautical Archaeology Quarterly* **27**(1), 11–17.
- Gould, R.A. 2000 *Archaeology and the social history of ships*. Cambridge. Cambridge University Press.
- Gowen, M. 1988 *Colp West, Meath. No. 51. 0122746*. (www.excavations.ie/Pages/Details.php?Year=&County=Meath&id=3562, last accessed 04 December 2009).
- Gowen, M. 1990 Gracedieu. In I. Bennett (ed.), *Excavations 1989: summary accounts of archaeological excavation in Ireland*, no. 262, 228. Bray. Wordwell.
- Grogan, E. (with contributions by Velzian-Donaghy, C. and Caufield, S.) 2008 *The rath of the synods, Tara, Co. Meath: excavations by Seán P. Ó Ríordáin*. UCD Archaeological Monographs. Dublin. UCD Press.
- Guido, M. 1978 *The glass beads of the Prehistoric and Roman Periods in Britain and Ireland*. Reports of the Research Committee of the Society of Antiquaries of London no. XXXV. London. The Society of Antiquaries of London.
- Halpin, A. and Newman, C. 2006 *Ireland: an Oxford archaeological guide to site from earliest times to AD 1600*. Oxford Archaeological Guides. Oxford. Oxford University Press.
- Hayes, J. 1980 *Supplement to late Roman pottery*. London. The British School at Rome.
- Hayes, J.W. 1972 *Late Roman pottery*. London. The British School at Rome.

- Hayes, J.W. 2008 *The Athenian Agora xxxii. Roman pottery fine-ware imports*. Princeton. The American School of Classical Studies at Athens.
- Hillgarth, J.N. 1961–3 Visigothic Spain and Early Christian Ireland. *Proceedings of the Royal Irish Academy* **62C**, 167–94.
- Hodkinson, B. 1994 Excavations at Cormac’s Chapel, Cashel, 1992 and 1993: a preliminary statement. *Journal of the Tipperary Historical Society* **7**, 167–74.
- Hollinrake, N. 2007 Dark Age traffic on the Bristol Channel, UK. *The International Journal of Nautical Archaeology* **36**(2), 336–43.
- James, E. 1982 Ireland and Western Gaul in the Merovingian Period. In D. Whitelock, R. McKitterick and D.N. Dumville (eds), *Ireland and early medieval Europe: studies in memory of Kathleen Hughes*, 362–86. Cambridge. Cambridge University Press.
- Karagiorgou, O. 2001 LR2: a container for the military annona on the Danubian Border? In S. Kingsley and M. Decker (eds), *Economy and exchange in the east Mediterranean during late antiquity. Proceedings of a Conference at Somerville College, Oxford, 29th May, 1999*, 129–66. Oxford. Oxbow Books.
- Keay, S. 1984 *Late Roman amphorae in the western Mediterranean. A typology and economic study: the Catalan evidence*. Part I and II. Bar International Series 196. Oxford. Archaeopress.
- Kelly, A. 2009 *An African Red Slip sherd from Kilree 3 (AR093, E3643), County Kilkenny*. Pottery Report for Irish Archaeological Consultancy Ltd. submitted on behalf of the National Roads Authority. 9/N10 Rathclogh to Powers-town. Unpublished manuscript, Irish Archaeological Consultancy Ltd.
- Kelly, E. 1978 Randalstown. In Delaney (ed.), *Excavations 1975–76*, no. 32, 17.
- Kelly, F. 1988 *A guide to early Irish law*. Early Irish Law Series 3. Dublin. Institute for Advanced Studies.
- Lachiver, M. 1988 *Vins, vignes et vigneron : histoire du vignoble français*. Paris. Fayard.
- Laing, L. 2006 *The archaeology of late Celtic Britain and Ireland c. 400–1200 AD*. Cambridge. Cambridge University Press.
- Lennon, A.-M. 2004 *Blanchfieldsland, Kilkenny. No. 0868. 252377 155958. 04E0661* (www.excavations.ie/Pages/Details.php?Year=&County=Kilkenny&id=11793, last accessed 04 December 2009).
- Liversage, G.D. 1968 Excavations at Dalkey Island, Co. Dublin, 1956–59. *Proceedings of the Royal Irish Academy* **66C**, 53–233.
- Lydon, J. 1998 *The making of Ireland — from ancient times to the present*. London. Routledge.
- McCormick, M. 2001 *Origins of the European economy: communications and commerce AD 300–900*. Cambridge. Cambridge University Press.
- McNamara, M. 2000 *The Psalms in the early Irish church*. Sheffield. Sheffield Academic Press Ltd.
- Mac Shamhráin, A. and Byrne, P. 2005 Kings named in *Baile Chuinn Chétchathaig* and the Airgíalla Charter Poem. In E. Bhreathnach (ed.), *The kingship and landscape of Tara*, 159–225. Dublin. Four Courts Press.
- Moore, M. 1987 *Archaeological inventory of County Meath*. Dublin. Stationery Office.

- Moran, P.F. 1864 *Essays on the origin, doctrines, and discipline of the early Irish church*. Whitefish, MT. Kessinger Publishing.
- Mytum, H. 1992 *The origins of early Christian Ireland*. London. Routledge.
- Newman, C. 1997 *Tara. An archaeological survey*. Discovery Programme Monographs 2. Dublin. Royal Irish Academy.
- Newman, C. 1998 Reflections on the making of a ‘royal site’ in early Ireland. In R. Bradley (ed.), *The past in the past: the reuse of ancient monuments*. *World Archaeology* 30(1), 127–41.
- Norman, A.F. 2000 *Antioch as a centre of Hellenic culture as observed by Libanius*. Liverpool. Liverpool University Press.
- Ó Carragáin, T. 2003a A landscape converted: archaeology and Early Church organisation on Iveragh and Dingle, Ireland. In M. Carver (ed.), *The cross goes north. Processes of conversion in Northern Europe AD 300–1300*, 127–52. York. York Medieval Press.
- Ó Carragáin, T. 2003b The architectural setting of the cult of the relics. *Journal of the Royal Society of Antiquaries of Ireland* 133, 130–76.
- O’Brien, E. 1992 Pagan and Christian burial in Ireland during the first millennium AD. In N. Edwards and A. Lane (eds), *The early church in Wales and the west. Recent work in early Christian archaeology, history and place-names*. Oxford. Oxbow Books.
- O’Brien, E. 1993 Contacts between Ireland and Anglo–Saxon England in the seventh century. In W. Filmer-Sankey (ed.), *Anglo-Saxon studies in archaeology and history* 6, 93–102. Oxford. Oxford University Committee for Archaeology.
- O’Brien, E. 2009 Pagan or Christian? Burial in Ireland during the 5th–8th Centuries AD. In N. Edwards (ed.), *The archaeology of the early medieval Celtic churches*, 189–214. Leeds. Maney Publishing.
- O’Donnell, M.G. 1984 *An analysis of E Ware in Ireland*. Unpublished MA thesis, University College Cork.
- Ó Floinn, R. 1985 *Lurgoe (Derrynaflan), Tipperary. No. 53. S108490*. (www.excavations.ie/Pages/Details.php?Year=&County=Tipperary&id=3767, last accessed 04 December 2009).
- Ó Floinn, R. 1987 *Lurgoe (Derrynaflan), Tipperary. No. 44. S108490*. (www.excavations.ie/Pages/Details.php?Year=&County=Tipperary&id=3623, last accessed 04 December 2009).
- O’Hara, R. 2008 From pagan to Christian in an early medieval cemetery. *Colliers-town 1. Medieval Archaeology* 52, 367–73.
- O’Kelly, M.J. 1962–4 Two ring-forts at Garryduff, Co. Cork. *Proceedings of the Royal Irish Academy* 63C, 17–125.
- O’Kelly, M.J. 1989 *Early Ireland: an introduction*. Cambridge. Cambridge University Press
- Ó Ríordáin, S.P. 1942 Excavation of a large earthen ring-fort, Garranes, Co. Cork. *Proceedings of the Royal Irish Academy* 47C, 77–150.
- Ó Ríordáin, S.P. 1947 Roman material in Ireland. *Proceedings of the Royal Irish Academy* 51C, 35–82.
- Ó Ríordáin, S.P. and Hartnett, J.P. 1943 The excavation of Ballycatteen Fort, Co. Cork. *Proceedings of the Royal Irish Academy* 49C, 1–43.

- O'Sullivan, A. 1998 *The archaeology of lake settlement in Ireland*. Dublin. Royal Irish Academy.
- O'Sullivan, A. and Sheehan, J. 1996 *The Iveragh Peninsula: an archaeological survey of south Kerry*. Cork. Cork University Press.
- Peacock, D.P.S. and Williams, D.F. 1986 *Amphorae and the Roman economy. An introductory guide*. London. Longman (Archaeology Series).
- Piéri, D. 2005 *Le commerce du vin oriental à l'époque Byzantine*. Beirut. Bibliothèque d'Archéologie et d'Histoire. Institut Français du Proche Orient.
- Purcell, A. 2003 *Kilgrovan, Waterford. No. 1882. 23090. 09314. SMR31:45. 03E1743*. (www.excavations.ie/Pages/Details.php?Year=&County=Waterford&id=10710, last accessed 04 December 2009).
- Raftery, J. 1965 Ex Oriente... *Journal of the Royal Society of Antiquaries of Ireland* **95**, 193–204.
- Ralegh Radford, C.A. 1956 Imported pottery found at Tintagel, Cornwall. An aspect of British trade with the Mediterranean in the Early Christian Period. In D.B. Harden (ed.), *Dark-age Britain (Studies presented to E.T. Leeds with a bibliography of his works)*, 59–70. London. Methuen.
- Reynolds, P. 1995 *Trade in the western Mediterranean AD 400–700*. British Archaeological Reports (International Series) 604. Oxford. British Archaeological Reports.
- Richter, M. 1999 *Ireland and her neighbours in the seventh century*. Dublin. Four Courts Press.
- Sharpe, R. (trans.) 1995 *Life of St. Columba by Adamnán of Iona*. London. Penguin.
- Sheehan, J. 1995 Caherlihillan. In I. Bennett (ed.), *Excavations 1994: summary accounts of archaeological excavation in Ireland*, no. 118, 43–4. Bray. Wordwell.
- Sheehan, J. 1999 *Caherlehillan, Kerry. No. 326. V572835. SMR 70:43. 93E0073ext*. (www.excavations.ie/Pages/Details.php?Year=&County=Kerry&id=325, last accessed 04 December 2009).
- Sheehan, J. 2004 Caherlehillan. In I. Bennett (ed.), *Excavations 2002: summary accounts of archaeological excavation in Ireland*, no. 0771, 211–12. Bray. Wordwell.
- Talbert, R.J.A. 2000 *Map-by-map directory to accompany Barrington Atlas of the Greek and Roman world*. Princeton, N.J. Princeton University Press.
- Thomas, C. 1956 *Excavations at Gwithian, Cornwall, 1956. Appendix to Proceedings of the West Cornwall Field Club, I, 1953–1956*. Cornwall. Redruth.
- Thomas, C. 1959 Imported pottery in dark-age Western Britain. *Medieval Archaeology* **3**, 89–111.
- Thomas, C. 1973 Irish colonists in south-west Britain. *World Archaeology* **5**(1), 5–13.
- Thomas, C. 1976 Imported late-Roman Mediterranean pottery in Ireland and western Britain: Chronologies and Implications. *Proceedings of the Royal Irish Academy* **76**, 245–55.

- Thomas, C. 1981 *A provisional list of imported pottery in post-Roman western Britain and Ireland*. Institute of Cornish Studies Special Report 7. Cornwall. Redruth.
- Thomas, C. 1988 The context of Tintagel: a new model for the diffusion of post-Roman Mediterranean Imports. *Cornish Archaeology* 27, 7–25.
- Thomas, C. 1990 ‘Gallici Nautae de Galliarum Provinciis’ — A sixth/seventh century trade with Gaul, reconsidered. *Medieval Archaeology* 34, 1–26.
- Thomas, C. 1994 *And shall these mute stones speak? Post-Roman inscriptions in western Britain*. Cardiff. University of Wales Press.
- Thomas, R. 2008 Roman wine traders on the Red Sea: the evidence from amphora stoppers. *Abstracts of the Annual Meeting of the American Schools of Oriental Research*, 99.
- Toner, G. 2000 Identifying Ptolemy’s Irish places and tribes. In D.N. Parsons and P. Sims-Williams (eds), *Ptolemy: towards a linguistic atlas of the earliest Celtic place-names of Europe* (Papers from a workshop, sponsored by the British Academy, in the Department of Welsh, University of Wales, Aberystwyth, 11–22 April 1999), 73–82. Aberystwyth. CMCS Publications.
- Turner, S. 2003 The Christian landscape of early medieval Cornwall. In Carver (ed.), *The cross goes north*, 171–94.
- University of Southampton 2005 *Roman amphorae: a digital resource* (http://ads.ahds.ac.uk/catalogue/archive/amphora_ahrb_2005/index.cfm?CFID=3352182&CFTOKEN=90636930, last accessed 19 November 2009).
- Unwin, P.T.H. 1996 *Wine and the vine: an historical geography of viticulture and the wine trade*. London. Routledge.
- Vogt, C. 2000 The early Byzantine pottery. In P.G. Themelis (ed.), *Πρωτοβυζαντινή Ελεύθερνα. Τομέας 1*, 39–199. Rethymnon. University of Crete.
- Vroom, J. 2004 Late antique pottery, settlement and trade in the east Mediterranean: a preliminary comparison of ceramics from Limyra (Lycia) and Boeotia. In W. Bowden, L. Lavan and C. Machado (eds), *Recent research on the late antique countryside*, 281–334. Late Antique Archaeology 2. Leiden. Brill.
- Waagé, F.O. 1933 The American excavations in the Athenian agora, first report: the Roman and Byzantine pottery. *Hesperia* ii, 279–328.
- Waagé, F.O. 1948 Hellenistic and Roman tableware of North Syria. *Antioch-on-the-Orontes* iv(i), Ceramics and Islamic Coins 1–60, plates I–XI.
- Wailles, B. 1982 The Irish ‘royal sites’ in history and archaeology. *Cambridge Medieval Celtic Studies* 3, 1–29.
- Wailles, B. 1995 A case study of heterarchy in complex societies: early medieval Ireland and its archeological implications. *Archeological Papers of the American Anthropological Association* 6(1), 55–69.
- Warner, R.B. 1973 The excavations at Clogher and their context. *Clogher Record* 8, 5–12.
- Warner, R.B. 1979 The Clogher Yellow Layer. *Medieval Ceramics* 3, 37–40.
- Warner, R.B. 1988 The archaeology of early historic Irish kingship. In S.T. Driscoll and M.R. Nieke (eds), *Power and politics in early medieval Britain and Ireland*, 47–68. Edinburgh. Edinburgh University Press.

- Warner, R.B. 2000 Clogher: an archaeological window on early medieval Tyrone and mid Ulster. In C. Dillon and H.A. Jefferies (eds), *Tyrone. History and society: interdisciplinary essays on the history of an Irish county*, 39–54. Irish County History series 14. Dublin. Geography Publications.
- White, M.L. 1990 *The social origins of Christian architecture*. Volume I: *Building God's house in the Roman world: architectural adaptation among pagans, Jews, and Christians* (2 vols). Baltimore. Trinity Press.
- White, M.L. 2000 Architecture: the first five centuries. In P.F. Esler (ed.), *The early Christian world* (2 vols), vol. II, 693–746. London. Routledge.
- Wickham, C. 2006 *Framing the early Middle Ages. Europe and the Mediterranean, 400–800*. Oxford. Oxford University Press.
- Wilkes, J. 2007 Sailing to the Britannic Isles: some Mediterranean perspectives on the remote northwest from the sixth century BC to the seventh century AD. In C. Godsen, H. Hamerow, P. de Jersey and G. Lock (eds), *Communities and connections: essays in honour of Barry Cunliffe*, 1–14. Oxford. Oxford University Press.
- Williams, D. 2005 Late Roman amphora 1: a study of diversification. In M. Berg Briese and L.E. Vaag (eds), *Trade relations in the eastern Mediterranean from the Late Hellenistic Period to late antiquity: the ceramic evidence*. Halicarnassian Studies vol. III. Denmark. Univeristy Press of Southern Denmark.
- Williams, D. and Carreras, C. 1995 North African amphorae in Roman Britain: a re-appraisal. *Britannia* **26**, 231–52.
- Wooding, J.M. 2002 Trade as a factor in the transmission of texts between Ireland and the Continent in the sixth and seventh centuries. In P. Ní Chatháin and M. Richter (eds), *Ireland and Europe in the early Middle Ages: text and transmission*, 14–26. Dublin. Four Courts Press.
- Woods, D. 2002 Arculf's luggage: the sources for Adomnán's 'De locis Sanctis'. *Ériu* **52**, 25–52.
- Zimmer, H. 1909–10 *Über direkte Handelsverbindungen Westgalliens mit Irland im Altertum und frühen Mittelalter*. Proceedings of the Prussian Academy 1909. Berlin. Königlich Preußischen Akademie.

Appendix: Collierstown 1 pottery

A008/015:69:2
(#81)

Diameter: 30cm

Description: Vertical thickened rim, concave on the outer face, with a pronounced overhang at the bottom. Rouletting occurs on the outer face of the rim.

Context: From fill of ditch C409—Phase 2C

Form: PRSW Form3/Late Roman C/Phocaean Form 3/A ware

Fabric: The core fabric is a medium–fine grained sand with inclusions of feldspar, calcite, claystones and glassy quartz. Both the fabric and slip are red orange (2.5yr 6/8) and the slip has fused with the body clay (although the surface of the sherd is very worn). The slip survives in the interior and along the grooves of the rouletting.

Date: Late fifth–early sixth century AD

A008/015:69:1
(#80)

Diameter: 26cm

Description: Everted broken rim of flared bowl with slight offset between rim and body. A darker wash is visible on the exterior of the sherd (although the surface is worn).

Context: From fill of ditch C409—Phase 2C

Form: Doyle identified the sherd as E ware (*pers. comm.*) and, judging from its form and fabric, it is clearly not an import from the Mediterranean.

Fabric: Medium coarse, buff ware, hard fired with melt holes. Feldspar paste is identifiable in the fabric matrix, inclusions include large glassy quartz, claystones and chert.

Date: The sherd can be loosely dated to the late fifth or early sixth century AD on the basis of its common context with PRSW sherd A008/015:69:2 (#81).

Bii wares

Nine body sherds can be classified as Bii ware and certainly five, if not potentially all, of the amphorae sherds represent the same pot (thereby all nine representing one amphora).

Of the Bii ware amphorae, A008/015:247:1 (**Phase 2E**) joins with A008/015:4:79 (**topsoil**) while A008/015:207:1 (**Phase 2C**) also joins with A008/015:207:3 (**Phase 2C**). The prominent ribs on A008/015:247:1 (**Phase 2E**) contrast with the faint ribbing on joining sherd A008/015:4:79 (**topsoil**) and point to a difference in deposition, subsequent to the initial breakage of the pot, a disparity, which would correspond with their separate stratigraphic contexts.

Bii ware amphorae sherds A008/015:247:1 (**Phase 2E**), A008/015:4:79 (**topsoil**), A008/015:207:1 (**Phase 2C**), A008/015:207:3 (**Phase 2C**) and probably A008/015:286:1 (**Phase 1A**), all definitely represent the same pot. Similarly, Bii ware amphorae sherds A008/015:379:2 (**Phase 3**), A008/015:456:1 (**Phase 4A**), A008/015:208:1 (**Phase 2C**), A008/015:267:1 (**Phase 3**) are so similar in fabric that it is highly probably, that they all represent the same vessel.

Due to the fact that both A ware/PRSW and Bii ware have been found in levels attributed to Phase 2C (stratigraphic information courtesy of Rob O'Hara of ACS Ltd), we can confidently date this phase to the late fifth and early sixth centuries AD.

Find number: A008/015:247:1 (joins with A008/015:4:79)

Diameter: Unknown

Description: Ribbed body sherd, with a wall thickness of 6mm. The exterior surface carries four ribs set at 7mm apart. The ribs are created during the throwing process while the clay is wet.

Context: Fill of ditch C196—Phase 2E

Form: Bii ware body sherd

Fabric: Buff plain ware. 5yr 7/6. Medium coarse sand, grainy texture, with inclusions of quartz, chert, claystone, limestone and occasional serpentine.

Date: Bii ware is a ribbed amphora type from the eastern Mediterranean and is roughly contemporary with PRSW (i.e. late fifth and early sixth century).

Find number: A008/015:4:79 (joins with A008/015:247:1)

Diameter: Unknown

Description: Body sherd with faint ribs, with a wall thickness of 6mm. The exterior surface carries two faint ribs set 7mm apart.

Context: From topsoil

Form: Bii ware body sherd

Fabric: Buff plain ware. 5yr 7/6. Medium coarse sand, grainy texture, with inclusions of quartz, chert, claystone, limestone and occasional serpentine.

Date: Bii ware is a ribbed amphora type from the eastern Mediterranean and is roughly contemporary with PRSW (i.e. late fifth and early sixth century).

Find number: A008/015:207:1 (joins with A008/015:207:3)

Diameter: Unknown

Description: Body sherd with ribs on the exterior surface, with a wall thickness of 6mm.

Context: From dump charcoal layer in ditch C261—Phase 2C

Form: Bii ware body sherd

Fabric: Buff plain ware. 5yr 7/6. Medium coarse sand, grainy texture, with inclusions of quartz, chert, claystone, limestone and occasional serpentine.

Date: Bii ware is a ribbed amphora type from the eastern Mediterranean and is roughly contemporary with PRSW (i.e. late fifth and early sixth century).

Find number: A008/015:207:3 (joining with A008/015:207:1)

Diameter: Unknown

Description: Body sherd with ribs on the exterior surface, with a wall thickness of 6mm

Context: From dump charcoal layer in ditch C261—Phase 2C

Form: Bii ware body sherd

Fabric: Buff plain ware. 5yr 7/6. Medium coarse sand, grainy texture, with inclusions of quartz, chert, claystone, limestone and occasional serpentine.

Date: Bii ware is a ribbed amphora type from the eastern Mediterranean and is roughly contemporary with PRSW (i.e. late fifth and early sixth century).

Find number: A008/015:286:1

Diameter: Unknown

Description: Ribbed body sherd, wall thickness 6mm. The exterior surface carries three ribs set at *c.* 8mm apart.

Context: A008/015:286:1—fill of ditch C283—Phase 1A

Form: Bii ware body sherd (very similar to A008/015:247:1)

Fabric: Buff plain ware. 5yr 7/6. Medium coarse sand, grainy texture, with inclusions of quartz, chert, claystone, limestone and occasional serpentine.

Date: Bii ware is a ribbed amphora type from the eastern Mediterranean and is roughly contemporary with PRSW (i.e. late fifth and early sixth century).

Find number: A008/015:379:2

Diameter: Unknown

Description: Plain body sherd, with a wall thickness of 8mm

Context: Fill of ditch C370—Phase 3

Form: Bii ware body sherd

Fabric: Buff plain ware. 5yr 7/6. Medium coarse sand, grainy texture, with inclusions of quartz, chert, claystone, limestone and occasional serpentine. Very similar to the fabric of the ribbed sherds A008/015:247:1, A008/015:4:79, A008/015:286:1, A008/015:207:1 and A008/015:207:3.

Date: Bii ware is a ribbed amphora type from the eastern Mediterranean and is roughly contemporary with PRSW (i.e. late fifth and early sixth century).

Find number: A008/015:456:1

Diameter: Unknown

Description: Plain body sherd, with a wall thickness of 4mm (very similar fabric to A008/015:208:1)

Context: Fill of ditch C360—Phase 4A

Form: Bii ware body sherd

Fabric: Buff plain ware. 5yr 7/6. Medium coarse sand, grainy texture, with inclusions of quartz, chert, claystone, limestone and occasional serpentine. Potentially the same pot as A008/015:208:1.

Date: Bii ware is a ribbed amphora type from the eastern Mediterranean and is roughly contemporary with PRSW (i.e. late fifth and early sixth century).

Find number: A008/015:208:1

Diameter: Unknown

Description: Plain body sherd, with a wall thickness of 5mm. Very similar fabric to A008/015:456:1

Context: Fill of ditch C261—Phase 2C

Form: Bii ware body sherd

Fabric: Buff plain ware. 5yr 7/6. Medium coarse sand, grainy texture, with inclusions of quartz, chert, claystone, limestone and occasional serpentine.

Date: Bii ware is a ribbed amphora type from the eastern Mediterranean and is roughly contemporary with PRSW (i.e. late fifth and early sixth century).

Find number: A008/015:267:1

Diameter: Unknown

Description: Body sherd with faint ridges, with a wall thickness of 5mm. The exterior surface carries three very faint shallow ribs set at 7mm apart.

Context: fill of grave cut C266—Phase 3

Form: Bii ware body sherd (very similar fabric to A008/015:456:1)

Fabric: Buff plain ware. 5yr 7/6. Soft medium coarse sand, grainy texture, with inclusions of quartz, chert, claystone, limestone and occasional serpentine.

Date: Bii ware is a ribbed amphora type from the eastern Mediterranean and is roughly contemporary with PRSW (i.e. late fifth and early sixth century).