Communication and Commerce along the Western Sealanes 400-800 AD

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List of Illustrations

Abbreviations

AA	*Auctores Antiquissimi.*
BAR	British Archaeological Reports.
BBCS	*Bulletin of the Board of Celtic Studies.*
CBA	Council for British Archaeology.
CEDRBI	*Councils and Ecclesiastical Documents Relating to the Britain and Ireland.*
CMCS	*Cambridge Medieval Celtic Studies.*
ECMW	*Early Christian Monuments of Wales.*
IJNA	*International Journal of Nautical Archaeology.*
LCL	Loeb Classical Library.
MGH	*Monumenta Germaniae Historica.*
P. L.	*Patrilogia Latina.*
PRIA	*Proceedings of the Royal Irish Academy.*
JRSAI	*Journal of the Royal Society of Antiquaries of Ireland.*
PSAS	*Proceedings of the Society of Antiquaries Scotland.*
SLH	*Scriptores Latini Hibernici.*
SS rer. Merov.	*Scriptores rerum Merovingicarum.*
TDGNHAS	*Transactions of the Dumfriesshire and Galloway Natural History and Archaeological Society*

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Finally over more than a decade of study my first debt is to my family and close friends for support and affection - most of all to my parents Deirdre and Ted Wooding and my brother Robert.

Introduction

This dissertation will examine evidence for communication and commerce between western Britain, Scotland, Ireland[1], their Continental and British neighbours, and the Mediterranean, in the period 400-800 AD. Parts of the terrain and subject of this enquiry have been covered in earlier, well-known studies by Heinrich Zimmer, Kuno Meyer and Joseph Vendryes, all of whom explored the evidence for 'direct' travel between Ireland and Gaul in this period[2], and by O. G. S. Crawford and E. G. Bowen, who examined the early medieval evidence in wide-ranging studies of what they termed the 'western seaways'[3]. Their sources and methods have figured more recently in studies of the 'Irish Sea Culture-Province' hypothesis[4] and, most significantly, of the

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[1] These terms are used in the modern sense, without implying any similar national boundaries in the period 400-800 AD.

[2] The seminal studies of these writers are: H. Zimmer, 'Über direkte Handelsverbindungen Westgalliens mit Irland im Altertum und frühen Mittelalter', *Sitzungsberichte der Königlich Akademie der Wissenschaften* (1909): 1) 'Zeugnisse für Westgallisch-irischen Handelsverkehr von Giraldus Cambrensis (a. 1186) bis Tacitus (a. 98)', pp. 363-400; 2) 'Der Weinhandel Westgalliens nach Irland im I. bis 7 Jahrhundert n. Chr. und sein Niederschlag in irischer Sage und Sprache', pp. 430-76; 3) 'Galliens Anteil an Irland Christianisierung im 4/5 Jahrhundert und altirischer Bildung A: Allgemeine Gesichtspunkte, B: Einzelheiten', pp. 543-613 (1910); 4) 'Der Gascogner Virgilius Maro Grammaticus in Irland', pp. 1031-1098; 5) 'Westeuropaischirischer Handelsverkehr im ersten Jahrhundert v. Chr. ', pp. 1098-1119. K. Meyer, *Learning in Ireland in the Fifth Century and the Transmission of Letters*, Dublin, 1913; J. Vendryes, 'Les Vins de la Gaule in Irlande et l'expression *Fín Aicneta'*, *Revue Celtique* 38 (1920), pp. 19-24.

[3] H. J. Fleure and J. E. Roberts, 'Archaeological Problems of the West Coast of Britain', *Archaeologia Cambrensis* 70 (1915), pp. 405-20; O. G. S. Crawford, 'Western Seaways', in D. Buxton, ed., *Custom is King: Studies in Honour of R. R. Marett*, London, 1936, pp. 181-200; E. G. Bowen, *Saints, Seaways and Settlements in the Celtic Lands*, University of Wales Press, Cardiff, 1969. For further bibliography on all these see discussion in Chapter One.

[4] A popular theme for colloquia in the 'sixties and 'seventies (and, occasionally, still) see for example, D. Moore, ed., *The Irish Sea Province in Archaeology and History*, Cambrian Archaeological Association, Cardiff, 1969; C. Thomas , ed., *The Iron Age in the Irish Sea Province* (CBA Research Report 9), London, 1972; also such individual studies as R. C. Shaw, 'Prolegomena to a re-appraisal of the Early Christianity of the Isle of Man Relative to the Irish Sea Province', *Proceedings of the Isle of Man Natural History and Antiquarian Society* 7 (1967), pp. 7ff. The value of this model was not accepted widely even at the time and has subsequently fallen out of fashion: see H. N. Savory, Review of Thomas, *The Iron Age in the Irish Sea Province, Archaeologia Cambrensis* 122 (1973), pp. 187-9; M. Ryan, Review of Bowen,*Britain and the Western Seaways, Studia Hibernica* 13 (1973), pp. 198-200; J. Graham-Campbell, ed., *Viking Treasure from the North West: The Cuerdale Hoard in its Context (Proceedings of the Vikings in the Irish Sea Province Conference)*, Liverpool, 1992.

contacts indicated by imported ceramics identified on western British and Irish sites since the 1940s[5].

Despite the considerable literature arising from these previous researches, however, a separate historical study integrating archaeological and textual sources to answer the basic question of who was coming and going from the western shores of Britain and Ireland in the period 400-800 AD, and by what means, is lacking. It has to a large degree been taken for granted that maritime exchange would have constantly flourished along the western seaboard, to be invoked whenever an explanation was required for the movement of ideas or objects between regions. The studies of Zimmer and Bowen, in particular, sought to identify communication models as the background to theses concerning the spread of culture to and from early medieval Britain and Ireland. Other investigations have discussed aspects of the subject with reference to Zimmer, sometimes adding new material in the case of Crawford, James and Thomas[6], but in other cases, such as studies by Boissonade, Vendryes and Lewis[7], chiefly repeating the core of references

[5] Identified in a series of studies commencing with C. A. R. Radford, 'Imported Pottery found at Tintagel, Cornwall', in D. B. Harden, ed., *Dark Age Britain: Studies in Memory of E. T. Leeds*, London, 1956, pp. 59-70. Further discussion in the works of C. Thomas: 'Some Post-Roman Imported Sherds in Cornwall', *Proceedings of the West Cornwall Field Club* 2 (1957), pp. 15-22; 'Imported Pottery in Dark Age Western Britain', *Medieval Archaeology* 3 (1959), pp. 89-111; 'Imported Post-Roman Mediterranean Pottery in Ireland and Western Britain, Chronologies and Implications', PRIA 76C (1976), pp. 245-55. Most recent full catalogue in C. Thomas, *A Provisional List of Imported Pottery in Post-Roman Western Britain and Ireland* (Institute of Cornish Studies Special Report 7), Redruth, 1981. Further recent discussion in C. Thomas, 'The Context of Tintagel: A New Model for the Diffusion of Post-Roman Imports', *Cornish Archaeology* 27 (1988), pp. 7-25 and *idem.*, 'Gallic *Nautae de Galliarum Provinciis* - A Sixth/Seventh Century Trade with Gaul Reconsidered', *Medieval Archaeology* 34 (1990), pp. 1-26.

[6] Crawford, 'The Western Seaways', p. 200; E. James, 'Ireland and Western Gaul in the Merovingian Period', in D. Whitelock, *et al.*, eds., *Ireland in Early Medieval Europe: Studies in Memory of Kathleen Hughes*, Cambridge University Press, 1982, pp. 362-86 is a very good critical reassessment of Zimmer's thesis; Thomas, 'Imported Post-Roman Pottery', pp. 252-3, discusses Zimmer less critically with reference to the important evidence of imported ceramics.

[7] Zimmer's sources have been cited and discussed on several occasions without significant expansion: P. Boissonade, 'Les Relations entre l'Aquitaine, le Poitou, et l'Irlande du Ve au IXe Siècle', *Bulletin de la Société des Antiquaires de l'Ouest* 4 (1916-18), pp. 181-202; Vendryes, 'Les Vins', pp. 19-24; A. R. Lewis, 'Le Commerce et la Navigation sur les Côtes Atlantiques de la Gaule du Ve et XIIIe Siècle', *Le Moyen Age* 59 (1953), pp. 249-98.

assembled by Zimmer. Accordingly, the desire of the cultural theorists to imagine constant trading links as a background to cultural exchange has been carried over into studies of economic history where, for example, Zimmer's 'wine trade' model, a theory particular to his thesis of the spread of classical culture to Ireland, has cast a misleading spell over most subsequent studies, both historical and archaeological[8], and has deflected any questioning of the causal relationship between commerce and the travels of cultural practitioners such as scholars who travel on trading ships. In some cases, for example where monastic links may be involved in the formation of commercial links, possibly crucial relationships are obscured[9].

This dissertation will defend the assumption that there was exchange along the western sealanes[10] in the period 400-800 AD, but on a smaller scale and in a developing pattern which has so far only been vaguely observed. Direct maritime exchange between the Irish Sea zone and Gaul, for example, will be shown to be a development of the sixth, or perhaps even seventh, century with Ireland, contrary to Zimmer's viewpoint, only entering into direct exchange around the seventh. Western sealanes activity in the early middle ages will be shown to be increasingly separate from economic activity in Anglo-Saxon England, with overland exchange only rarely entering the picture[11]. It

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[8] Discussed in my paper 'Gaulish Artefacts in the Celtic West: Some Problems of Approach', in R. Hall, R. Hodges and H. Clarke, eds, *Exchange and Trade, Medieval Europe 1992, Pre-Printed Papers, Volume 5*, York, 1992, pp. 169-74.

[9] See pp. 236ff below. Also J. M. Wooding, 'Cargoes and Trade along the Western Seaboard of Britain, 400-800 AD', in K. R. Dark, ed., *External Contacts and the Economy of Celtic Britain 400-800 AD*, Woodbridge, 1992, forthcoming.

[10] To coin a new phrase, free from the 'maritime culture' overtones of 'sea*ways*': cf. 'folkways', 'culture ways' and other anthropological terms. 'Seaway' will be used in the specific maritime sense of 'in seaway', i. e. 'in motion at sea'. *Sealanes* better conveys the sense of navigating particular routes for exchange or regular travel.

[11] *Contra* Harden's interpretation of glass distributions on western sites as extensions of Anglo-Saxon distributions: D. B. Harden, 'Glass Vessels in Britain and Ireland AD 400-1000', in *idem*, ed., *Dark Age Britain*, London, 1956, pp. 132-70. Also noteworthy are various attempts to link ceramics on Anglo-Saxon sites with Irish Sea distributions: e.g. supposed finds of Mediterranean wares at Chester (Thomas, *A Provisional List*, p. 25); Souterrain ware at Southampton (R. Hodges, *The Hamwih Pottery: Local and Imported Wares from 30 Years' Excavations at Middle Saxon Southampton and their European Context* (CBA Research Report 37), London 1981, p.32 - now see J. R. Timby, 'The Middle Saxon Wares', in P.

will emerge that failures of method, with archaeologists and historians arguing in circular fashion from each others' work[12], have seen a consistent model of activity imposed on the period 400-800 at the expense of change from century to century, with the seventh century traffic between Ireland and Gaul in particular tending to overwhelm earlier links primarily focussed on Britain. The previous historiography, as much as the data, has coloured our interpretation of the sources and continues to require re-examination.

The choice of the period 400-800 AD seemed most appropriate for a doctoral dissertation. Though the period and geographical scope of the study are reasonably large, the quantity of evidence for actual communication and commerce is not overwhelming - one of the reasons why the historiography of the topic is so confused. It is vitally important that we now successfully distinguish phases of activity *within* the period 400-800, refining the rough grouping 'early christian' (often only distinguished as separate from 'Roman' and 'Viking') which hampers understanding of four centuries which saw considerable change[13]. In a subject where such sweeping comparative models are created as travels of 'the Megalithic saints'[14](!) more distinction of chronological phases would indeed seem desirable. With regard to the geographical scope of the study, the area taken in is defined by the sources. Where artefactual assemblages are shared between Scotland, Wales, Ireland, the Isle of Man, Gaul and Iberia, to narrow the scope to any one region or

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Andrews, ed., *Southampton Finds, Volume 1, The Coins and Pottery from Hamwic*, London, 1988, pp. 101-2) and E ware at Abercorn (C. Thomas, 'Abercorn and the *Provincia Pictorum'*, in R. Miket and C. Burgess, eds, *Between and Beyond the Walls, Essays on the Prehistory and History of North Britain Presented to George Jobey*, Edinburgh, 1984, p. 336).

[12] This is especially seen where ceramic evidence with the power to refine historical models is simply slotted into general models provided by history.

[13] For the importance of locating change to individual centuries in this period see the general discussion in J. M. Wooding, 'How Did Irish History Begin?', in *idem*, ed., *Old Myths: New Lights*, Brisbane, 1991, pp. 50-60, with discussion of earlier models such as presented in E. MacNeill, *Celtic Ireland*, Dublin, 1921; D. A. Binchy, 'The Passing of the Old Order', in B. Ó Cuív, ed., *The Impact of the Scandinavian Invasions on the Celtic-speaking Peoples*, Dublin, 1975, pp. 119-32; and F. J. Byrne, 'Tribes and Tribalism in Early Ireland', *Ériu* 22 (1971), pp. 153ff.

[14] Bowen, *Saints, Seaways*, pp. 79-80.

landmass would be to imply the existence of limits which did not obtain in the past. Irrelevant modern political boundaries too often circumscribe studies on Celtic topics and, moreover, one of the purposes of this study is to test the degree to which the sea may have been a primary unifying factor over long distances.

Why and when the sea was used in preference to the land will be seen to be central questions in the historiography of this topic. A crucial distinction will be made in this thesis between what will be termed 'overland' traffic and 'direct' maritime traffic. These terms require definition in the context of this study. 'Overland' routes are routes where land crossings are used in preference to a voyage entirely by sea. 'Overland' routes will thus often contain some crossing of water: either of channels and rivers; or even voyages along rivers. 'Direct' maritime routes are voyages where sea routes are used which pass around landmasses. The focus of attention will therefore be upon international and interregional communication and exchange, taking a critical view of methods and approaches to such study as much as making a substantive survey, to establish the economic and social contexts in which sea-travel is used. Like all dissertations it has gradually set its own limits. There is a great deal of circumstantial evidence which can be used to create models of local and redistributive exchange which does not find a place in a study which is primarily international in focus. We also need to make critical, not mechanical, use of such economic models from prehistoric archaeology as the drawing of simple links between consumption centres and the nearest resources[15], or the reading of settlement patterns in terms of a response to seaborne threats. The

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[15] Sensitively handled examples of this sort of study of catchment areas of resources can be seen in E. Campbell, 'Lesser Garth Cave', in N. Edwards and A. Lane, eds, *Early Medieval Settlements in Wales AD 400-1100*, Early Medieval Wales Research Group, Bangor and Cardiff, 1988, pp. 86-7; *idem*, 'A Cross-Marked Quern from Dunadd and Links Between Dunadd and Iona', *PSAS* 117 (1987), pp. 105-117. For critical comment L. Alcock, *Economy, Society and Warfare among the Britons and Saxons*, Cardiff, 1987, p. 83.

need to take account of evidence from which reasonably definite conclusions might be drawn has hence led to some selectivity in choice of subject matter. The gaps in the archaeological profile of western France, Portugal and Spain have led to somewhat slighter treatment of those regions. Some abundant archaeological and textual evidence has been mostly avoided for reasons of imprecise chronology, such as the evidence of sculpture, metalwork and the *vitae* of the Celtic 'maritime' saints. In a few cases it has been necessary to depend upon secondary literature to provide comparisons with models arising from the primary research. This is inevitable in a study of such breadth, but important if new data is to be worked into meaningful interpretations.

The framework for all present studies of the western sealanes is dependent upon the evidence of imported ceramics: the Mediterranean amphorae and dishes and the Gaulish classes 'D' and 'E'[16] as A. A. M. Duncan has critically emphasised in reviewing a recent work by Charles Thomas:

> Whether the sherds of class E ware will bear the weight of interpretation put upon them by him, or indeed by anyone else, may be a matter of some doubt, but Professor Thomas is absolutely right to make the attempt at a model which will explain the native, the late Roman, and the Mediterranean elements in Celtic civilisation after 400 AD[17].

The attention of the fieldwork for the present study has rightly focussed upon further refinement of the models provided by the ceramic finds upon which, as Duncan stresses, the final word is far from being said. Further research on artefactual grounds has fruitfully involved comparison between ceramics and the occurrence of other artefacts. In particular, it can be shown that ubiquitous imported artefacts on western British and Irish sites can be compared and grouped to establish separate floruits of importation so that chronological phases can be identified in the period 400-800. A study that is particularly

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16 See p. 2, n. 5 above.

17 A. A. M. Duncan, Review of C. Thomas, *Celtic Britain, Scottish Historical Review* 67 (1988), p. 70-1.

sensitive to the consumer and cargo context of the finds (including investigation of the types of ships that carried them) can also shed light upon the commercial impetus behind the traffic along the western sealanes, too long submerged under the trite label (invoking stereotypes of taste[18]) of the 'wine trade'[19]. We will also see, however, that the overwhelming usefulness of the long-distance imports to the archaeologist, for research into routes of sea travel and for establishing the chronology of sites, should not be confused with the actual economic significance of the traffic which brought them in, which was probably relatively small. Such contacts were probably *not* regular trading patterns which formed a crucial element of economy[20]. We will, accordingly, not replace the 'wine trade' model with a similarly obtrusive 'ceramic trade'.

The beginning point of my thesis was an interest in the way in which the Zimmer thesis and the 'western seaways' exerted an influence on early medieval studies, mostly in terms of vague references to the 'wine trade' or the 'saints and seaways', to the extent that their association with the study of imported ceramics from western Britain and Ireland has become ubiquitous - my interest in the latter arising from historical research into E ware as an undergraduate. It was clear that this was not ground which was as well-worked as might appear

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[18] E.g. Diodorus Siculus's account of Iron Age Celtic elites 'greedy for wine', *Historical Library* V.26 (ed. C. H. Oldfather, LCL, Harvard, 1939, Vol. 3, p. 166).

[19] Most recently reaffirmed by Thomas, 'Gallic *Nautae*', p. 16; and Alcock, *Economy*, pp. 89-90. Those who have accepted the 'wine trade' hypothesis wholesale include: Boissonade, 'Les Relations', pp. 181-202; Lewis, 'Le Commerce', pp. 249-98; Radford, 'Imported Pottery', p. 69; Thomas, 'Imported Post-Roman Pottery', p. 252; S. P. O'Riordan, 'Roman Material in Ireland', *PRIA* 51C (1947), pp. 35-82; Vendryes, 'Les Vins', pp. 19-24.

[20] *Contra* E. Campbell, 'The Archaeological Evidence for External Contacts: Imports, Trade and Economy in Celtic Britain AD 400-800, in K. R. Dark, ed., *External Contacts and the Economy of Celtic Britain, 400-800 AD*, Woodbridge, forthcoming, where he argues that the cessation of ceramic imports coincides with the decline of the prominence of the south-west British hillforts.

at first glance. The 'wine trade' and western seaways seemed to live mainly in the oral tradition and were more often reasserted as general truths than deconstructed. The imported ceramics and glass were the subject of a number of studies, mostly however following the lead of Thomas and Harden, and as Mytum has also recently noted[21] we are often left to infer an orthodoxy of opinion from the questions addressed by the critics of Thomas and Harden. These critics have perhaps confined themselves too often to devil's advocacy[22] - even in the course of a range of important new discoveries which took place while this dissertation was being written. A tendency not to reassess the *wider* significance of the imports has indeed been noted by commentators who are at some distance from the debate[23].

The research for this study has taken in both historical and archaeological investigation. A combined treatment of both sets of sources that is critically aware of the methodology of both disciplines can significantly broaden our understanding of the topic. This is not a dramatic form of reassessment, but an integration of traditional approaches to reassess material which has already been the subject of formal analysis. While the theoretical 'excitement and enquiry' (as Hodges terms it[24]) of a work such as *Dark Age Economics* or, say, Hastrup's anthropological study *Culture and History in Medieval Iceland*[25] is challenging and provides much of interest, there is a danger of such works fuelling the view that only the application of external theoretical paradigms to well-known early medieval data can now promise any

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[21] H. Mytum, *The Origins of Early Christian Ireland*, London, 1992, pp. 257, 261-2.

[22] See pp. 188-9.

[23] *Ibid.*, 261-7; D. Griffiths, 'Territories and Exchange in the Irish Sea Region 400-1100', in R. A. Hall, R. Hodges and H. Clarke, eds, *Exchange and Trade: Medieval Europe 1992, Pre-Printed Papers Volume 5*, pp. 9-10.

[24] R. Hodges, *Dark Age Economics: the Origins of Towns and Trade* (2nd Edition), London, 1989, p. vii.

[25] K. Hastrup, *Culture and History in Medieval Iceland*, Oxford University Press, 1985.

further reward. The value of such deductive approaches to historical studies is still debated by historians[26] and in the present case there is an equal excitement for the historian to discover that combined historical and archaeological fieldwork can further refine historical questions.

As stated above, unconscious circular argument by historians and archaeologists is responsible for many errors in study of the western sealanes. A sound theoretical basis hence needs to be defined, to allow archaeology to be brought into historical study. The problems are arguably greater in early medieval 'Celtic' historiography, where there has been considerable criticism of the lack of narrative historical studies, with a greater emphasis being on text-editing and text-centred analyses[27]. The merits of much of this reconsolidation of the textual basis of the subject are not in question. The historian writing narrative studies, however, cannot re-edit every text, but must have sufficient grasp of the intricacies of the material to make critical treatment of it. A similar approach to the archaeological material is necessary. The matter does not stop there, however, as there is a further, widely-held, view that archaeology and history tell of fundamentally different things. F. X. Martin epitomised this in his statement in the court proceedings relating to the destruction of the Wood Quay site in Dublin: 'Documents record major events, and archaeology reveals how people lived'[28]. In the present study it will emerge that this dichotomy is true neither in its assessment of archaeology nor of history. Stephen Driscoll has argued that if history is accepted as being the study of the social discourse

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[26] See S. Airlie, Review of S. Driscoll and M. Nieke, *Power and Politics in Early Medieval Britain and Ireland, Scottish Archaeological Review* 6 (1989), p. 134.

[27] For debate on this issue see W. Davies, 'A Historian's View of Celtic Archaeology', in D. Hinton, ed., *25 Years of Medieval Archaeology*, Sheffield, 1983, p. 68; A. P. Smyth, Review of K. Hughes, *Early Christian Ireland: An Introduction to the Sources, Studia Hibernica* 13 (1973), p. 170, where he takes issue with the messianic regard for Binchy's re-editing of the lawcodes in the then forthcoming *Corpus Iuris Hibernici* (rather overstated response by D. Binchy in 'Irish History and Irish Law', *Studia Hibernica* 16 (1976), pp. 19ff). Also see F. J. Byrne, 'Ireland before the Norman Invasion', in T. W. Moody, ed., *Irish History 1945-70*, Dublin, 1971, pp. 1-15, esp. 1ff.

[28] Quoted in T. Heffernan, *Wood Quay*, University of Texas Press, Austin, 1988, p. 8.

which produces texts (rather than the belief that philological interpretation of texts reveals 'the way it was') then we must accept that the study of material evidence will also reveal evidence for the same discourse[29]. Some historians must utilise both sets of sources together or interpretation of this discourse becomes one-sided.

The separation of the disciplines has been exacerbated by the movement of archaeology toward a 'social history' agenda, away from the sort of socio-political interpretation favoured by archaeologists such as Gordon Childe. This change may be partly reflective of a desire by textual historians for archaeology to be able to answer questions which texts cannot. In the present study it will be demonstrated that artefactual sequences can inform our understanding of major political activities such as Justinian's 'reconquest' in the sixth century[30] and the bringing of Irish churchmen into affairs of the Frankish crown in the seventh[31]. Archaeological discontinuities such as the appearance of E ware pottery in Ireland, as studies by the present writer have observed[32], can be interpreted as evidence of major social change - a point recently reaffirmed by Charles Thomas[33]. These are historical as much as archaeological events. So, whereas it will be seen that the interpretation of the archaeological evidence by Thomas, in particular, has been heavily influenced by historical data, it does not follow that a separation of the historical and archaeological paradigms will bring

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[29] S. Driscoll, 'The Relationship Between History and Archaeology: Artefacts, Documents and Power', in S. Driscoll and M. Nieke, eds., *Power and Politics in Early Medieval Britain and Ireland*, Edinburgh University Press, 1988, esp. pp. 164-6.

[30] See pp. 164, 179.

[31] See J. N. Hillgarth, 'Modes of Evangelisation in Western Europe in the Seventh Century', in P. Ní Chatháin and M. Richter, eds, *Irland und die Christenheit: Bibelstudien und Mission*, Stuttgart, 1987, pp. 311-32; J. F. Kenney, *The Sources for the Early History of Ireland: Ecclesiastical*, New York, 1929, pp. 489-516; James, 'Ireland', pp. 362-86; D. Ó Cróinín, 'Rath Melsigi, Willibrord and the Earliest Echternach Manuscripts', *Peritia* 3 (1984), pp. 17-42.

[32] J. M. Wooding, 'What Porridge Had the Early Irish? E Ware and Early Irish History', *Australian Celtic Journal* 1 (1988), pp. 12-17.

[33] Thomas, 'Gallic *Nautae*', p. 8.

better results (*contra* the rather negative school of thought that the archaeological evidence should be constructed into an edifice in its own right and only then compared to a textually derived one[34]). Not only is it doubtful that archaeological interpretation can be so thoroughly separated from history in the mental process, the need for 'objective' models of interpretation has, moreover, led to input from anthropological paradigms the relevance of which has not always been fully established[35].

The archaeological fieldwork undertaken for this study has, accordingly, been selectively designed to answer questions not answered by the regular work of archaeologists, to establish a body of data for historical analysis, and to gain insight into the theoretical problems raised by the overlapping of historical and archaeological paradigms. This activity identified further questions which were also of value, relating to the problems caused by the small number of workers who have studied the material in question (also noted by Arnold in the Anglo-Saxon field[36]) and the general problems of the confusion of priorities of research into eastern British and eastern French assemblages, with the needs of research into similar finds from western sites[37].

The greater part of the fieldwork was aimed at solving problems raised particularly by Wailes[38], Thomas[39] and Harden[40]. It appears likely that only

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[34] E.g. H. Mytum, 'High Status Vessels in Early Historic Ireland: A Reference in *Bethu Brigte*', *Oxford Journal of Archaeology* 5 (1986), pp. 375-8 (see comments by Wooding, 'What Porridge', p. 14); P. Rahtz, *Invitation to Archaeology*, Basil Blackwell, Oxford, 1985, pp. 85ff. For examples of the text-free archaeological approach: I. Burrow, *Hillforts and Hill-Top Settlement in Somerset in the First to Eighth Centuries AD* (BAR British Series 91), Oxford, 1981; P. Rahtz, 'Celtic Society in Somerset AD 400-700', *BBCS*, 30 (1982), pp. 176-200.

[35] A methodology now being strongly criticised by anthropologists themselves: see N. Thomas, *Out of Time: History and Evolution in Anthropological Discourse*, Cambridge University Press, 1989, pp. 5-13.

[36] C. Arnold, *An Archaeology of the Early Anglo-Saxon Kingdoms*, London, 1988, p. 2.

[37] See pp. 272, 294-5.

[38] B. Wailes, 'Some Imported Pottery in Western Britain, AD 400-800', Doctoral Thesis, University of Cambridge, 1963.

[39] See note 5 above.

future excavation work in France will solve such questions as where such imports as E ware and the western British group of glass cones[41] originate. Selective fieldwork, however, makes all of the problems clearer and allows much more critical comparison of these finds with the textual data. This is precisely what historians must do if they are to avoid what Pucci has termed simply 'shopping in the supermarket of archaeology'[42]. Pucci's criticism is aimed at the historian who chooses 'only those items which suit his theories more readily'[43]. In the present case every attempt has been made to canvass the range of potential evidence and to present a rationale for choices. Hypotheses will, moreover, be seen to originate from the artefactual data, as well as from the textual. For the purposes of the present study the author sought to examine as much of the body of imported artefacts from British and Irish sites as possible, to re-examine continental (particularly French) assemblages and the full range of literature relating to all the types of artefacts which had been held to produce parallels to these finds. The aim of this activity was to gain a full grasp of the character of the archaeological material (which in the case of certain ceramic types is definable more on fabric than form anyway - hence the limited value of rigidly traditional methods) and reconsider the interpretive models directly. No attempt was made to compile new comprehensive catalogues or typologies of these finds[44].

In 1987, 1988 and 1989 a series of museums in England, Scotland, Wales, Ireland, France and Germany were visited. In all cases these had been selected through library research or discussion. A great deal of 'cold-searching'

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40 Harden, 'Glass Vessels', pp. 132-70.

41 This term will be preferred to the more commonly used 'cone beaker' throughout. The western British pieces are in the 'real cone' tradition. See C. Isings, *Roman Glass from Dated Finds*, Gröningen, 1957, pp. 130-1.

42 'Pottery and Trade in the Roman Period', in P. Garnsey et al., eds, *Trade in the Ancient Economy*, London, 1983, p. 105.

43 *Ibid.*, p. 105.

44 An approach which was dismissively criticised by two museum curators!

of archaeological periodicals covering all areas of western Europe was undertaken (mostly with negative results). Extensive use was made of the fieldwork of Wailes[45] and Hodges[46], who between them visited most of the major centres in northern and western France and Germany in the 1960s and '70s respectively. To some extent this research might have been considered supernumerary to a history dissertation and was designed to answer questions peculiar to the historian's needs of the data. Some of these questions were as follows: Were there any reliable finds of E ware anywhere on the Continent (there were, in 1987, very few scholars who were convinced that any exact parallels to E ware existed outside of Britain)? There was also much debate as to whether all of the D ware finds in Britain were *paléochrétienne grise* of the *groupe Atlantique* (as had been long accepted, but not refined), so fieldwork was also necessary to confirm (or in some cases refute) this[47]. Was there any evidence to link E ware with north-western France? Did the glass vessels found in western Britain and Ireland come from the Rhineland? Are there any lessons to be learned from the experience of studying E ware which may also be applied to the glassware problems?[48] Are there any other objects from the Continent which can be paralleled in western Britain and Ireland? Were there still no finds of sixth-century Mediterranean imported wares in western France? In general, there was a need to be entirely certain of the degree to which all artefacts listed under the various imported classes formed homogeneous groups. Finally, the exercise of going to look at this material in its museum and site context gave a

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[45] See note 38 above.

[46] Hodges, *The Hamwih Pottery*.

[47] J. and Y. Rigoir and J. F. Meffre, 'Les Derivées paléochrétiennes du groupe Atlantique', *Gallia* 31 (1973), pp. 207-64; Alcock, *Economy*, p. 120; Alcock, *pers. comm.*, Thomas, *pers. comm.*

[48] Interestingly, the initial comparison of the two classes of artefacts had been instrumental in the formulation of the Rhineland-origin hypothesis for E ware: D. P. S. Peacock and C. Thomas, 'Class E Imported Pottery: A Suggested Origin', *Cornish Archaeology* 6 (1967), p. 36; Wooding, 'Gaulish Artefacts', p. 3.

correct sense of proportion of the task which presents itself to the purely archaeological researcher. The exercise also inevitably produced results for questions which the fieldwork had not initially addressed. Despite the pessimistic forecasts, a genuinely informative picture of glassware groups began to emerge from Campbell's study of the Dinas Powys glass, the discoveries of glass vessels at Whithorn in 1988-9 (in which the author participated) and the author's fieldwork in Britain in 1988-9. Unfortunately, it was rather too late to fully investigate in continental centres what would have been an archaeological thesis topic unto itself.

On the textual side there is a simple need to bring together the various textual sources and analyse them in terms of recent critical standards well defined by scholars such as Dumville[49]. Even though some of this is well-worked ground - many of the sources are already assembled and usefully discussed by Zimmer, Kenney, Doherty, James, Ó Cróinín and Claude[50], among others - the exercise has revealed connections and patterns of considerable value. Less well-known sources also show that sixth-century activity in the Atlantic is far from being an historical vacuum - pleasingly now reaffirmed in a paper by Fulford[51] - and seventh-century diplomatic, legal and hagiographical references, in the past treated as disparate, can also be fruitfully drawn together to explain changes to the pattern of western sealanes traffic in the seventh century[52].

It was also accepted from the beginning that a study of western sealanes traffic must attempt to look closely at the maritime perspective. Few models for

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[49] D. Dumville, 'Legend and History in Early Medieval Britain' *History* 62 (1977), pp. 173-92.

[50] D. Claude, 'Der Handel im westlichen Mittelmeer während des Frühmittelalters', *Untersuchungen zu Handel und Verkehr der vor-und frühgeschichtlichen Zeit in Mittel- und Nordeuropa*, Göttingen, 1980, pp. 155-63.

[51] M. Fulford, 'Byzantium and Britain: A Mediterranean Perspective on Post-Roman Imports in Western Britain and Ireland', *Medieval Archaeology* 33 (1989), pp. 1-6.

[52] Wooding, 'Cargoes'.

this sort of work exist. The tradition of maritime-geographical study established by Nansen early in the century found little acceptance before 1980, except in the works of Heyerdahl and Severin[53], who are not highly regarded in university-based research. Instead, the physical and human schools of geography founded by Fleure and Fox focussed attention fully upon the variations of land quality as governing sea use, not the varying character of the sea itself. The tradition of maritime-based research into human geography, however, has academic roots. Nansen was Professor of Geography at the University of Oslo and carried out explorational voyages to the Arctic. For various reasons, however, this sort of work gave rise to an 'expedition' paradigm (e.g. by Nansen's protege Amundsen) only partially devoted to research. This may be due to the often impressionistic results of such researches. In particular one may highlight the difficulty of establishing benchmarks for measurement of marine data. To give one example: Charles Thomas observes the fundamental problem of measuring the changing character of the sea *vis-a-vis* the land, when the 'sea-level' (itself an abstract concept) is used as a benchmark for land-based geography[54]. The until-recent marginalising of maritime historical geography has doubtless been assisted by the tendency for seafaring to be treated as an arcane study, upon which only the professional mariner may enter - Sean McGrail and G. J. Marcus, scholars who are experienced mariners, fit the latter paradigm. Relevant also to this discussion are George Bass' definitions of the status of underwater

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53 For the work of T. Severin see, most importantly, *The Brendan Voyage*, New York, 1978, and subsequent works. Severin is, like Nansen, a geography graduate who has held research fellowships in this field, though his maritime work, which was preceded by overland expeditions, also owes much to the tradition of experimental archaeology. The value of his work is diminished by a poor use of historical data, but remains of value as a primary source, used critically.

54 *Exploration of a Drowned Landscape*, London, 1985, pp. 18ff. This sort of problem is characteristic of the difficulty of bridging the gap between land and sea studies.

archaeologists with respect to their similar marginalising in the archaeological world of the 1960s[55].

The primary problem in managing the marine data, readily available from pilot books and charts, however, is establishing benchmarks and frameworks from which to relate these data to actual routes of sea voyages. One approach would be to attempt a primarily maritime analysis to establish likely searoutes, and then to apply these data to the questions of communication and commerce. In some ways this would seem a satisfying approach, more inductive than the approach finally adopted in the present study. Dogged adherence to this approach, however, would lead to vague generalisations regarding the routes in use, informed by an impressionistic form of anthropology (mostly secondhand maritime experience from other eras). Recent studies by Pryor[56] and, above all, McGrail[57] provide useful models for more efficient and relevant use of maritime data, which will be examined in the opening sections of this study.

The first chapter of this dissertation will review the theses of the principal previous studies of the topic and the areas which they defined for separate study. The second chapter will define the general maritime character of the sealanes, the types of ships in use and the navigational principles used by the mariners of these waters. This discussion is linked to the following, chronologically organised chapters, by a discussion, in Chapter 2.4, of the relationship of seafaring, especially at the point of landing, with the activities of movement of people and goods. A serious attempt has been made to keep these data within manageable proportions and to address them to the questions which

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[55] See his *Archaeology Underwater*, London, 1966, esp. pp. 15-19.

[56] J. Pryor, *Geography, Technology and War*, Cambridge University Press, 1988.

[57] See esp. S. McGrail, 'Cross-Channel Seamanship and Navigation in the Late First Millenium BC, *Oxford Journal of Archaeology* 2 (1983), pp. 299-337. Also, S. McGrail, *Ancient Boats in NW Europe, the Archaeology of Water Transport to AD 1500*, London, 1987, pp. 258ff.

this survey can feasibly answer. In the subsequent chapters a century-by-century analysis is made of the textual and archaeological data which indicate overseas travel and the routes and ports derived from this research are related to maritime details along the lines set out in the opening sections. Maritime data alone will indicate 'logical' routes of traffic, but these sorts of data are awkwardly placed when they are outside of an inherently likely historical framework[58]. A site such as Tintagel may seem inferior as a port[59], but in the face of the overwhelming evidence for ships landing at the site we must accept that there are criteria which can be established for its use as port[60]. McGrail demonstrates that a critical use of anthropological paradigms in conjuction with maritime data can indicate a typology for port sites[61] and his models will be discussed and utilised here in conjunction with data relating to the identification of commercial sites and cargoes. It is especially important that this be done for specific cases, where there is no evidence for a very regular typology of site-status along the early medieval western seaboard - such as exists, for example, around the shores of the North Sea in the seventh through tenth centuries[62] - and indifferent evidence for regularity of overseas voyaging. Any attempt to make general models of trade and redistribution founders on these points. Research into individual cases is necessary before we may proceed to generalise.

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[58] McGrail, 'Cross-Channel', esp. pp. 308-10.

[59] See K. R. Dark, 'The Plan and Interpretation of Tintagel', *CMCS* 9 (1985), p. 16.

[60] See Chapter 2.4 and 4.1 on cargoes arriving at Tintagel.

[61] McGrail, *Ancient*, pp. 267ff.

[62] Hodges, *Dark Age*, pp. 47-65.

Chapter One: Sealanes and the Scholarly Terrain

Julius Caesar, in our earliest surviving eyewitness account of the western sealanes, during his campaign in Armorica in 56 BC, was preoccupied by the 'strong tides...shallows' and 'high seas in mighty gales'[1], even during the *summer*. The western sealanes, running from the Atlantic shores of Britain and Ireland and the Irish Sea basin in the north, to the coasts of France, Spain and Portugal in the south, are noted for these often unpredictable and shifting winds and tides. The contrast with the Mediterranean is at times extreme: 'and navigation of a closed sea is far different to that in vast and empty Ocean'[2]. Though parts of the Mediterranean, such as the Aegean, are noted for strong winds and storms there are no appreciable tides to complicate sailing or make landing a complex task. The tides of the western sealanes are very strong, a topic which interested Strabo[3], another of the early writers (drawing for the most part on the eyewitness account of Pytheas[4]), as well as Caesar[5]. The tidal flow of the Bristol Channel, for example, is the third fastest in the world. Navigation of these waters requires well-adapted vessels and particular skills.

To the mariner born and bred along the western sealanes, using a technology which had evolved within the region, the harshness of the sailing conditions would not be so striking. The modern scholar, whose perspective is underpinned by an intellectual discourse embracing Mediterranean views of the role of technology and commerce, may not appreciate this[6]. Caesar,

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1 'magnis aestibus', *Bellum Gallicum* III.12 (ed. H. J. Edwards, LCL, Harvard, 1917, pp. 153-4); 'vada...magnitudinem fluctuum tempestatumque', *ibid.*, III.13 (pp. 153-4).

2 'ac longe aliam esse navigationem in concluso mari atque in vastissimo atque apertissimo Oceano', *ibid.*, III.9 (p. 150).

3 Strabo, *Geographica,* III.3.3 (ed H. Dewing, LCL, 1917, vol.2, pp. 66-7)

4 On Pytheas, see C. F. C. Hawkes, *Pytheas: Europe and the Greek Explorers,* Oxford, 1977.

5 Caesar, *Bellum Gallicum* III.12 (ed. Edwards, pp. 152-4).

6 Unger, *The Ship,* pp. 234ff. After 1500 AD northern European ship-builders appropriated the Mediterranean carvel building technique in place of their own traditions, on account of its advantages in economic and military terms. This involved a compromise of efficiency in

characteristically, adapted to the conditions by recognising the limitations of his Mediterranean technology and experience[7]. Indeed, the British seas were to be the only theatre where compromise was frequently made in Roman methods of shipbuilding[8].

Caesar's appreciation of the unique character of the western seas leads us to note some key issues for the researcher in approaching the western sealanes. The marine conditions are certainly challenging and ships and sailing methods must be adapted to the geography of the region. Factors of transport and economy are to some degree governed by these limitations. Nonetheless, the western seas *were* navigated on some considerable scale - even by those who were not familiar with the region, such as Caesar. The reader coming to the study of the early use of the western sealanes through the secondary sources is confronted by widely varying images of the scale of activity along these sealanes and of the command which mariners exercised over the conditions. On the one hand there are images of sealanes traversed by large wine ships[9] and a plethora of saints[10] (both in curachs and trading ships). Other views, conversely, identify 'peninsular roads' and transshipment of goods, implying fear of the open sea and technological incapacity[11]. The problem is one of 'all-or-nothing' approaches. The forbidding character of the western seas has not engendered underestimation of their historic and prehistoric role, perhaps

terms of performance - one early ship which was rebuilt in the new style was the *Mary Rose*, which sank unaided soon after!

[7] *Bellum Gallicum* III.12-15 (ed. Edwards, pp. 152-9).

[8] P. Marsden, 'Ships of the Roman Period and After in Britain', in G. Bass, ed., *A History of Seafaring Based on Underwater Archaeology*, London, 1972, pp. 114-24. Much later in history, the refugees from the 1588 Armada were to find these foreign conditions insurmountable - their mostly Mediterranean warships poorly suited indeed to Atlantic sailing.

[9] See p. 1, n. 2.

[10] See p. 1, n. 3.

[11] Crawford, 'Western Seaways', p. 185ff; E. G. Bowen, '"Britain and the British Seas"', in D. Moore, ed., *The Irish Sea Province in Archaeology and History*, Cardiff, 1969, p. 14; M. Miller, 'Hiberni Reversuri', *PSAS* 110 (1978-80), pp. 316-7; Thomas, 'Imported Pottery', p. 101.

contrary to what we might have expected. Crawford and Fleure's challenge to the land-oriented models of Mackinder[12], historically coinciding with the rise of the diffusionist paradigm, inspired overestimation of the scale of seaborne contacts - and consequent exaggeration of their role in the development of those lands which border on the western sealanes. In the period of our concern, the early middle ages, the spread of Christianity to the Celtic lands of the British Isles, the seminal interchange of scholarly ideas between Ireland, Gaul and Spain, and the spread of styles and motifs found in 'Insular Art' have all been traced along the western sealanes[13]. While such exchanges certainly did occur, it is arguable, however, whether any of this research attention proceeds from a real understanding of the relationship between maritime geography, economy and technology. Often there has been a reactive need to counter arguments that cultural influences came overland (for example to Ireland from Anglo-Saxon England - a topic often treated with bias by both English and Irish academics). Sometimes arguments for land-based travel are rightly dismissed as landlubberly and against logic. However the contacts *themselves* still must be examined closely and not made subservient to theories inspired either by externally-derived models or internal polemics. Again the problem has been one of 'all or nothing' approaches. As will be seen in the following review of the secondary literature, the sea is treated as a *deus ex machina* in cultural studies: its role under- or overstated somewhat arbitrarily, or sometimes according to the need for contacts to suit certain theories[14].

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12 H. Mackinder, *Britain and the British Seas*, London, 1902. Fleure and Roberts, 'Archaeological Problems', pp. 405-20; Crawford, 'Western Seaways', pp. 181-200.

13 Most of these topics have been recently discussed in the following studies: J. N. Hillgarth, 'Ireland and Spain in the Seventh Century', *Peritia* 3 (1984), pp. 1-16; James, 'Ireland', pp. 362-86; H. Mayr-Harting, *The Coming of Christianity to Anglo-Saxon England*, London, 1972, pp. 7ff; 27ff; M. Herren, 'The Earliest Irish Acquaintance with Isidore of Seville', in E.James, ed., *Visigothic Spain: New Approaches*, Oxford, 1980, pp. 243-50; Ó Cróinín, 'Rath Melsigi', pp. 17-42.

14 See Thomas, 'The Context', p. 22: 'Over and above the traders and their shiploads, men and ideas...could have been ferried over the long distances. It is still the most economical and most probable way to explain the transmission of minor aspects of Mediterranean Christian

The previous studies of this topic originate in two distinct methodological contexts. In several studies published in the first decade of this century Heinrich Zimmer pioneered a model of research into the development of early christian culture in the Celtic world, proceeding largely through study of its external contacts[15]. Zimmer's death prevented the completion of this research and only literary aspects of his scheme were developed by scholars such as Meyer and Vendryes[16]. Zimmer rightly recognised that in cultural exchange of this period the role of commercial links is fundamental. When St Columbanus was to be sent away from Gaul in 610 he was taken to Nantes to be put on board a ship engaged in 'Irish commerce'[17]. The study of the movements of traders and their vessels is thus not only important for the history of commerce, but also for interpreting the travels of people and the cultural ideas which they carried. Zimmer's approach was characteristic of research being done in Germany at the same time, for example by Bruno Krusch and Wilhelm Levison as a byproduct of work for the *Monumenta Germaniae Historica*[18]. Levison went on to develop the evidence for overseas exchange

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art to British and Irish shores without the intermediary of mainland western Europe or, perhaps, even of Iberia'.

[15] Overall see K.Meyer, 'Aus dem Nachlass Heinrich Zimmers', *Zeitschrift für Celtische Philologie* 9 (1913), p. 87ff. Zimmer's thesis was developed through a range of studies on topics which still remain central to our concerns: *Pelagius in Irland*, Berlin, 1901; 'Keltische Kirche in Brittanien und Irland', *Realencyklopädie für Protestantische Theologie und Kirche*, Leipzig, 1901 (English version *The Celtic Church in Britain and Ireland*, trans. A. Meyer), London, 1902. The final study set up a chronological framework of overseas trade, upon which a longer narrative could be hung (Zimmer's death prevented this): 'Über direkte' (see p. 1, n. 2, above)

[16] Meyer, *Learning in Ireland* ; Vendryes, 'Les Vins', pp. 19-24.

[17] 'Scotorum commercia', Jonas, *Vita Columbani* I.23 (ed. B.Krusch, *MGH: SS rer. Merov.* IV, Hannover, 1902, p. 97).

[18] Who edited such sources as the Merovingian saints' *vitae* (e.g. for positivist analysis). Krusch also focussed much attention on chronological frameworks, e.g. *Studien zur christlich-mittelalterlichen Chronologie*, Leipzig, 1880, addressing questions of date and prosopography which fell out of fashion (now see the work of Ó Cróinín, 'Rath Melsigi', pp. 17-42; K. Harrison, *The Framework of Anglo-Saxon History*, Cambridge University Press, 1980; and R. Gerberding, *The Rise of the Carolingians and the Liber Historiae Francorum*,

which this work uncovered into a study of links between England and the Continent, on a similar model to Zimmer's Celtic researches (if more limited in chronological scope)[19]. After this era, however, such research became less popular with historians, partly because the potential for documentary research into the cultural dimension of the exchange is greater than for actual commerce and travel.

There is no question that further research on this topic must follow the initial agenda established by Zimmer. In many ways Zimmer's approach has been forgotten in modern 'Celtic' historiography, which in focussing upon the cultural connection has left the analysis of the sea routes and voyages themselves to the geographers and, more recently, archaeologists. In some ways this might be seen to be a continuation of the subsequent treatment of Zimmer's work by Vendryes and Meyer (both of whom were more philologically-oriented than Zimmer had become), but it also reflects more recent currents in Celtic historiography. The focus on text-editing in Celtic historiography has been discussed elsewhere[20]. As we will see, the problem of western sealanes travel is that much of the reliable source material is not textual. In current fashion, many historians would see the answering of problems not covered by the traditionally-used texts as lying outside of their field of concern. Though Zimmer worked from texts, he put the contacts indicated by them into the foreground. Study of the archaeological data can now reveal information on the same contacts and Zimmer would certainly have been interested in this evidence.

The gradual move away from the study of the primary evidence for commerce and travel also parallels the decline of diffusionism. There is a

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Oxford University Press, 1987, pp. 84ff esp.), but were characteristic of the 'historical' discipline of 19th century German positivism. Zimmer made extensive use of the saint's lives edited by Krusch and Levison.

[19] W. Levison, *England and the Continent in the Eighth Century*, Oxford University Press, 1948.

[20] See pp. 9, above.

tendency to attribute to long-distance overseas links a sort of messianic role in the spread of culture. That these contacts serve to obscure the real interplay between contact and social change occurring within a society may be a reason for downplaying their historical significance. This is, of course, no reason to abandon their study altogether - unless it was simply the cultural connections themselves which kept the voyages on the agenda of historians. Hillgarth is one who now would prioritise the cultural connection: 'perhaps this question of routes is, in the end, secondary...More crucial than the question of routes is that of reception'[21]. Arguably both are important, and an understanding of the scale and character of each informs the study of the other[22]. For example, that maritime links existed between Britain and the Mediterranean in the early sixth century is beyond doubt. A fuller analysis of the evidence, however, sufficently diminishes their scale to the point where they are unlikely to figure in the importation of many cultural influences - though, conversely, the archaeological evidence does not allow us to dismiss contact altogether, as Raftery wished to do only two decades ago[23]. Similarly, we will see that seventh-century Irishmen travelling to the Continent very likely did so by means of commercial shipping focussed on the western Gaulish ports, just as Zimmer suggested. This does not immediately imply any 'natural' link with western Gaul in intellectual terms, however, as many of the Irishmen then went on to work in eastern Francia in a context where they are as much a part of the western Gaulish church as the Irish[24]. The way in which the choice of route to

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[21] Hillgarth, 'Ireland', pp. 13-14.

[22] Processual approaches to archaeology have encouraged a similar appreciation of the complexity of the process of contact, Mytum, *The Origins*, p. 7-9.

[23] J. Raftery, 'Ex Oriente...', *JRSAI* 95 (1965), p. 199: 'In fact, there is no valid reason, as far as I can see, to assume that there were any contacts at all between the island in the west and the faraway eastern Mediterranean, separated by some thousands of miles'.

[24] Hillgarth, 'Modes', pp. 311-32; J. M. Wallace-Hadrill, *The Frankish Church*, Oxford, 1983, pp. 72-3; 143.

the Continent may have determined the later theatre of their activity is therefore very complex.

An obstacle to in-depth analysis is the acceptance that the sources which we possess only indicate a fraction of the actual activity. It is probably a reasonable assumption, but encourages the view that it is futile to attempt further refinement of the documentary sources using excavated evidence[25]. It will be argued here that both the archaeological and textual data often seem to indicate the *same* routes of contact. Whether or not there was other activity which does not find record may be irrelevant to this point.

The sealanes gradually have became the territory of archaeological geographers. The 'western seaways' model originated in a school of thought, particularly to be found in Wales early in this century, which rightly saw the role of maritime routes as having been devalued by the work of land-oriented geographers such as Mackinder. Doubtless also present, less strongly stated, was a reaction against the predominently eastern-British orientation of Mackinder's interest. Mackinder's approach, which emphasised the lowland east of Britain as the normal route of cultural influx into the British Isles[26], is accountable to a Victorian fear of the sea combined with an overemphasis on the model provided by the early historically-attested invasions of Britain by the Belgae and the Anglo-Saxons, which were lowland-based. Mackinder's approach reflected diffusionist debates popular at the time, which emphasised migration of dominant peoples, rather than the spread of culture, and tending to focus on land-based migrations. Its disappearance from scholarly debate was appropriately hastened by its use by Haushofer in his theory of *Geopolitik*, taken by Hitler to legitimate German imperialism[27]. The broader notion of the sea as a 'highway' for early cultures seems to have evolved from the growth of

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[25] Cf. P. Sawyer, *The Age of the Vikings*, rev. ed., London, 1975, p. 49.

[26] Mackinder, *Britain and the British Seas*, esp. on the Belgae and Anglo-Saxon migrations, pp. 194ff; Bowen, '"Britain and the British Seas"', pp. 13-28.

[27] L. Outhwaite, *The Atlantic: A History of an Ocean*, New York, 1957, p. 69.

a more anthropological approach to geography and archaeology, partly a consequence of the encounter with Pacific cultures where deep-sea travel was relatively common[28]. Fleure, famous for a range of studies of archaeology in terms of comparative anthropology[29], was amongst the scholars who formulated the response to Mackinder's study[30]. Others to follow the 'highway' model were O. G. S. Crawford[31] and Margaret Davies[32], who made studies of prehistoric artefacts in terms of maritime distribution, though now it is clear that this should not have been so much taken to exclude overland distribution[33].

The 'western seaways' thus evolved in the forefront of the diffusionist debate. The idea found later support by Childe, one of the foremost proponents of diffusionism. Childe was to see these routes, along with the Danube valley, as being of primary importance for the cultural 'irradiation' of Europe[34]: 'their grey waters as bright with Neolithic argonauts as the western Pacific is today'[35]. The 'western seaways' model also found support in the work of Sir Cyril Fox, who continued in Wales archaeo-geographical work which he had commenced at Cambridge[36]. Aided by the cartography of Lily Chitty, he undertook the distributional studies which led to his influential work *The*

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28 B. Malinowski, *Argonauts of the Western Pacific*, London, 1922.

29 *The Corridors of Time* series, by H. J. Peake and H. J. Fleure: 9 vols., Oxford, 1927-36.

30 Fleure and Roberts, 'Archaeological Problems', pp. 405-20.

31 O. G. S. Crawford, 'The Distribution of Early Bronze Age Settlements in Britain', *Geographical Journal* 40 (1912), pp. 184-203.

32 M. Davies, 'The Diffusion and Distribution Pattern of the Megalithic Monuments of the Irish Sea and North Channel Coastlands', *Antiquaries Journal* 26 (1946), esp. pp. 40-6.

33 See Ryan, Review of Bowen *Britain and theWestern Seaways*, pp. 198-200.

34 See B. Cunliffe, Introduction to reprint of V. G. Childe, *The Dawn of European Civilisation* (1957), Paladin; St Albans, 1973, p. 17. Also Bowen, *Saints, Seaways*, p. 79.

35 V. G. Childe, *Scotland Before the Scots*, London, 1946, p. 36.

36 C. Fox, *The Archaeology of the Cambridge Region*, Cambridge, 1922.

Personality of Britain[37], which set up a Highland/Lowland Zone dichotomy. This concept integrated effectively with the 'western seaways' model insofar as the impenetrable character of the Highland Zone seemed to encourage the use of sea travel[38]. The difficulties of penetrating the highland geography of western Britain also of course emphasised the unlikelihood of overland contacts from the east playing any seminal role in the cultural formation of the western zone. An important later consequence of this model was the briefly fashionable notion of the 'Irish Sea Culture-Province'[39], which further emphasised the east-west exclusion by positing natural links between Ireland and western Britain. This latter model founders, at least where the early middle ages are concerned, upon the fact that there are several patterns of contact throughout this short period, some of which fit the model and some of which contradict it.

In 1936 the prehistoric evidence was integrated with the medieval when O. G. S. Crawford discussed as a whole the various geographical and distributional studies which seemed increasingly to be drawing the western sealanes into a maritime 'province' and analysed them in comparison with a series of early medieval voyages derived mostly from hagiography[40]. In a final, dramatic, passage he compared his results to Zimmer's conclusions, stating that he had read Zimmer's work only *after* completing his paper[41]. E. G. Bowen developed this model along much the same lines in later decades, drawing frequent parallels between the early medieval period and prehistory[42].

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[37] C. Fox, *The Personality of Britain*, 4th Edition, Cardiff, 1946.

[38] We should note in passing that this is true, but in the particular, not the general. In the case of a zone such as Dalriada this will be seen to be likely, but not in others.

[39] See p. 1.

[40] Crawford, 'Western Seaways', pp. 181-200.

[41] *Ibid.*, p. 200.

[42] See esp. Bowen, *Saints*; *Seaways*, to trace the development of his thesis, see E. G. Bowen, 'The Travels of the Celtic Saints', *Antiquity* 18 (1944), pp. 16-28; *idem, The Settlements of the Celtic Saints in Wales*, Cardiff, 1954; *idem, Britain and the Western Seaways*, London, 1972.

This sort of study has been no substitute for historical analysis. The sources chosen for comparison are not at issue, though only a few cases drawn from saint's dedications and hagiography would now be accepted as evidence for travel and commerce in the period 400-800 AD[43]. The work of Crawford and Bowen makes no notable analysis of either maritime or political factors - something barely defensible in a geographical approach. The only maritime model introduced by Crawford, that of locating 'peninsular roads', is almost totally without relevance to the early medieval period. Whatever the value of their methods for geography, the work of Crawford and Bowen tells us nothing meaningful of the finer points of travel. It serves, rather, to suggest 'natural' routes of contact which often do not compare closely enough with actual travels and which link prehistoric travel with historic activity in ways which obscure the differences and exaggerate the scale of early medieval activity[44].

Childe's comparison with Malinowski's 'argonauts' drew a strong image of prolific exchange activity into the early economy of the western sealanes, implying the economic context for a model of a 'maritime culture'. It would appear, however, that such a pattern was mostly missing from the prehistory of the Irish Sea zone, with most goods and cultural influences arriving in the zone from the Continent only crossing the sea at the closest points of the landmasses to each other. The 'channels of intercourse' between Britain and the Continent, far from being 'settled by nature and previous

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[43] See O. Chadwick, 'The Evidence of Dedications in the Early History of the Welsh Church', in N. K. Chadwick, ed., *Studies in Early British History*, University of Cambridge Press, 1954, pp. 87ff esp. See rather laboured response in Bowen, *Saints, Seaways*, pp. 81-3. Short, sensible comment in L. Laing, *The Archaeology of Late Celtic Britain and Ireland 400-1200 AD*, London, 1975, pp. 118-9.

[44] Bowen's treatment of Crawford's map of sea-routes is a typical example. In recording a range of sea-routes implied by recent archaeological finds he simply superimposes them upon Crawford's map, affixing the comment that this evidence 'adds many details to the earlier maps of Fox and Crawford'. Remarkably little effort is made to compare the data to discern whether the new evidence invalidates any of the earlier scholars' findings, Bowen, "'Britain and the British Seas'", p. 18. On the constant comparisons of prehistory with Celtic saints see Cunliffe, Introduction to Childe, *The Prehistory*, p. 27.

history', as Levison would suggest[45], may be seen to restart in every era, or are at least reshaped under the impetus of identifiable political events. Sixth-century contact with the Mediterranean can be linked to identifiable Byzantine interest in northwestern Europe[46]. Seventh–century Frankish interest in Ireland is symptomatic of the Irish role in the 'world dominated by Franks' in the seventh[47].

In previous studies a consciousness of these distinctions between individual centuries has been obscured. The geographers' model does not assert simple continuity, but routes determined by nature: the Roman period being understood as a hiatus in a 'normal' sea-oriented pattern[48]. In most cases it is clear, however, that the circumstances which govern post-Roman contact are unique to that period rather than a reversion to an earlier pattern.

We should be aware that these basic ideas remain very influential: namely, that evidence for contacts between the Continent and the Irish Sea basin can be understood in terms of a wider model of maritime culture, in which regular commerce along the sealanes allowed a constant alternative source for cultural influences (especially for Ireland) to the overland routes via Britain. While most early medieval scholars would not go so far as Bob Quinn[49] in following this model, so strikingly reminiscent of the medieval Irish Milesian legends, there has been a basic acceptance of the assumption that maritime

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[45] Levison, *England and the Continent*, p. 5.

[46] E. A. Thompson, 'Procopius on Brittia and Brittannia', *Classical Quarterly* (New Series) 30 (1980), pp. 498-507.

[47] I. Wood, 'The Franks and Sutton Hoo', in *idem* and N. Lund, eds, *People and Places in Northern Europe 500-1600: Essays Presented to Peter Sawyer*, Woodbridge, 1991, p. 13.

[48] See Bowen, *Saints, Seaways*, p. 22: 'The spread of Roman power.....stabilized the eastern land routes and traffic flowed more and more to the continent across the Narrow Seas. The Western Sea routes were not to regain their vitality until the lowlands of south-eastern Britain were once again submerged by barbarian invasions'.

[49] *Atlantean: Ireland's North African and Maritime Heritage*, London and New York, 1986.

activity along the sealanes was prolific and represented a continuity from earlier ages.

My conclusions place strong limitations upon this model in terms of scale and continuity of activity. Serious criticisms are levelled at the case for fifth-century and earlier links between Ireland and the Continent, a crucial element in the 'maritime culture' theses. Indeed, the causal assumption that pre-existing commerce conditioned cultural contacts will be disputed.

Such activity as there was, must be understood in terms of a variety of political and economic circumstances, not 'natural' models upset by great events. The 'Irish Sea Province' is a particularly good case in point. Its general rejection has perhaps overlooked some cases which do seem to fit its model, notably distributions of pottery and glass imports (discussed below). These are chronologically specific to the late-sixth/seventh century, however, and to express them in terms of overarching geographical schemes would only serve to obscure their specific chronological context.

The notion of the 'western seaways' has thus become something of an archaeological commonplace, of more than passing interest to early medieval historians on account of superficially similar models which arose from the documentary studies of Zimmer in the last decade of the nineteenth century and the first of the twentieth. Again, as with the prehistoric models, Zimmer's work is inevitably dated - here by the limits of the positivist paradigm in which Zimmer operated. It is the combined weight of the two branches of study which gives the model some continuing acceptance, even without revision.

The evidence of artefacts, initially (and most notably) ceramics, has come to occupy centre stage in early medieval western sealanes studies since the 1950s. The ceramic evidence first achieved substantial notice in the Irish excavations at Lagore and Garranes, where it was immediately linked to the

'wine trade' hypothesis of Zimmer[50]. Since the 1950s, when Radford published his study of the imported pottery from Tintagel, Charles Thomas and a range of other archaeologists have continued to focus attention upon the value of this material in indicating the overseas connections of Celtic Britain and Ireland[51]. The literature relating to the identification of this material and its study will be fully reviewed in later chapters. Discussion at this point will focus on a few preliminary issues.

These finds seem to offer concrete evidence of the types of links which the data studied by Zimmer and Crawford (but now in many cases held to be of dubious value for this period) had seemed to indicate for the period 400-800 AD. The study of these discoveries is inevitably complex, however, and their interpretation has been strongly influenced by the historical models - especially those of Zimmer, though conversely he himself was not divorced from the nineteenth-century German ideas of culture which underpin some of the common archaeological models[52]. Some sensitivity is therefore needed to the interplay of historical and archaeological paradigms over the history of this subject if we are to gain meaningful evidence from the archaeological data collected so far. Historians have not always recognised the richness of this relationship. The degree to which a scientific study such as Peacock and Thomas' 1967 paper on the petrology of E ware was dependent on a historical model still may not be fully appreciated[53]. It will be demonstrated in the present study that scientific studies of glass require similar integration with non-scientific data to be meaningful - outside of the technological-history paradigm[54].

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[50] O' Riordain, 'Roman Material', pp. 70-1.

[51] Radford, 'Imported', p. 69.

[52] For definition see, for example, V. G. Childe, 'Retrospect', *Antiquity* 32 (1958) pp. 69-74.

[53] Wooding, 'Gaulish', p. 2; Peacock and Thomas, 'Class E Imported', p. 39

[54] For example see D. Sanderson, J. Hunter and S. E. Warren, 'Energy Dispersive X-Ray Fluorescence Analysis of First Millenium AD Glass from Britain', *Journal of Archaeological*

Studies from a historical perspective have been rare in the second half of this century. Lewis and Doherty[55] have produced discussions of trade connections, still utilising Zimmer's references - though Doherty adds more from the Irish perspective and takes a critical view of all sources. J. F. Kenney's bibliographical study, appearing in 1929[56], however, contained many observations for a more politically conscious reassessment of Zimmer's thesis, which was taken up by Edward James in an excellent short study only in 1982[57]. James also fully embraces the example of Mayr-Harting, whose *The Coming of Chrisitianity to Anglo-Saxon England* builds on the example of Levison in utilising commercial and literary evidence to create a model to explain the quality and diversity of the early medieval christian culture of Anglo-Saxon England[58]. In attempting to reassess the texts utilised by Zimmer, however, James still resorts to the evidence of imported ceramics, rightly recognising the combined role of history and archaeology in the study of the models which Zimmer established. If subsequent critics, for example Hillgarth and Duncan[59], are right to stress that study along these lines is still inconclusive, this point only further necessitates the present work.

Science 11 (1984), pp 53-69. For alternative methods see E. Campbell, 'A Blue Glass Squat Jar from Dinas Powys, South Wales', *BBCS* 36 (1989), pp. 239-45; Wooding, 'Gaulish', pp. 3-4.

[55] Lewis, 'Le Commerce', pp. 271-2; C. Doherty, 'Exchange and Trade in Early Medieval Ireland', *JRSAI* 110 (1980), pp. 67-89.

[56] Kenney, *The Sources*.

[57] James, 'Ireland', pp. 362-4; some of the same matters are also taken up in *idem*, *The Merovingian Archaeology of Southwest Gaul* (BAR Supplementary Series 25 i & ii), Oxford, 1977, vol. 1, pp. 220-58.

[58] Mayr-Harting, *The Coming*, esp. p. 7-8. Levison, *England and the Continent*.

[59] Hillgarth, 'Ireland', pp. 14-16; Duncan, Review of Thomas, *Celtic Britain*, pp. 70-1.

Chapter Two: The Maritime Personality of the Western Sealanes

In the preceding chapters the geographical-determinist approach to western sealanes activity has already been rejected in favour of defining the evidence for actual voyages in advance of maritime analysis. However, a discussion of the broad features of climate and geography, the 'personality' of the region[1], remains an important preliminary. To this needs to be added a discussion of technology. Perhaps the most important step, however, is the processing of these data to establish models of interaction between technology, geography, society and economy. Such models are vital in attempting to establish how much each factor can be seen to govern choices such as routes of travel, goods involved in commerce and landing sites (and such settlement sites as where the relationship with a port is a major factor).

In any study where sea-travel along the western and northern sealanes is the primary focus, a discussion of the maritime topography and ship technology involved would seem to be fundamental. Even Lewis's book entitled *The Northern Seas,* however, says little concerning the sea itself[2]. Lewis includes a discussion of ship types[3], as does Hodges[4], while Marcus also integrates this material with a study of navigation techniques[5]. Bowen, however, does not discuss any of these

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[1] For use of this term see Fox, *The Personality*; E. Estyn-Evans, *The Personality of Ireland,* Cambridge, 1973.

[2] A. R. Lewis, *The Northern Seas,* Princeton, 1959.

[3] *Ibid.,* pp. 45-8.

[4] Hodges, *Dark Age,* pp. 94-103.

[5] G. J. Marcus, *The Conquest of the North Atlantic,* Woodbridge, 1980, pp. 5-15, 100-18.

matters in depth. Before 1976 only one substantial study, of the distribution of megaliths[6], took serious account of marine geography[7].

McGrail, in work partly concerned with the western sealanes[8], has now provided a more satisfactory model for the use of marine data (as has Warner, to a more limited extent[9]) and has also examined the methodology of such approaches[10]. Some parts of his rationale and models will be used as texts for the discussion in Chapter 2.4. The first section of this chapter, however, will discuss the basic data on climate and geography. The second section will discuss the evidence for the types of ships in use. The data discussed in these two sections will be brought together by the two following sections (2.3 and 2.4): the former dealing with navigation and sailing techniques which, in the abstract, define the ways in which evolved techniques of navigation influence maritime activity; the latter section with the crucial interface between land and sea, which centres on choices of landing sites and the sealane/hinterland relationships which extend from them.

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[6] Davies, 'The Diffusion', esp. pp. 40-6.

[7] The circumstances behind the previous exclusion of necessary maritime data are complex. Modern archaeological approaches have long (and rightly) rejected the determinist element in landscape study and no new context for the introduction of such data has been fully accepted in its place. Confronted with the possibility of introducing seemingly gratuitous data, not tied to any argument, it is perhaps logical that the choice has been made to include none at all, as unassociated data of this type can easily grow out of all proportion to the remainder of the study and not contribute anything of value. In academic publishing this was once quite an issue, with topographical and maritime detail seen as an interruption to narrative (an example being the rejection of G. A. Wood's book on the colonisation of New South Wales, see R. M. Crawford, 'A Bit of a Rebel', Sydney, 1975, p. 332) unless the work was on a maritime topic (ibid., pp. 350-1). Nonetheless, in various studies the above authors have occasionally lapsed into indefensibly impressionistic geographical judgements, without reference to the broader picture.

[8] McGrail, 'Cross-Channel', pp. 299-337.

[9] R. Warner, 'Some Observations on the Context and Importation of Exotic Material in Ireland from the First Century BC to the Second Century AD', PRIA 76C (1976), pp. 284-5, 276-7.

[10] McGrail, Ancient Boats, ch. 13.

2.1 The Western Sealanes: Area, Geography and Climate

The western sealanes, for our purposes, must be defined by the nature of the historical traffic and by previous historiography. Bowen, after tracing the growth of interest in the western sealanes from an initial concern with links within British waters to a model including France and Spain[11], extended Crawford's definition of 'western seaways' further to include the seas of the western coasts of the entirety of Europe, approximately 2,500 kilometres from the northern to the southern end[12]. Thomas accepts this sense, though noting the likely changes across time[13], which would see the existence of real links from one end of the sealanes to the other as only episodic. Lewis and Runyan refer to 'a Celtic Atlantic thalassocracy... centering around the Irish Sea and Brittany and extending south to Coruna in Iberian Galicia and north to the Shetland and Orkney Islands'[14]. Bowen would also extend the seaways to the Faeroes and even Iceland[15] and Bullough, in a recent aside, refers to the Hebrides as being 'at the north-eastern extremity of the Western Seaways'[16]. For our purposes, however, these latter areas must be defined as separate. In the period of the early Greek explorations of the Atlantic (c. 325-100 BC), and afterward in the Viking age, ships sailed westward around Ireland from

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[11] '"Britain and the British Seas'", pp. 14-16.

[12] The 'classic' quality of this definition is reflected in its use in a recent school text-book *The Northern World* (Facts on File Series), New York, 1990, pp. 1-26

[13] Thomas, 'Gallic *Nautae'*, pp. 10-11.

[14] A. R. Lewis and T. Runyan, *European Naval and Maritime History*, Bloomington, 1985, p. 15.

[15] Bowen, *The Western*, p. 92ff.

[16] D. Bullough, 'The Missions to the English and the Picts and their Heritage (to c. 800)', in H. Löwe, ed., *Die Iren und Europa im Früheren Mittelalter*, Stuttgart, 1982, p. 81.

northern Scotland to reach the southern branch of the western sealanes. In the period 400-800, however, maritime activity to the west and north of Scotland was separate from that of the western sealanes south of Scotland. The people of Dalriada were beginning to explore the North Atlantic and Arctic waters, however, in ways which would have significant implications for the Viking Age and beyond[17].

Information about maritime conditions of the western sealanes can be obtained from publications of the Admiralty Hydrographer and from the observations of actual mariners, present and past. The more recent sources, of course, raise the question as to whether the conditions of the twentieth century are comparable with those which obtained in the early medieval period. McGrail has addressed this point at some length[18]. There is evidence to suggest that conditions prior to circa 1300 were at times slightly warmer than in the present day. By the mid-first millenium AD, however, the most profound temperature changes were a millenium in the past, though we might assume an average of a week or two more of finer weather on a yearly basis and slight lessening of the danger of exposure in cold weather sailing. Isotope levels in cores taken from the Greenland permafrost suggest that the period c.500-700 was slightly colder than the periods immediately preceding and succeeding it[19], but the net difference from the present day may be accounted negligible. There is little other than indirect evidence for changes in air pressure. In the area of coastline changes there are probably greater discrepancies. The English Channel has been especially volatile in this regard. The estimated

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[17] See p. 326.

[18] McGrail, 'Cross-Channel', p. 303-4.

[19] W. Dansgaard *et al.*, 'Climatic Changes, Norsemen and Modern Man', *Nature* 255 (1975), p. 25. For very wide ranging discussion of climatic development, H. H. Lamb, *Climate: Past, Present and Future* , vol.II, London, 1977; *idem*, 'Climate and the History of Europe and its Offlying Seas', in M. Carver, V. Hall and R. Sutcliffe, eds, *Maritime Studies, Ports and Ships, Medieval Europe 1992 Pre-Printed Papers, vol.2*, York, 1992, pp. 1-26.

steady rise in sea level and rate of erosion in the latter region would imply the need for some care in using modern pilot manuals. Still any change would mostly be within the modern tidal range. Scilly is an exception, in part due to its individual terrain, which is susceptible to inundation on a scale not replicated even on the neighbouring coastline[20].

The climate[21] of the western coasts of Europe is dominated by the Atlantic pressure systems. Simply, these are two pressure centres: the one high, in the vicinity of the Azores; the other low, in the vicinity of eastern Greenland. The former has dominance in the summer months, the latter in winter. Pressure is low over the Continent in summer and the North-Atlantic low-pressure system weakens. The Azores high pressure centre becomes around 2 millibars higher and moves 2° futher north with an extension east towards the Bay of Biscay. In the winter the North Atlantic low-pressure centre moves to 65° north latitude and pressure becomes higher over the Continent, with an extension westward into the Atlantic from the Mediterranean. These pressure changes bring seasonal changes in weather patterns. Along the western sealanes, from Biscay northward, winds are chiefly from the south-west and west at most times of the year. North and east winds are at their most frequent in February, March, April and May. The

[20] J. J. Devoy, 'Controls on Coastal and Sea Level Changes and the Application of Archaeological-Historical Records to Understanding Recent Patterns of Sea-Level Movement', in S. McGrail, ed., *Maritime Celts, Frisians and Saxons* (CBA Research Report 77), London, 1990, pp. 17-26; A. B. Hawkins, 'Sea Level Changes around South West England', *Marine Archaeology: Colston Papers*, Bristol, 1971, p. 67-88; Thomas, *Exploration*, pp. 17-34; M. J. Tooley, 'Sea-Level and Coastline Changes during the Last 5000 Years', in S. McGrail, ed., *Maritime Celts, Frisians and Saxons* (CBA Research Report 77), London, 1990, pp. 1-16.

[21] The details in the following section are compiled from: R. Buchanan, 'The Irish Sea: the Geographical Framework', in M. McCaughan and J. Appleby, eds, *The Irish Sea, Aspects of maritime History*, Belfast, 1989, pp. 1-12; K. A. Coles & A. N. Black, *North Biscay Pilot*, London, 1970; S. McGrail,'Cross-Channel Seamanship'; C. H. Cotter, *The Atlantic Ocean*, Glasgow, 1974; Hydrographer of the Navy, *West Coasts of England and Wales Pilot*, Eleventh Edition, Taunton, 1974,*West Coast of Scotland Pilot*, Eleventh Edition, Taunton, 1974, *Mediterranean Pilot*, vol. 1, Taunton, 1970; J. W. King, *The Pilot's Handbook for the English Channel*, London, 1893; Naval Intelligence Division, *Spain and Portugal Handbook*, vol. 1, London, 1941; Pryor, *Geography, Technology.*

frequency of gales is most profoundly affected by seasonal change in pressure system development. 80% of gales occur between October and March, the most severe in December and January. Most gales come from the south-west and west. For the west coast of Spain and Portugal winds tend more to the north and west in summer *(penientes)* than further north. Swell in most regions of the western sealanes tends to follow the prevailing wind. Winds in the western Mediterranean in spring will often be easterly, known as the *levanter,* favouring exit from the Mediterranean into the western sealanes. But in the Atlantic, *vendevales,* south-westerly winds bringing bad weather and poor visibility, are common from November to April. These occur as far north as Galicia, but earlier in the season than in the south of Spain. In general, the intensity of wind and swell gradually increases as one travels north from Gibraltar.

The strong incidence of westerly winds makes coast-hugging particularly unsafe (except on eastward-facing coasts). Where the predominant wind is from offshore, a vessel without the ability to sail effectively to windward would run the risk of being driven onto the shore with the strengthening of the wind, or the turning of the tide. As we shall see below, there is strong evidence that early medieval craft had next to no ability to perform to windward. Though obvious, it is still worth pointing out that (in the north) the westward-facing coasts of the western sealanes are often peninsulas[22] of which only the extreme ends actually face west. On the south coast of such a peninsula a ship can be caught in a dangerous lee that requires considerable sailing south and west to extricate itself, often in the face of a prevailing wind. Floodtide can often drive such a vessel, caught in this position, onto the shore. This is a form of 'embayment': whereby a vessel becomes landlocked, with either wind or tide obstructing its only path of exit. Openings in

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[22] Cotter observes that the North Atlantic has a greater proportion of peninsulas than any other world sea, *The Atlantic,* p. 4. The coastline of the Atlantic is indeed greater in length than that of both the other oceans combined, Outhwaite, *The Atlantic,* p. 48.

the western coasts are intensified in their dangers by another factor. Directly facing the prevailing wind and swell, the English and Bristol Channels and the Bay of Biscay are subject to 'funnelling', especially the English Channel mouth. This phenomenon, caused by the narrowing-in of landmasses to either side, causes tidal patterns of great complexity and up to 20% strengthening of the wind. In the south of the Bay of Biscay the same phenomenon obtains. There the prevailing wind is northerly and a rugged coast faces it, with only a handful of safe harbours.

Tides are the most significant variable element in western sealanes navigation. Caused predominantly by the action of the Moon's gravitational effects upon the ocean, they are, however, significantly influenced by topography and the action of wind-generated currents. Tidal streams are all but absent from the Mediterranean, where travel may involve sailing from peninsula to peninsula[23] thus rendering any input of models from ancient Mediterranean navigation practices dangerously misleading. Peninsulas in the northern seas often divide tidal streams on different timetables and have, accordingly, an excessively volatile character. Nonetheless, tides are a regular variable factor in a region where most variations in marine conditions are only vaguely predictable. There is no doubt that early mariners must have been extremely conscious of, and knowledgable concerning, tidal patterns. Tides in the western sealanes bring extreme changes in sea-level. Tides also begin to run at different times in different parts of the sealanes. A knowledge of the relative times of change of tides can be of great assistance to navigators. A mariner rounding the tip of Land's End, for example, having taken a favourable ebb out of Mount's Bay (leaving at half ebb) can pick up a nine-hour tide up the Bristol Channel[24].

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[23] T. Severin, *pers.comm.*

[24] King, *Pilot's Handbook*, p. 22.

Within the Irish Sea conditions have always governed the patterns of traffic. The tidal range within the zone exhibits great variety: less than 2m between Arklow and Wexford, but reaching between 6-8m along the Lancashire coast[25]. Neither of these extremes is best suited to navigation for the mariner who wishes to work the tides. Where the tides are at their weakest, between Isle of Man and St John's Point on the coast of Ireland, the shallow waters yield exceptional levels of mackerel and herring[26], but navigation is hampered by slack water. Generally low wave heights along the east coast of Ireland make it more hospitable than the eastern shore of the Irish Sea, but are accompanied by frequent shallows and sandbars between Wexford and Dublin[27]. The tidal streams entering the Irish Sea from north and south meet at the Isle of Man, making it a logical staging-point for the mariner working the tides on a north to south voyage. In the north of the Irish Sea it is possible to work the tides flowing into the Clyde estuary. The tidal flow of the channel between Fairhead and Kintyre, however, is fearsome, being funnelled up to a speed of five knots[28].

Missing the tide in such strong tidal waters can mean not only the missing of tidal assistance. Progress against the tide, except with the strongest of following winds, can be negligible. Where the vessel is near the shore this can be a matter of life or death. Ships stranded by the retreating tide could also be prey for 'longshoremen', such as the notorious 'sharks' of nineteenth-century Britain who boarded accidently stranded boats before the tide could refloat them and then claimed a percentage of their value as if they were shipwrecks under the law - an extremely common form of piracy in all maritime societies. Though the sources do

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[25] Buchanan, 'The Irish', p. 3.

[26] *Ibid.*, p. 4.

[27] *Ibid.*, p. 5.

[28] *Ibid.*, p. 3.

not attest directly to the existence of such operators, the Old Irish *Muirbretha (Sea Laws)* appear from the surviving commentaries upon them to have defined the legal liability of being driven onto someone else's land[29] and would open the way for such practice, if they were not a response to it.

The western coasts of Europe and the British Isles have a hazardous scattering of rocks and shoals. A frightening collection of shoals and offshore rocks exists off the tip of Brittany: Les Platresses and the submerged rocks of La Plate la Vielle, Île d' Ouessant and Île de Beniquet. There are strong tidal streams amongst these. Lands End has dangerous rocks, also, off the southernmost tip and in the northern lee, such as the Longships. There is no evidence that early medieval mariners actually used the routes close in around them leading into the Channel, though local traffic may well have done so. With detailed local knowledge it is possible, for example, to sail in a channel behind the main reefs of Ushant, sheltered from the offshore winds[30]. We may note in conclusion the contrast of these exposed seas with the sheltered 'training ground' of western Norway, so important in the genesis of Norse seafaring, behind the offshore islands of the *skergardr*[31]. Any technology evolving along the western sealanes *began* with the need for a deep sea sailing capacity.

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[29] For *Muirbretha* see pp. 255ff.

[30] *Channel Pilot*; McGrail, 'Cross-Channel Seamanship', p. 321.

[31] Marcus, *The Conquest*, p. 39.

2.2 *Shipping*

In communication and commerce the elements called by Marx the 'vascular systems'[32], the ships and containers used, provide vital information about the scale and the priority given to overseas transport. Details regarding the performance, cargo capacity and basic design features of vessels in use along the western sealanes are limited and much has depended upon the evidence of literary sources. The latter give often a very clichéd image of seafaring, especially in the Irish case, which has only recently been approached with a more critical eye.

Our concern here is with identifying ships involved in interregional trade and communication, rather than a technical study of shipping. The following discussion is therefore divided into ethnic or regional sections, rather than by ship types. It should be observed, however, that the regular equation of certain designs with ethnic groups (such as Ellmers' 'Celtic' class of wooden ships[33] and the general equation of the clinker construction technique with the Germanic peoples) should not be regarded as certain. The shipping of the Irish, in particular, has too often been perceived as dependent on skin-covered craft, only giving way to wooden vessels in the mid-first millenium AD - this evolutionary model giving rise to such convoluted arguments as Bowen seeing the Broighter boat as a skin-covered vessel[34] and Hodges's attempt to see the Utrecht ship as similar in shape to a curach[35]. A variety of types was used within an ethnic group and designs may be regionally, and not ethnically, centred. The choice to use one of the available types

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32 Marx, *Capital*, trans E. and C. Paul, London, 1930, vol.1, p. 172.

33 D. Ellmers, 'Keltischer Schiffbau', *Jahrbuch Römisch-Germanischen Zentralmuseums Mainz* 16 (1969), pp.73-122; S. McGrail, 'Boats and Boatsmanship in the Late-Prehistoric North Sea and Channel Region', in *idem, Maritime Celts, Frisians and Saxons* (CBA. Research Report 77), London, 1990, pp. 32-48.

34 Bowen, *Britain and the Western*, p. 187 (caption to plate 33).

35 Hodges, *Dark Age*, p. 97.

of ship technology is then a matter of the appropriateness of the type to the function and its affordability to the persons wishing to use it. This is true not only in the Celtic case[36]. Some Germanic groups clearly were willing to use whatever vessels came to hand and to adapt to new techniques at need. Barbarian groups arriving on the shores of the Mediterranean quickly utilised captured craft[37]. Haywood would even see ships from Pontus taken back to the Rhineland by escaping Franks in the 270s[38]. We must accordingly remain open-minded on the issue of the variety of maritime technology available at the close of the Roman period in northern Europe. The historiography of curach sailing, which will be discussed first to serve as a case study, serves to indicate how narrow past interpretations have been.

Celtic Ships

The Irish churchman sailing in a curach is a commonplace in writings both from and about the early middle ages. In such small, skin-covered, craft we are accustomed to envisage Irish mariners sailing far afield, certainly around the Irish Sea and the Hebrides, perhaps to the Continent - or even to America[39]. The role played by the curach in the early medieval navigation of the Irish Sea and the Atlantic, however, has been much debated in what Farrell and Penny have termed the 'inevitable argument about skin boats and wooden boats'[40]. G. J. Marcus has

[36] Unger, *The Ship*, pp. 40-1 & 253ff.

[37] E.g. Aurelius Victor XXXIII.3, where Franks captured a fleet at Tarragona around 260 AD and raided the coasts of Africa.

[38] J. Haywood, *Dark Age Naval Power, A Reassessment of Frankish and Anglo-Saxon Naval Activity*, London, 1991, p. 31.

[39] J. De Courcy Ireland, *Ireland and the Irish in Maritime History*, Dublin, 1986, pp. 38ff.

[40] R. W. Farrell and S. Penny, 'The Broighter Boat: A reassessment', *Irish Archaeological Research Forum* 2 (1975), p. 19.

been criticised for overemphasising the role of the curach at the expense of other possible types[41] as has Paul Johnstone[42], and the debate has further been sustained by Tim Severin's experimental reconstruction of a curach and subsequent voyage from Ireland to Newfoundland[43]. It emerges from critical study of the sources that the placing of the curach in the foreground of early medieval Irish maritime history involves contentious readings of the ambiguous term *navis* where it is used in more reliable texts such as Adomnan's *Vita Columbae*, as well as undue reliance upon the interdependent literary texts known as 'voyage literature', which favour the curach over wooden ships but which may be unrepresentative of an Irish maritime experience involving both wooden and skin-covered vessels in contemporaneous use.

The *Scotti* (Irish) who raided the shores of sub-Roman Britain in the fourth and fifth centuries are described as coming *de curucis*[44], from which we may be sure that something akin to the vessel known today in Ireland as a *curragh* (Old Irish *curach*, Latin *curucus*) is described. For convenience this type will be known henceforth by the term curach. As distinct from what is now in Britain called a 'coracle', the curach is a sea-going craft of some size, longer than it is wide, and capable of being sailed. The general type seems to have been indigenous to most of the Celtic groups of the British Isles and perhaps other Celtic groups in continental Europe - as Lucan refers to the use of coracles in Italy[45]. The Picts and the Irish,

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[41] De Courcy Ireland, *Ireland*, pp. 38ff; Marcus, *The Conquest*, pp. 3-32.

[42] P. Johnstone, 'The Bantry Boat', *Antiquity* 38 (1964), pp. 277-8; Farrell and Penny, 'The Broighter', p. 20.

[43] Severin, *The Brendan.*

[44] Gildas, *De Excidio* XIX.1 (ed. M. Winterbottom, *Gildas: the Ruin of Britain and other Writings,* London, 1974, p. 94).

[45] 'Venetus stagnante Pado fusoque Britannus navigat Oceano: in which the Venetian navigates the sluggish Po and the Briton the wide Ocean', Lucan, *Pharsalia* IV.134 (ed. J. W. Duff, LCL, London, 1969, p. 184).

including the Argyll 'Scots', definitely used such vessels, while the smaller, 'coracle', form is still found in Wales today[46]. Modern descendents of the medieval curach are still built in western Ireland (where the English term 'canoe' is used as cognate in meaning with the Gaelic word *curragh*), by stretching tanned fabric over a frame of tied or woven laths (in medieval texts sometimes this frame is described as *flescach*: 'wicker'[47]).

Supporters of the thesis that the curach was predominant have often assumed an evolutionary model whereby an ancient tradition of curach-sailing was only superseded by the use of wooden ships late in the pre-Viking period, or with the coming of the Vikings. Opponents of this view have taken an equally evolutionary model in asserting that the curach was not capable of the voyages described in Irish texts of the pre-Viking period[48]. That fifth-century raiders sailed across the Irish Sea in curachs is beyond doubt. Need this imply, however, that it was the only type of vessel available to the early medieval Irish, even as early as the fifth century? We should bear in mind E. V. Wright's observation that even in early societies a plurality of types should be expected to be found in contemporaneous use[49]. Contrary to the evolutionary viewpoint, there are particular functions for which the curach might be favoured over a wooden craft. The curach is a particularly suitable vessel for raiding, it is light, can land through the surf and it can negotiate very harsh conditions[50]. It was also cheaper and easier to build than wooden craft, which may have been a factor of importance if the

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46 J. Hornell, *Water Transport*, Cambridge, 1946, 111-47; McGrail, *Ancient*, pp. 173ff)

47 *Annals of Ulster* s.a. 622 (ed. G. MacNiocaill and S. Mac Airt, Dublin, 1983, p. 110); J. Bannerman, *Studies in the History of Dalriada*, Edinburgh, 1974, p. 152.

48 De Courcy Ireland, *Ireland*, p. 39.

49 E. V. Wright, 'The Boats of North Ferriby', in *Three Ancient Boat Finds in Britain*, National Maritime Museum Monograph, No. 6, Greenwich, 1972, p. 6.

50 G. J. Marcus, 'Factors in Early Celtic Navigation', *Etudes Celtiques* 6 (1953-4), p. 312.

raiders came from a displaced or relatively economically-deprived sector of society, especially likely with groups who are raiding offshore. In other words, we must question whether the curach was used in the fifth century raids because it was the 'natural' means of transport for Celtic peoples; or whether it was one of several types of available craft, chosen for its suitability to the task in hand or for economic reasons.

The curach is the preferred vessel in the texts that are known as the lives *(vitae)* of the 'maritime saints'. They are also the vessels used in the Irish writings known as the 'Otherworld' or 'Voyage' *(immrama)* texts. The historical value of the evidence from these texts is questionable, however, as they are highly imaginative and often written well after the events they purport to depict. Particularly influential has been the Latin *Navigatio Sancti Brendani*, which combines both traditions, where St Brendan and his followers build themselves a curach to sail to a Paradise in the ocean. This text is at least ninth-century, but has been argued to be as early as seventh-century, in date. It shares many episodes in common with the *immrama* and it is unclear whether they are hence earlier or later than the *Navigatio*[51].

That churchmen did use the curach for their *peregrinatio*[52] into the ocean is beyond doubt. The Old English *Parker Chronicle* for 891 records how:

> Three Irishmen came to King Alfred in a boat without any oars, from Ireland...The boat in which they set out was made of three-and-a-half-hides...and after a week they came to land in Cornwall[53].

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[51] C. Selmer, *Navigatio Sancti Brendani Abbatis*, Notre Dame, 1959, pp. 10-11; D. Dumville, 'Two Approaches to Dating *Navigatio Sancti Brendani*', *Studi Medievali* 29 (1988), pp. 87-102.

[52] For good critical discussion of *peregrinatio*, see T. Charles-Edwards, 'The Social Background to Irish *Peregrinatio*', *Celtica* 11 (1976), pp. 43-59.

[53] 'þrie Scottas comon to Ælfrede cyninge, on anum bate butan ælcum gereþrum of Hibernia...se bat wæs geworht of þriddan hælfre hyde þe hi on foron...þa comon hie ymb vii niht to londe on Corn walum', *Parker Chronicle*, s.a. 891 (ed. C. Plummer and J. Earle, *Two of the Saxon Chronicles Parallel*, Oxford, 1892, 82).

We may accept this text as a reliable witness to an actual event, but it should not be held to typify Irish clerical voyaging[54]. Romantic associations may have attached to the èurach concerning its use by the saints, and in view of the fact that some saints, such as Petroc, travelled in boats of stone (!) it is with care that we take at face value the evidence of the *vitae* for any material from which boats are said to be made. The fact that the curach was made from animal, rather than vegetable, matter seems to have given it special qualities in literary contexts. In the *Vita Brendani*, St Brendan is prevented from entering Paradise until he returns in a wooden ship[55]. In later medieval tradition St Columba and his brethren first arrive at Iona in a curach which is symbolically buried. All voyages made by the saint in the more reliable *vita* of the saint by Adomnan, however, are in a *navis* (which may or may not be a curach, but is not distinguished as one[56]). At some point in the development of the hagiographical tradition the specifying of a curach must have come to be seen as particular to Irish eremetical symbolism, only as real as the symbolic committment not to return to his homeland (which he does more than once). Until a full study is made of the priority of the texts in the voyage tradition we cannot rely upon them as witnesses to the regular use of curachs in monastic voyaging. Again we may note that a curach could be cheap to build[57]. If the *Navigatio* is any indicator of the

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[54] Especially as the romantic 'aimless' image of *peregrinatio* implied in this epsiode is very similar to that in another English source, the poem *Seafarer*. See D. Whitelock, 'The Interpretation of the *Seafarer*', in C. Fox and B. Dickens, eds, *Early Cultures of North West Europe*, Cambridge, 1950, pp. 267ff.

[55] *Vita Brendani* LXXI (ed. C. Plummer,*Vitae Sanctorum Hiberniae*, Oxford, 1910, Vol. 1, p. 136). This text is more recent than the *Navigatio*, and incorporates passages from it, though some rescensions do not. For textual tradition of the *Vita* see R. Sharpe, *Medieval Irish Saints' Lives, An Introduction to Vitae Sanctorum Hiberniae*, Oxford, 1991, pp. 390-1.

[56] *Vita Columbae* e.g. I.1 (ed. A. O. and M. O. Anderson, *Adomnan's Life of St Columba* Edinburgh, 1961, p. 194) and *contra* the sort of assumption made by P. Johnstone, 'A Medieval Skin Boat' *Antiquity* 36 (1962), p. 32: 'St Columba, of course, travelled from Ireland to Iona in a curragh'.

reality of eremetical life, the fact that the brethren in the *Navigatio* are depicted as building their own vessel may indicate that the curach was able to be built by hermits who had no means to pay a boatbuilder.

Where we have matter-of-fact references to a *duorum navicula transitorum* ('two-benched boat') in Dicuil[58] or *vii sese* ('seven-benched boats') in the *Senchus fer nAlban* (c.7th century)[59] in use by ethnically Irish people, there is no certainty that these are curachs[60]. Curachs, we may note, tend to be referred to by the number of hides from which they are made[61] and not explicitly by the number of benches. In the *Vita Columbae* Adomnan uses a variety of words for ships: *navis*[62], *longa navis*[63] and *barca*[64]. The value of Adomnan's text, written late in the seventh century and within only a century of the saint's death, is, accordingly, much greater than that of the majority of the Irish *vitae*, most of which survive in texts written at the earliest in the ninth century (and from later manuscripts still)[65]. Its unique character amongst such *vitae* in terms of accuracy of description is

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[57] See J. Hornell, 'British Coracles', *Mariners Mirror* 22 (1936), p. 9.

[58] Dicuil, *Liber de Mensura Orbis Terrae* VII.14 (ed.. J. J. Tierney, Dublin, 1967, p. 74).

[59] Bannerman, *Studies*, pp. 42 & 59-60.

[60] Marcus, 'Factors', p. 325; *contra* P. Johnstone, *The Archaeology of Ships*, London, 1964, p. 282.

[61] E.g. *Parker Chronicle* s.a. 891 (ed. Plummer and Earle, p. 82); *Immram Curaig Máel Duin*, Prologue (ed. H. P. Oskamp, Gröningen, 1970, p. 106).

[62] *Vita Columbae* I.4 (ed. Anderson and Anderson, p. 220).

[63] *Ibid* II.45 (p. 452).

[64] *Ibid* I.28 (p. 264).

[65] Sharpe, *Medieval Irish*, pp. 9-12.

widely acknowledged. Another reliable seventh-century source, the Irish law text *Uraicecht Becc*, speaks in a similar range of terms: *long*[66], *barc* and *curach* [67].

The *longa navis* of Adomnan (literally 'long ship') is clearly a wooden vessel. Adomnan describes an incident 'when dressed timbers of pine and oak for a long ship were being drawn over land'[68]. This is an exceptional reference and clearly this was not an everyday ship, but a special purpose vessel. Other evidence will suggest that this was a warship. Old Irish *long* is clearly a borrowing from this Latin term. The use of this and related terms for ship was widespread, not merely confined to the Gaelic-speaking groups. The Middle Welsh word for ship is, likewise, *llong*[69]. *Longa navis* in Latin is used to describe a 'warship'[70] and the context in which it enters Irish is probably the same. Carney would consider this a very early loanword from Latin, on account of its appearance in the Leinster genealogical poems, along with probable pre-Christian Latin terms such as: *legión (legio), míl (miles), trebun (tribunus)* and others[71]. These words suggest an imperial context and, all importantly, a comprehension of Roman conceptions. Gildas, in sixth-century Britain, uses *longa navis* as cognate in meaning to the Germanic stem *cyul-* [72]. Although in the Germanic reference it is likely that the ships are both literally 'longships', in the sense of the Icelandic *langskip*

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[66] Also, for example, in *Annals of Ulster* s.a. 588 (ed. MacNiocaill and MacAirt, p. 94) - an interpolation of indeterminate date.

[67] *Uraicecht Becc* (ed. D. A. Binchy, *Corpus Iuris Hibernici*, Dublin, 1978, pp. 1615, 2280, 2332 - for the three different rescensions).

[68] *Vita Columbae* II.45 (ed. Anderson and Anderson, p. 452).

[69] E. g. *Branwen uerch Lyr* I.18 (ed. D. S. Thomson, Dublin, 1961, p. 1).

[70] C. H.Ericsson, *Navis Oneraria: the Cargo Carrier of Late Antiquity* (Acta Academiae Aboensis, Series A: Humaniora), Åbo, 1984, p. 15.

[71] J. Carney, 'Three Old-Irish Accentual Poems', *Ériu* 22 (1971), pp. 69-70.

[72] Gildas, *De Excidio* 23 (ed. Winterbottom, p. 97).

('longship'), and 'warships' in the Roman sense, there is no reason to consider that *longa* in any of these cases has a separate adjectival sense[73]. The *Glossary* of Cormac of Cashel (c.900) may imply this sense (*Long - .i. ab eo quod est lang bis for muir)*[74], but the use of *lang* seems to indicate the influence either of Old English or Norse *lang*, not Latin *long*. Likewise the glossing of *fada* ('long') onto two of the recensions of the *Uraicecht Becc (.i. longa fada)*[75] is from a later date than the early middle ages.

Old Irish *long* is thus a word for 'warship' deriving from the Latin compound *longa navis*. The Andersons gloss the term as indicating a 'wooden ship', but in doing so they are at pains to correct Reeves', and a manuscript variant, reading as *naves*, believing it to wrongly suggest a monoxylous log-boat[76]. They also are perhaps unconciously favouring the idea that *navis* alone indicates a non-wooden craft, but this is not certain. *Longa* is obviously not a qualifier to specify 'wooden', hence what the more generic *navis* may be constructed of is ambiguous. The voyager Cormac's *navis*, however, has a leather covering *(pellicum tectis)*[77]. This might imply it is a curach, or may refer to a canopy of leather[78]. Elsewhere Adomnan describes curachs *(curuca)* specifically and distinguishes them in the same phrase from *scaphae* (skiffs)[79]. Adomnan occasionally qualifies *navis*, for

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[73] Though the equation of Latin *long-* with Irish *fada* ('long') was common, e.g. *Annals of Ulster* s. a. 592 (ed. MacNiocaill and MacAirt, p. 94).

[74] *Cormac's Glossary* (ed. W. Stokes, *Three Old-Irish Glossaries,* Dublin, 1862, p. 27).

[75] *Uraicecht Becc* (ed. Binchy, *CIH,* pp. 1615 & 2332).

[76] *Vita Columbae* I.36 (ed Anderson & Anderson, p. 282n).

[77] *Vita Columbae* II.42 (ed. Anderson & Anderson, p. 444).

[78] In the literary context, an eremetical voyage, a curach would seem likely. But we must consider that this early text is quite likely to have *inspired* images of *peregrinatio* as much as fitting in with them. If it was in any way an archetype for later voyage stories the matter becomes very complicated and what Adomnan intended the term to imply is less of an issue than what later writers thought he meant.

[79] *Vita Columbae* II.45 (ed. Anderson and Anderson, p. 452).

example with *oneraria* - i.e.'freight ship'[80]. The Latin usage of *navis* in the Mediterranean distinguished the merchant ship from the *galea* or long rowing vessel[81], but it seems in the Irish case that *longa navis* conveys the sense of *galea*. There may be potential for further terminological debate in this evidence. That Adomnan uses *ratis* (raft) as cognate in meaning with *navis*[82], however, reminds us that he is inclined to make elegant or metonymic usage of terms. It would seem safest to accept that *navis* is a generic term, and not a class of ship, and it can be used either of curachs or wooden ships.

Adomnan's *barca*[83] is the ship of visiting Gaulish sailors. The word is used only of their craft in that text and seems, therefore to imply some kind of distinction from indigenous craft. In the ninth-century Irish text *Tecosca Cormaic* it is seen in the context of a ship bringing imported goods[84]. The other possibility then is that the word has a specifically trading connotation, i.e. only being used of a trading ship. The *barca* of the *Uraicecht Becc* is implied to be a type built in Ireland, as the law relates to 'a builder of *ler long* ('sea-ships'), and *bairca*, and *curach*[85] who must obviously be resident in Ireland for the law to be relevant. A Middle-Irish gloss on this text states that the *barca* is a ship 'not fitted for voyaging'[86], but this would be a later interpretation and probably does not mean much. It is worth noting that *barque* in more modern usage is similarly ambiguous

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80 *Ibid.* II.3 (p. 328); also Gregory of Tours, *Historia Francorum* X.9 (ed. Krusch, p. 492).

81 W. Ashburner, *The Rhodian Sea Law*, Oxford, 1909, p. ciii.

82 *Vita Columbae* I.36 (ed. Anderson and Anderson, p. 282*n*).

83 *Ibid.* I.28 (p 264).

84 'Bárca do thocor i port, Allmaire sèt: inviting barcs into port, with treasures from over the sea', *Tecosca Cormaic* (ed. K. Meyer, Todd Lecture Series XV, Dublin, 1909, p. 2-5).

85 *Uraicecht Becc* (ed. Binchy, *CIH*, pp. 1615, 2280, 2332).

86 *Ibid.* (p. 1615, 2280, 2332).

being used for both a small boat carried on board a ship as a tender or launch, and for a class of larger, two-masted, ships.

Literary and iconographic material may provide some clues as to the form and capacity of the curach and the wooden ship types. In the *Navigatio Sancti Brendani*, St Brendan and his brethren build a curach with the aid of iron tools:

> The ribs and frames were of wood, as is the custom in those parts, and the covering was tanned ox-hide stretched over oak bark. They greased all the seams on the outer surface of the skin with fat and stored away spare skins inside the coracle, together with fat for waterproofing the skins, tools and utensils. A mast, a sail, and various pieces of equipment for steering were fitted into the vessel[87].

The relationship of these details to modern curach-building is a subject for debate. There is only a small body of problematical evidence through which we may trace the descent of the modern curach from the medieval. In view of the conservative quality of boatbuilding practice, which in the Germanic case shows similarities of practice and even dimension across hundreds of years, it is with reluctance that we should dismiss any similarities[88]. Nonetheless, it is fair to say that the argument for considering the modern curach as closely resembling the early medieval one is worthy of detailed criticism.

A pillar stone at Bantry, Co. Cork, shows a carving of a boat with four oarsmen and another steering, being rowed heavenward from the bottom to the top of the pillar[89]. The boat seems clearly to be a curach, in form not unlike the modern

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[87] 'costatum et columnatum ex silua, sicut mos est in illis partibus, et cooperuerunt illam coriis bounis [atque rubricatus] in roborina cortice. Et linierunt foris omnes iuncturas pellium ex butyro, et miserunt duas alias paraturas navis de aliis coriis intus in navim et stipendia quadraginta dierum et butyrum ad pelles preparandas ad cooperinmentum nauis et cetera utensilia que as usum uite humane pertinent. Arborem quoque posuerunt in medio nauis fixam et uelum et cetera que ad gubernacionem nauis pertinent', *Navigatio* 4 (ed. Selmer, pp. 10-11; trans. J. F. Webb, *Lives of the Saints*, Harmondsworth, 1969, p. 36).

[88] C.f. Farrell and Penny, 'The Broighter Boat', pp. 22-3.

[89] Johnstone, 'The Bantry Boat', pp. 277-8.

The Bantry Boat
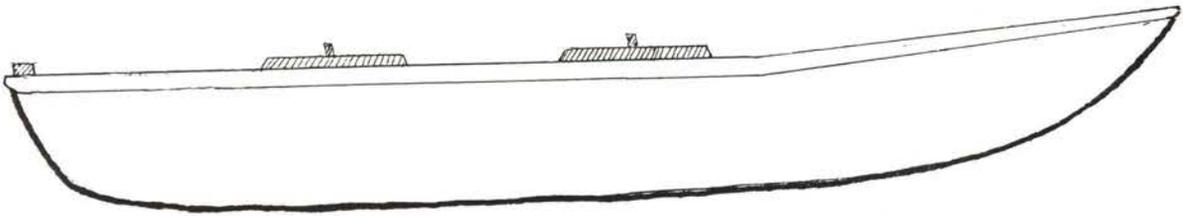
Sheer of Dunfanaghy Curragh, Co. Donegal 1936
(after Hornell, *Water Transport,* p. 146 fig. 19))

Fig. 1

curach of Ireland's southwest. It has a short stern, though whether there is a transom is not clear, and the bow tapers forward with a slow upward curve, very like the bow of a modern curach. There is no sign of a mast. This carving is therefore evidence of the existence of a curach of similar form to those built today. The carving was dated by Henry to the eighth century, by comparisions with the Ahenny chariot and other eighth-century images[90]. As with all dating on the basis of typology, the date is to be treated with care. There seems little doubt that the pillar and carving is early medieval, however, and iconographically distinct from the representations of ships on high crosses, which usually highlight clinker planking on the hull[91]. It should also be noted that the negative evidence for planking in the picture is significant: iconographic studies show that planking is one of the commonest elements to be included in the crudest representations of ships - if there is planking to depict[92]. The estimated length of the model for the picture is around eight metres. It is unclear whether four (rowing with two oars each) or eight (side by side with one oar each) oarsmen are in action. It varies somewhat in design to Severin's reconstruction of an early curach, being less double-ended and probably (if there are only four oarsmen) narrower.

References in a range of texts indicate that curachs were able to be sailed[93] evidently with a single mast and sail set in the middle of the vessel (hence the *Navigatio: in medio navis*[94]). Severin's second mast is based on the fact that modern curachs traditionally have a mast in the bow (which he interprets as a legacy

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[90] F. Henry, *Irish Art in the Early Christian Period*, Dublin, 1940, p. 108.

[91] Johnstone, 'The Bantry Boat', p. 278.

[92] A. W. Farrell, 'The Boat Motif on the Tintagel Slate Fragment: Its Implications', *Mariner's Mirror* 70 (1984), pp. 71-2.

[93] E.g. *Vita Columbae* II.45 (ed. Anderson and Anderson, p. 452).

[94] *Navigatio* 4 (ed. Selmer, p. 11), *contra* Farrell and Penny, 'The Broighter', p. 21 - now confirmed by Severin's experience.

of an early foremast), but his arguments contradict the texts and at times are nonsensical[95]. On the other hand, Severin has argued very convincingly that the reference to 'oak bark' in the *Navigatio* probably refers to a tanning process in which oak acids were used[96], indicating that leather rather than untanned hides (such as in Eskimo craft) were used. The alternative, that bark was placed between the frame and the skin, makes no appreciable sense. The outer skin was greased with fat, butter *(butyro)* in the *Navigatio*[97], to make it watertight at the seams and to preserve the leather. Severin's use of wool grease is without textual support[98].

The excellent seagoing qualities of the well-balanced and flexible[99] curach would certainly be shared by its early medieval counterpart. Those doubters who have sought to dismiss the idea that the *curach* was suitable for Atlantic voyaging have clutched at straws. Tim Severin in 1976-7 sailed his replica of a medieval curach from Ireland to America. There has been much criticism of this replica, mostly on account of points where he departed from the evidence to put in desired features, such as the second mast. His suggestion that medieval curachs were double-ended and with less of a sheer at the stem than modern ones is also made doubtful by the similarity of the Bantry Boat to modern curachs - though, as the Bantry Boat does not have a mast, we cannot be sure that a *sailing*-curach's hull was not differently shaped to a rowing curach. It does not follow, however, that the changes invalidate his work as evidence. The adjustments in design which he made (admittedly often on poor grounds), to compensate for an anticipated poor

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[95] Severin, *The Brendan*, p. 25.

[96] Severin, *The Brendan, pp.* 27ff.

[97] *Navigatio* 4 (ed. Selmer, p. 11).

[98] Severin, *The Brendan*, pp. 30ff.

[99] A quality frequently noted in Viking ships - e.g. P. Johnstone, *The Archaeology of Ships,* London, 1974, p. 72.

sailing performance of his craft, can be set against his lack of experience in sailing such a craft. Most likely the shortfall in curach sailing ability hampered *Brendan*'s performance. His performance statistics are a valuable pointer to the performance of such craft in the early medieval period. The merits of his reconstruction and historical point are debatable. The success of his experiment to prove the resilience of the construction technique is not. Some criticism of Severin's craft is unreasonable and in it the critics of both his and Marcus' theses reveal a desire to assert the seaworthiness of wooden craft over skin boats (hinting at an impressionistic prejudice) - typical is De Courcy Ireland's citation of the following tiresome assertion: 'Dr Little...was no doubt nearer the truth in asserting that *oceanic* voyages from Ireland in the period under discussion, to be successful, would have needed a wooden ship'[100]. The capability of the curach over ocean voyages is surely not in doubt.

There has been much less treatment of the evidence for wooden vessels though we have some textual and iconographic evidence. What were the wooden ships like? Adomnan's *barca* was probably one of the continental types which will be discussed below - though there is evidence that Celtic and northern Frankish wooden ships may be interrelated. The Celtic Veneti, resident in Armorica in the later Iron Age, possessed wooden ships. It would be not unlikely that later wooden vessels built among their overseas Celtic neighbours would be of the same general class, though this is little more than a speculation. The ships of the Veneti are described by Caesar:

> Their keels were considerably more flat than those of our own ships, that they might more easily weather shoals and ebb-tide Their prows were very lofty, and their sterns were similarly adapted to meet the force of waves and storms. The ships were made entirely of oak, to endure any violence and buffeting. The cross-pieces were beams a foot thick, fastened with iron nails as thick as a thumb...Skins and pieces of leather finely finished were

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100 De Courcy Ireland, *Ireland*, p. 39.

used instead of sails...When our own fleet encountered these ships it
proved its superiority only in speed and oarsmanship; in all other respects,
having regard to the locality and force of the tempests, the others were more
suitable and adaptable[101].

Here, then, are wooden vessels built by a Celtic people. We can infer that they were double-ended. The solution to those extreme pressures of the sea which forced the curach builders (and the builders of Viking craft) to make a flexible vessel which would yield to the pressures of the sea, was in this case to build a boat so rigid that no combination of wind and tide could damage it. Most probably the vessels were carvel built, with closely-spaced frames[102]. The prow and stern were so high that no sea could break dangerously over them[103]. We may note that this would have been a hindrance to the placing of oarsmen, with rowing places only really possible at the lowest point of the gunwale. A boat as heavy as this would be extremely cumbersome to row and Caesar notes their primary use of sails. The Veneti were principally a trading people and these vessels may have been chiefly designed for cargo carrying. Traders rarely row their vessels over long distances (they do not carry unnecessary crew, needing the space for cargo and needing to keep overheads down). The ships of the Veneti would provide a considerable amount of dry space for cargo behind the high prow and stern.

The boat model from the first-century AD hoard of gold objects found at Broighter, Co. Derry in 1895 may provide some further clues. Its provenance has

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[101] 'Carinae aliquanto planiores quam aestus excipere possent; prorae admodum erectae atque item puppes ad magnitudinem fluctuum tempestatumque accommodatae; naves totae factae ex robore ad quamvis vim et contumeliam perferendam transtra ex pedalibus in altitudinem trabibus confixa clavis ferreis digniti pollicis crassitudine...pelles pro velis alutaeque tenuiter confectae...Cum his navibus nostrae classi eiusmodi congressus erat, ut una celeritate et pulsu remorum praestaret, reliqua pro loci natura, pro vi tempestatum illis essent aptiora et accommodatiora. Caesar, *Bellum Gallicum* III.13 (ed. Edwards, pp. 154-7).

[102] Haywood, *Dark Age,* p. 17; McGrail, 'Boats and Boatmanship', pp. 43-6.

[103] McGrail, 'Boats and Boatmanship', p. 43.

been considered very doubtful[104], but analysis of the gold content now seems to demonstrate its homogeneity with a La Tène collar found in the same hoard. If the hoard is not truly Irish, then it is very likely to be British and first-century in date. The model is of a vessel of eighteen oars, one steering oar and a mast and sail. Farrell has estimated that the vessel depicted in the 18.4 cm model was around 50 feet in length, estimating on the basis of the relative size of oars and mast. The width of the model is hard to assess, owing to its having been crumpled at the time of discovery. The thwarts are a fair guide (if not to hull shape) and suggest a vessel 20 or more feet in width. The hull is double ended and deep, along with its size making it unlikely to be a curach. Some of the arguments made by Farrell as to why it could not be a curach, however, are of doubtful relevance. It seems unlikely, for example, that a prehistoric model-maker would go to the trouble of modelling internal framework: so little can be made of its absence. Likewise the argument that modern Irish curachs have masts only in the forward part and small, triangular sails may only imply that the role of the sail has diminished as the curach became less involved in long distance voyaging. The evidence of the modern rig of a curach, often being fore-and-aft, is likely to be reflective of later changes. The Broighter sail is clearly square. Subsequent to Farrell's study, Severin has demonstrated that a curach can safely carry a mast amidships. This notwithstanding, there seems little about the model to suggest a curach. Is this then an ancestor of the *long*, or some other *navis?* If so, we may make some observations of value in assessing performance in seaway: it is broader than a Viking *langskip* and more bulbous, though reconstruction of the model has probably exaggerated this. As the evidence of the *Senchus fer nAlban* suggests

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104 Farrell and Penny, 'The Broighter Boat'; R. Warner, 'The Broighter Hoard', in B. G. Scott, ed., *Studies in Early Ireland*, Belfast, 1981, pp. 29-38. Illustration in G. Bass, ed., *A History of Seafaring Based on Underwater Archaeology*, London, 1972, p. 125.

that a vessel of seven benches (or more) could be a warship[105], we may speculate that the model is of a *longa navis*.

We may assume that Ireland and Dalriada form one technological province. We are on less certain ground with western Britain, but the types of wooden ships in use in an Irish context are probably a safe guide to what British traffic used, also. Only hagiographical sources suggest British sea voyages in curachs and we must beware of Irish influence in such cases.

Saxons

The role of the Saxons in western sealanes navigation is not entirely clear, though recent studies by the author[106], and above all by Michael Jones[107], have sought to critically re-examine the divergent sources on Saxon seafaring. Sidonius mentions Saxons present as seaborne pirates off the coast of western Gaul in the fifth century and they have a continued presence in the sixth century[108]. There they may constitute one of the groups involved in western sealanes commerce (certainly we find them working for a Frankish merchant[109]) as they lived on islands at the mouth of the Loire from where they seem to have visited the Garonne estuary[110].

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[105] See p. 47, n. 59.

[106] J. M. Wooding, 'Saxons Who Furrow the British Sea with Hides', *The Great Circle* 10 (1988), pp. 33-6.

[107] M. E. Jones, 'The Literary Evidence for Mast and Sail during the Anglo-Saxon Invasions', *Studies in Medieval and Renaissance History*, forthcoming; also see now Haywood, *Dark Age Naval Power*, pp. 15-22, 62-75.

[108] See pp. 130-1.

[109] *Historia Francorum* VII.46 (ed. Krusch, pp. 365-6).

[110] Sidonius, *Epistolae* VIII.9 (ed. Anderson, pp. 446-7)

The types of ships used by Saxons are not certain. Gildas describes the ships of the Saxon invaders of Britain by the Germanic stem *cyul-* ('keel')[111], the only Anglo-Saxon term used in his writings, which he equates with *longa navis* (which may have further implications regarding the interrelationship of Saxon and British boatbuilding traditions). These 'keels' would certainly have been wooden craft, built in the clinker tradition with overlapping strakes. The Nydam ship (c.300 AD), a double-ended craft of oak, twenty seven metres long by three broad, found in a bog near Schleswig in 1863, may be closely ancestral to this type[112]. Later in time the Viking ships are a product of the same lines of evolution. The Nydam ship has no sail and Brøgger and Shetelig have popularised the view that this is symptomatic of a Germanic ignorance of the use of the sail prior to the Viking period[113]. Gildas might be thought to imply, however, with his comments upon the Saxon's arrival with *secundis velis*[114] that the keel could be sailed. This comment has been translated by Winterbottom, for example, as 'winds were favourable', but literally it is 'winds favouring the sails'[115]; in which case the translator may be unconsciously favouring the theory of the maritime historians. Jones has critically reassessed this terminology again favouring the rhetorical rather than the literal view[116]. The terminology must still give the reader pause. We should note, however, that in the strong wind and tide of the northern seas wind is as much a factor in rowing as it is in sailing. A vessel being rowed can often make no progress at all into a strong wind. Gildas' phrase may well sit within this

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111 Gildas, *De Excidio* XXIII.3 (ed. Winterbottom, p. 97).

112 Haywood, *Dark Age*, pp. 63-6.

113 See Haywood, *Dark Age*, pp. 62-75.

114 Gildas, *De Excidio* XXIII (ed. Winterbottom, p. 97).

115 *Ibid.*, p. 26.

116 Jones, 'The Literary Evidence', forthcoming.

context. If the keels of Gildas's time were to be sailed they would have to have been built with higher gunwales than the Nydam ship evinces.

When we consider Saxons raiding the Atlantic coast, however, it is hard to see them doing so in rowing vessels, which may be why this side of their activities has been neglected[117]. Sidonius, in 456 AD, makes the following reference: 'the Aremorican region too expected the Saxon pirate, who deems it but sport to furrow the British waters with hides; cleaving the blue sea in a stitched boat'[118]. This is generally taken as an error on Sidonius' part. The fact that skin-boats are generally considered to be ethnically 'Celtic', along with the association with the 'British Sea', might be held to indicate that Sidonius has mistaken Celts for Saxons, though 'British Sea' does not need to indicate any very close proximity to Britain - in the sixth century it includes the waters off Brittany[119]. Anyway, there is no reason why 'Saxons' should be silently emended to 'Irish' by Marcus[120], nor is the fact that Saxons are more familiar in a Channel context any justification for relocating the reference there[121]. We should note a second reference by Sidonius in a letter to his friend Namatius who is fighting the Saxons off Bordeaux:

> ...in discharging the duties now of a sailor, now a soldier were roving the winding shores of Ocean to meet the curving vessels of the Saxons... Shipwreck, far from terrifying them, to them is training. With the perils of the sea they are not merely acquainted, they are familiarly acquainted; for since a storm whenever it occurs lulls into security the object of their attack

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[117] Haywood, *Dark Age*, pp. 23ff.

[118] 'Aremoricus piratam salum sulcare Britannum ludus et assuto glaucam mare findere lembo', Sidonius, *Panagyric on Avitus* ll. 369-71 (ed. W. B. Anderson, *Sidonius: Poems and Letters*, London, Vol. 1.1936, pp. 150-1 - for variants, none of which disagree with the recension selected by Anderson, see edition by C. Luetjohann, *MGH AA* 8, Berlin 1961, p. 212).

[119] The issue here is whether 'British waters' in that case refers to the British presence in Armorica, which would barely have begun in 456, or is an older name for the waters south of Cornwall. We should remain open-minded on this point and simply note the ambiguity of the term.

[120] Marcus, 'Factors', p. 313.

[121] C. E. Stevens, *Sidonius Apollinaris*, Oxford, 1933, p. 25.

and prevents the coming from being observed by victims, they gladly
endure dangers amid billows and jagged rocks in order to achieve a
surprise[122].

Here clearly the Saxons are seen in an Atlantic context and Sidonius still does not

use a stem which necessitates a wooden vessel, but a literary phrase: *pandos*

myaparones. Lewis and Short translate this as 'curving light piratical craft'[123].

Pandos might hint at the type of curving wooden craft which we will see was

probably common along the western sealanes, but the Saxons are perhaps the least

likely group to be using this type in the fifth century - coming from further afield

than the Franks and Celts. Jones has observed that Sidonius is a most unreliable

writer where detail is concerned, being given to rhetorical use of many identifiable

sources[124]. On the other hand, we are confronted here again with the matter of the

curach's particular suitability as a vessel for piracy or guerrilla warfare. This

should incline us to accept Sidonius' words at face value. Sidonius's image of the

barbarian raiders is admittedly highly rhetorical. The reference is embedded in a

passage in which he highlights the vigour of the barbarians by association with a

vigorous activity or metaphor (for example: Alamans drinking from the Rhine,

Franks descending like wolves): so he depicts Saxons sailing the sea in a hide. The

writer has argued elsewhere that this passage by Sidonius is in some way related to

the passage in Avienus where he describes Celtic people in skin boats *(navigia*

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122 'cecinesse atque inter officia nunc nautae, modo militibus litoribus Oceani curvis inerrare
contra Saxonum pandos myoparones...exercent ad illos naufragia, non terrent est eis quaedam cum
discriminibus pelagi non notitia solum, sed familiaritia. nam quoniam ipsa si qua tempestas est
huc securos efficit occupandos, huc propisci vetat occupaturos, in medio fluctuum scopulorumque
confragosorum spe superventus laeti periclitantur', *Epistolae* VIII.6 13-14 (ed. Anderson, Vol. 2,
1965, p. 430).

123 Cf. Cicero, *Verrine Orations* (ed. L. Greenwood, London, 1976, Vol. 2, p. 231).

124 Jones, 'The Literary Evidence', forthcoming.

junctus semper aptant pellibus corioque vastum saepe percurrunt salum[125]). The text of Sidonius does not quote Avienus, whose text contains only two words in common *(pellis, salum)* with his[126] but the images are too close for coincidence. The derivative quality of the image, however, only serves to make this an important case study. Whatever our scepticism of these details, our desires to dismiss this passage as romantic nonsense must be seen in the context of a tradition of such reductionism. To give a comparable example, Jones's excellent discussion of the complexities of the rhetoric of Sidonius and Gildas still follows the implicit agenda of Brøgger and Shetelig: attempting to dismiss evidence which does not fit the basic thesis that Saxons did not know the use of sails. Starting with closed minds is not the way to research early medieval shipping.

Gaulish/ Frankish Craft

Remains of ships from the lower Rhine show an established tradition of large wooden seagoing vessels from as early as at least the second century AD. These were sailing vessels, shallow of draught, with distinctive carvel construction using heavy iron clench nails. It is regrettable that study on this topic is circumscribed by evolutionary arguments attempting to relate them to both earlier (the ships of the Celtic Veneti), and later (Frisian) traditions, which has resulted in them being referred to as the 'Celtic' class, where clearly they were very often built by Germanic people.

This class of ships may or may not be ancestral to the principal vessels used in deep sea voyaging by the Franks. They are clearly adapted to sailing in shoal

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[125] Wooding, 'Saxons who Furrow', pp. 34-5.

[126] See p. 121, for text of Avienus.

waters and shallow rivers and their role may have been similar to that of the Thames Barge of recent history, which mainly operated river and coastal trade, but was untroubled to sail across or down the English Channel when a worthwhile cargo was on offer. Hence such vessels can cover both the role of local and deep-sea sailing vessels.

A range of ship finds make more certain the predominance of this family in Antiquity. The second century AD Blackfriars ship from London, carvel built with the characteristic massive timbers and clench nails[127], shows that the type was found on both sides of the Channel and the third century ship find at St Peter Port shows the involvement of this type in traffic to western Gaul[128]. The Bruges Boat, also of this class, is able to be partially reconstructed to show a vessel of some 45 feet in length[129]. A mast survives from this vessel, and mast steps are found in most other cases.

Where Frankish warships are concerned, the possibility that a northern Germanic clinker 'longship' tradition may have existed should be seen as unlikely in the light of the long contact between the Franks and the Roman Empire. Roman warships of the fourth century from Mainz show links with the native traditions[130] as do Roman ships built in Britain[131]. Finally, the existence of captured ships from the Roman world is likely.

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[127]P. Marsden, 'A Reassessment of Blackfriars Ship 1', in S. McGrail, ed., *Maritime Celts, Frisians and Saxons* (CBA Research Report 77), London, 1991, pp. 66-74.

[128]M. Rule, 'The Romano-Celtic Ship Excavated at St Peter Port', in *ibid.*, pp. 49-56.

[129] P. Marsden, 'A Boat from the Roman Period found in Bruges, Belgium in 1899, and Related Types', *IJNA* 5 (1976), pp. 37-45.

[130] O. Höckmann, 'Römische Schiffsverbände auf dem Ober- und Mittelrhein und die Verteidigung der Rheingrenze in der Spätantike', *Jahrbuch Römisch-Germanischen Zentralmuseums Mainz* 33 (1986), pp. 390ff.

[131] Marsden, 'Ships of the Roman Period', pp. 114-24.

The vessel found in a dried up branch of the Rhine at Utrecht may also be an example of a northern Gaulish craft. It is some 18 metres long and 4 metres in width. It is a shallow vessel, curved upward at both ends. It carried a light mast somewhat forward of amidships[132]. Dates from the timbers now are held to indicate a date of around 980 AD[133] Hodges advances the idea that it was a seagoing ship, but this argument seems to be chiefly based on the idea that its form is comparable to a curach, which was seagoing[134]. The idea that the Utrecht ship, which was clinker built of massive planks, is in any way comparable to a curach is scarcely credible. A comparison with the ships of the Veneti may not be so far fetched, however, even allowing for a gap of nearly a millenium. Comparisons have been drawn with Carolingian coins from Quentovic and Dorestad, where boats with a similar curve to the Utrecht ship are depicted[135]. On the basis of a comparison with a more recently found boat of similar type from Waterstraat (near Utrecht[136]) Vlek has cast serious doubt on the possibility that these particular vessels were seagoing craft, but the existence of large, clinker built, craft in this region is still suggestive of further possible variety in river/ coastal vessels.

Another category of Gaulish ships is probably Mediterranean in inspiration. The seventh-century shipwreck at Fos-sur-Mer, near Marseilles, is similar in style to a Roman trader. The hull is between 15 and 18 metres in length, with a beam of around 6 metres and a depth of 2 metres. It is shell built (in that the planks are

[132] J. Philipsen, 'The Utrecht Ship', *Mariner's Mirror* 51 (1965), pp. 35-46.

[133] R. Vlek, *The Medieval Utrecht Boat* (BAR International Series 382), Oxford, 1987, p. 67.

[134] Hodges, *Dark Age,* p. 97.

[135] D. Ellmers, 'The Cog of Bremen', in S. McGrail, ed., *The Archaeology of Medieval Ships and Harbours in Northern Europe* (BAR Supplementary Series 66), Oxford, 1979, pp. 11-12. Also L. Th. Lehmann, 'The Flat-Bottomed Boat from Druten, Netherlands', *IJNA* 7 (1978), pp. 239ff. One should temper this argument, however, with the point that depiction of the ship on a coin can distort the shape in such a way as to exaggerate the curve at bow and stern.

[136] Vlek, *The Medieval Utrecht Boat,* pp. 139-40.

nailed on from the outside) but some strakes have mortises and tenons, widely spaced[137]. Hypothetical reconstructions so far produced are of a round-bellied vessel, which may well be inspired by the assumption that the vessel is comparable to Roman styles of cargo vessels. Its capacity is estimated at around 50 tons, where the average Roman corn ship, by comparison, would have been between 130 and 60 tons (20,000-10,000 *modii*). The depth of the Fos-sur-Mer ship would link it to the ancient Mediterranean tradition.

Such a vessel find is of relevance to the study of the western sealanes. Though there is little evidence of Frankish activity passing around Spain, there is for the fifth through sixth centuries some possibility of an extension of western Mediterranean commerce into the Atlantic. The Fos-sur-Mer style of vessel was probably not well suited to such a voyage in that it is a very unwieldy style of vessel to easily negotiate the Straits of Gibraltar. This may explain further the fact that most of our evidence for such voyages suggests eastern Mediterranean ships. The Fos-sur-Mer wreck at least may be a pointer to the persistence of late Roman style cargo vessels in this western province, not undergoing the evolution to smaller, more mobile craft taking place in the east[138]. It may also offer pointers to a more general model for the west, that early medieval shipping may be a matter of continuing tradition from the Roman and pre-Roman past. We should always bear in mind that shipbuilding is often an aspect of local tradition which remains unchanged by population or administrative change. There is little specific evidence, anyway, that the Frankish element in Gaulish society exercised any role in seafaring.

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[137] E. Reith, 'Research on Nautical Archaeology and Traditional Boats in France', in C. O. Cederlund, ed., *Post-Medieval Boat and Ship Archaeology* (BAR International Series 256), Oxford, 1985, p. 416.

[138] F. W. Van Doorninck, 'Byzantium, Mistress of the Sea', in G. Bass, ed., *A History of Seafaring based on Underwater Archaeology*, London, 1972, pp. 134-56. , pp. 134-58.

Vandals, Visigoths and Suevi

None of these groups (unlike the Saxons) were maritime peoples before arriving on the western seaboard, unless we accept the doubtful arguments of R. L. Reynolds for a seaborne migration of the Suevi[139]. These groups most probably had some tradition of river-boat building. However the edict of 419 makes it clear that the Vandals were ignorant of shipbuilding and forbade any citizen from teaching them, on pain of death[140]. Evidently, this measure had little effect, as the Vandals were soon at sail both in the Mediterranean (where they invaded Africa) and the western sealanes, where Hydatius records Vandal pirates in the Atlantic[141]. Likewise, as noted above, the Gothic king Euric recruited Gallo Roman naval commanders, such as Namatius, to protect his coasts from the Saxons. It is clear that the Goths and the Vandals both simply appropriated local shipping for their purposes.

For Spain and Portugal, there is little apart from anthropological evidence, beyond the statements of Strabo regarding the replacement of traditional craft after the Iron Age:

> Up to the time of Brutus [136 BC] they used boats of tanned leather, on account of the flood tides and shoal waters, but now, already, even the dugout canoes are rare[142].
> The river-boats (at the present time [First Century AD] these are builded boats whereas in antiquity they were merely dugout canoes)[143].

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[139] R. L. Reynolds, 'Reconsideration of the History of the Suevi', *Revue Belge de Philologie et d'Histoire* 35 (1957), pp. 19-57.

[140] L. Musset, *The Germanic Invasions*, trans. E. and C. James, London, 1975, p. 56.

[141] See p. 125.

[142] Strabo, *Geographica* III.3 (ed. Jones, Vol. 2, pp. 76-7).

[143] *Ibid.* III.2 (pp. 24-5).

Strabo also notes the number of Roman vessels voyaging to the region[144], which presumably provided a model for these new craft, though wooden boatbuilding traditions from western Gaul are another possibility as trade out of the Garonne grew under Roman influence[145]. Filigueras has assembled evidence from anthropological sources which points to both Germanic and Mediterranean influences in the early medieval shipping of Spain[146]. In particular there is a tradition of clinker building around the Douro, which he attributes to the Suevi. Some features of hull design in indigenous Portuguese and Spanish craft still built in the twentieth century have also been compared to the 'Celtic' class though this is a less convincing case[147].

In conclusion a basic wooden ship type, of carvel construction, seems to have predominated right along the western sealanes. The high stem and stern are reflected in literary and iconographic sources. Illustrations on Celtic coins have been taken to suggest ships of deep draught as well as the shallow vessels described by Caesar, though the form of coins is so likely to distort images of ships that the value of such images is doubtful[148]. Attempts to discern keel curvature and aspects of rigging from coins of Cunobelin are very unconvincing. The coins and the Broighter model have central masts and yards appropriate to a square sail[149].

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[144] See p. 122.

[145] See pp. 123ff.

[146] O. L. Filigueras, 'A Presumptive Germanic Heritage for a Portuguese Boatbuilding Tradition', in S. McGrail, ed., *The Archaeology of Medieval Ships and Harbours in Northern Europe* (BAR Supplementary Series 66), Oxford, 1979, pp. 45-82.

[147] O. L. Filigueras, 'The Xavega Boat', in S. McGrail, ed., *Sources and Techniques in Boat Archaeology* (BAR Supplementary Series 29), Oxford, 1977, pp. 77-114.

[148] McGrail, 'Boats and Boatmanship', pp. 43-4.

[149] McGrail, 'Boats and Boatsmanship', p. 44.

Depth of hull would make for better windward sailing, but the bulk of these vessels does not imply a fast sailer. Probably the average speed for western sealanes vessels in the early middle ages would be greater than McGrail's estimate for Iron Age vessels (which depends more upon curach statistics), but much slower than for Viking ships, which were of finer, lighter, construction. These performance questions will be discussed in chapter 2.3.

Mediterranean Craft

The evidence of imported ceramics on Irish, western British, Spanish and Portuguese sites which clearly arrived by sea through the Straits of Gibraltar, implies the presence of Mediterranean ships on the western sealanes in the sixth century. As will be discussed further on, voyages originating in the Aegean with a further loading at Carthage (or some other Tunisian site) are most likely[150]. We should remain open-minded as to whether an eastern or western Mediterranean ship was involved, though the cargo was certainly loaded in the east.

If an eastern Mediterranean ship was used, the ship found at Yassi Ada in Turkey, a Byzantine cargo ship wrecked around 625 or 626 would provide an interesting model in this connection[151]. It contains large quantities of the two main classes of amphorae found on western sealanes sites, as well as the same North African tableware. Though maybe three-quarters of a century later than the dateable British finds, it is likely (if not certain) that a craft of this type was involved in mid-sixth-century voyages to the western shores of Europe. The Yassi Ada ship differs from Roman and late Roman craft in being small: 20.52 metres in length and

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[150] See pp. 167-8.

[151] G. Bass and F. Van Doorninck, *Yassi Ada: A Seventh-Century Byzantine Shipwreck*, The College Station, Texas, 1982.

especially narrow: only 5.22 metres in beam (beam to length ratio 1:4). It is quite deep: 2.25 metres[152]. It was constructed of cypress (keel and posts), elm (frames) and pine (planking)[153]. Construction method varied from the Roman techniques in that the ship was only mortice and tenon joined to the waterline and, above that point, of planks nailed direct to frames[154]. It was a faster ship, of lighter timber and cheaper to build than its Roman period counterpart. It is at once slightly longer, narrower and deeper than it western Mediterranean counterpart at Fos-sur-Mer. Its capacity was around 40 tons. Its depth in the water would give it good windward performance and its single (probable) lateen sail, greater manoeuvrability[155]. These changes are most likely the adjustments necessary for a transition from capitalised, bulk commerce in controlled waters, to entrepreneurial luxury, or semi-luxury, trade in waters now harbouring many hostile elements. Bass notes that 'if our ship seems too lightly timbered, we should remember she was not an Atlantic courier. In fact, she was probably not intended for heavy weather at all'[156]. Scholars of the Atlantic sealanes should be careful not to take this comparison at face value. In good weather this vessel would perform effectively in Atlantic seaway, though for regular sailing in inshore tidal waters it would need to be stronger. There are strong winds (for example the *Meltemi)* and currents in the Aegean and any ship built for those conditions could negotiate the sea route which took the Mediterranean wares to the Atlantic coasts[157].

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[152] *Ibid.*, p. 86.

[153] *Ibid.*, p. 160.

[154] *Ibid.*, pp. 58-63.

[155] Van Doorninck, 'Byzantium', p. 135.

[156] Bass and Van Doorninck, *Yassi Ada,* p. 84.

[157] See pp. 194ff.

In conclusion, the western sealanes saw the use of a range of ship types in the early middle ages. The predominant types involved in trade were probably Celtic and Roman derivatives, corresponding with Ellmers's 'Celtic' class, though we should remain open-minded as to which more modern traditions they relate to. The evidence of Strabo can be accepted as indicating a transition from dugouts and curachs to larger 'built' wooden vessels as early as the last centuries BC in Spain. The Broighter Boat is also suggestive of wooden ships in use in the Irish Sea basin in the first centuries AD. The curach type was certainly in use, but for special purpose travel, side by side with wooden ships: for raiding, in the case of Gildas's description of the Irish and Sidonius's of the Saxons; while Strabo notes their use in difficult waters by the Iberians. Eloquent testimony to the attraction of the curach for continuing 'special purpose' use is seen in Caesar's use of curachs of British design in Spain during the Civil War[158]. The tendency to argue for non-use of the curach in early medieval navigation is usually misleadingly impressionistic, and polluted by an overly romantic appreciation of their role, which is also a characteristic of the early medieval discourse on these vessels.

The likely predominance of wooden vessels in trade is probably a consequence of economics, with the 'Celtic' style of wooden ship having a greater cargo capacity than the curach. What craft were used for river traffic and local coastal voyaging must remain a mystery. Strabo notes the lack of dugouts and curachs in Iberia - though in northern Gaul the extended dugout seems to have been a continuing tradition, leading to the Utrecht ship. In this we may note the shallower estuaries in the latter region. In the Irish Sea basin the references to ships involved in local travel do not usually specify curachs, though they are seen towing logs in the *Vita Columbae*[159]. Doubtless they were still used for some traffic,

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[158] Caesar, *Bellum Civile* I.54 (ed. A. Peskett, Cambridge MA, 1914, pp. 76-7).

[159] *Vita Columbae* II.45 (ed. Anderson and Anderson, p. 452).

alongside wooden craft. All the traditions of the 'maritime saints' and their use of curachs should be treated with scepticism.

These conclusions upset a tradition of scholarship has been too preoccupied with evolutionary and determinist arguments. We should accept that personal choice and a range of economic factors were often responsible for design selection. The evidence of Strabo even warns us to be wary of putting too much weight upon the deterrents of geography: a tendency to assume that the Straits of Gibraltar were an often insurmountable obstacle to trade must be set against Strabo's evidence that voyages through the Straits were a regular event[160]. Fast Byzantine carriers may have made the voyage, but so may more prosaic Roman and post-Roman ships from the western Mediterranean. The significance of the Bordeaux overland route can be overrated in terms of a desire to avoid the Gibraltar exit: its primary value was as a direct route to Cornwall, perhaps not as a gateway to the western sealanes made necessary by the problems of Gibraltar.

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2.3 Seamanship, Navigation and their Obstacles

The evidence for practice of seamanship along the western sealanes is not plentiful. Much can be inferred by simply looking carefully at where mariners actually went, though such inference itself is dependent upon further refinement of what are at the moment barely processed data. Judgements upon what techniques were used by mariners will often be impressionistic, even if carefully controlled. The importation of paradigms from other cultures which navigated similar, or the same, seas is informative if used with care. Alcock, in connection with economic history, has taken issue with the tendency to prioritise completely external models over comparison with later examples from the same, or similar, regions - contesting the assumption that the former process conveys greater objectivity[161]. We may note that, similarly, any local evidence, properly controlled, would seem more appropriate for maritime investigations than totally external models. Of particular interest should be the evidence of sailing practice in Icelandic texts, describing navigation techniques arising out of the Viking Age in the same waters. While there were some differences in the quality of shipping available to them, the Icelandic mariners faced the same conditions as the mariners of the period 400-800, similarly without navigational instruments.

Many of the inferences which can be made regarding the practice of early medieval mariners arise directly from the limitations of the terrain. The difficulty of coast-hugging on the westward-facing shores has already been noted (distribution patterns discussed further below seem to tally with this conclusion). That much of the land which borders upon the western sealanes is highland territory would have been advantageous to mariners wishing to avoid the dangers close in to land:

161 L. Alcock, 'The Activities of Potentates in Celtic Britain 500-800, a Positivist Approach', in S. Driscoll and M, Nieke, eds, *Power and Politics in Early Medieval Britain and Ireland,* Edinburgh, 1988, p. 22.

McGrail notes that headlands thirty metres in height can be seen from a distance of eleven and a half nautical miles and headlands sixty metres in height from as far as sixteen and a half nautical miles. At five hundred metres they are visible from a distance of twenty-five nautical miles[162]. The headlands of Cornwall and Brittany are high enough to be seen from well out at sea and have prominent cliffs[163]. The mountains of Cantabria in the north of Spain make a good landfall for a vessel heading southward, being between 900 and 2,100 metres - a considerable aid to navigation, as the north coast of Galicia is very poorly served with harbours. Travelling northward to Ireland, the Wicklow mountains of Ireland's south east make another good landfall. Around the Irish Sea, the Isle of Man, North Wales, South Wales and the Mountains of Mourne are all visual aids to navigation. In the north of the Irish Sea it is possible to be in sight of Southwest Scotland, Man, Ulster and Kintyre all at once[164].

There can be no question that western sealanes mariners would have been well accustomed to sailing out of sight of land. To cross from Gaul to Cornwall by the shortest western sealanes route, at an average speed of around 2.5 knots (which McGrail calculates as an average speed for an early medieval vessel, considering both windward and downwind performance[165]), would involve spending around 20 hours out of sight of land. Even though McGrail's speed estimate may be a little slow for the wooden ship types[166], to voyage from the Loire estuary to the Scilly Islands (a more likely actual voyage) at twice McGrail's estimate would still leave

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162 McGrail, 'Cross-Channel Seamanship', p. 311.

163 Personal observation 1987. Also *Spain and Portugal Handbook*, p. 113.

164 Personal observation 1988.

165 McGrail, 'Cross-Channel', p. 300.

166 See p. 80.

the mariner out of sight of land for around 12-15 hours - and this is assuming optimum visibility. Early medieval mariners probably had a healthy fear of the shores of the west coast of Europe, so we may assume that they were accustomed to sail well clear of the land. Off the west coasts of Britain the Admiralty Pilot warns 'At sea rain can be expected...on twenty days per month in winter and fifteen days per month in summer'[167]. Sea fog is also common along the sealanes when a westerly blows over cold water. These factors reduce visibility and make reliance on coastal marks even more difficult. As noted above, however, summer visibility in Spain and Portugal is much more dependable.

We may presume that early medieval mariners had some knowledge of navigation by use of the celestial bodies, certainly in use for direction finding and we know that the Scandinavians of the tenth century had knowledge of latitude reckoning[168]. Again, however, the prevalence of fog and rain render these methods unreliable. Early medieval mariners would possibly have had knowledge of the flight patterns of migratory birds and of which birds indicated the proximity of land[169]. There is no evidence or likelihood that such mariners would have possessed the magnetic compass. It is also unlikely that they used sounding-leads for checking depth and seabed composition, though these were known in the ancient Mediterranean[170], and find mention in Icelandic texts after the thirteenth century[171], where they may owe their inspiration to Mediterranean contact. In any

167 Hydographer, *West Coasts of England and Wales*, p. 16.

168 Marcus, *The Conquest*, pp. 109-14.

169 J.Hornell, 'The Role of Birds in Early Navigation', *Antiquity* 20 (1946), p. 142-9; Marcus, *The Conquest*, pp. 114-5.

170 Herodotus, *Histories* II.5 (ed. Godley, vol.1, p. 280).

171 Marcus, *The Conquest*, p. 108.

event their application is limited without detailed knowledge of the area to be navigated[172]. Mediterranean ships navigating the Atlantic, however, may have used them to test harbour or channel depths.

The mariner relies heavily on instinct. It is debatable, however, how much this may be taken into account. Does instinct aid in the efficiency of performance over a route (i.e. simply as an escalation of the scale of efficiency of the less experienced mariner over the same route) or does it presuppose that routes and travel which seem impossible or barely practicable to us were regularly used? We must accept clear principles in our treatment of sources. No sea routes should be considered unusable by early medieval vessels - maritime data do not answer questions in this way. Regularly used routes often will tie in with convenience of terrain, however, and areas where on archaeological or textual evidence we may suspect vessels did not venture may often be easily associated with forbidding features. Some imagination is needed in treating this material. There must be a distinction between local and long-distance traffic and their respective levels of operation. There are also undoubtedly regional and commercial distinctions. For example the series of voyages around the Inner Hebrides which are mentioned by Adomnan's *Vita Columbae* and in the *Annals of Ulster*[173], in a country united only by sea, represent a level of acceptance of the need to navigate dangerous waters which was probably unique in Britain at that time - and a technology and practice well-adapted to it. The case of an owner-operated Mediterranean ship entering the Bristol Channel, very far from home, is quite another. The presence of a local pilot on board might be of some benefit (if there was no communication problem), but

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[172] The lead is used in ocean navigation to determine position relative to *known* details of seabed composition and depth, which in the modern era are marked on charts. At its simplest it can also be used to warn a mariner of dangerous shallows while entering a harbour or river mouth.

[173] See Bannerman, *Studies*, pp. 149-50, for a convenient tabulation of the voyages mentioned in these two sources.

even so the ship would be unfamiliar to that pilot, while the master might be suspicious of groundswell and tides (not known in the Mediterranean) and accordingly very cautious. A Gaulish ship arriving at Kintyre would not be incapable of sailing north to Iona or Dunollie, but the maritime obstacles might be sufficient to discourage the attempt, considering the alternative destinations, such as Dunadd and Dumbarton: these sites themselves located in part because of geographical convenience[174].

It is most likely that western sealanes voyagers navigated out of sight of land by dead reckoning: through orienting their vessel as it left shore and estimating the distance covered. Leeway slippage, average speed and other variable factors would be reckoned through observations of the boat's performance. 'Steering by run of the sea' is a common practice in northern navigation: to maintain the ship's position by steering a consistent angle across a prevailing swell pattern. Nineteenth-century Shetland fishermen were able to follow a prevailing swell even through distracting surface currents[175]. A knowledge of regional currents would enable the mariner to detect the proximity of land even in fog. Only the combination of fog with a storm, or with calm, would result in the mariner being disoriented (what the Icelandic texts term *hafvilla*[176]). Regular man-made navigation marks were probably not in use in this period, though Rutilius notes their continuing use in the Mediterranean[177]. Some man-made structures may have played a navigational role. Structures on headlands or islands might serve as navigation marks. In Cornwall in the medieval period small chapels were often built on headlands, for

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174 See pp. 94-6, 81.

175 K. Walton, 'A Geographer's View of the Sea', *Scottish Geographic* 90 (1974), p. 10.

176 G. J. Marcus, '*Hafvilla*: A Note on Norse Navigation', *Speculum* 30 (1955), pp. 601-5.

177 Rutilius, *De Reditu Suo* ll.457-62 (ed. J. W. and A. M. Duff, *Minor Latin Poets*, LCL, Harvard, 1932, Vol.II, p. 804).

example at St Ives and Zennor. One, at Carn Brea, was definitely maintained as a 'beacon hermitage' (with a tithe called *byckenage* payable by local fishermen) in the fourteenth century[178]. Whether or not similarly located *early* medieval chapels were built so deliberately for this purpose, it is likely that they performed the same function. The presence of an early burial ground in Tintagel churchyard may have interesting implications in this connection - the medieval church itself is listed as a prominent navigation mark even today[179].

A feature of sailing practice which limits the movement of vessels is pilotage. A vessel entering unfamiliar waters is limited in where it can operate by the extent of its knowledge of the local conditions and the lie of the land. It is usually assumed that operators of foreign ships arriving in region would put in to shore at some point to take on a local pilot or gain directions, or presumably would bring with them some person from their own region who had knowledge of the route. Several early medieval texts refer to the profession of 'pilot' (*gubernator* though we should note that this term might also mean simply 'steersman')[180].

The need for a pilot, or directions, is fundamentally different between the operations of international and of local traffic. And some regions are consistently more hazardous than others, notwithstanding local knowledge. To sail from Gaul or Spain to Scilly is a simpler task than trying to make a landfall in Cornwall. Both of Cornwall's coasts have dangerous tidal streams and the tip has hazardous shoals. It is no surprise that there is strong evidence that Scilly was a primary landfall for

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[178] P. A. S. Pool, 'The Hermitage Chapel of St Michael of Brea, St Just in Penwith', *Annual Reports of the Cornwall Polytechnic Society* 101 (1964), p. 26ff. I would like to thank Oliver Padel for this reference.

[179] Hydrographer, *West Coasts of England*, p. 33; Novakowski and Thomas, *Tintagel Churchyard*, 1-8, 25-7.

[180] Asser, *Life of Alfred* XCI (ed. W. Stevenson, Oxford, 1904, p. 77); Adomnan, *Vita Columbae* II.41 (ed. Anderson and Anderson, p. 436).

ships out of the south. Such a spot would be an ideal place from which to plan the next leg of a journey into the Bristol Channel or to Ireland.

The best time of year to navigate the western sealanes is between April and August, at which time the weather is at its finest and most predictable. Gales are at their lowest frequency during this season. These seasonal differences are particularly pronounced in Portugal and Atlantic Spain, where there is virtually no summer cloud, but in winter, almost permanent cloud cover. It is difficult to imagine early medieval mariners attempting voyages between November and March. However we should take note of the writings of Dicuil who records the sojourn of Irish monks in Iceland, voyaging there in February and returning in August[181]. The return date is logical, being near the end of the viable sailing season. The earlier date is a little less likely: as in winter, especially in January, there is a strong likelihood of gales off the southeast of Iceland. Unique maritime reasons for leaving on this route early in the season, however, can be adduced. The motivation of ascetics to sail in February, however, may not have been shared by commercial sailors. Probably February was not a normal sailing month. This evidence nonetheless teaches us to be wary of underestimating what early medieval mariners would accept as possible in this regard.

In several texts reference is made to the need for a favourable wind to leave a harbour. Egbert, for example, was waiting for such a favourable wind in an Irish harbour (perhaps Waterford[182]), when his ship was wrecked[183]. St Samson also is delayed by the need to wait for a favourable wind to travel from Ireland (perhaps Howth) to Wales[184]. The importance of favourable winds is also stressed in the

[181] Dicuil, *Liber de Mensura* XI (ed. Tierney, p. 74).

[183] Bede, *Historia Ecclesiastica* V.9 (ed. B.Colgrave and R.Mynors, 1969, p. 478).

Vita Columbae[185] and a range of other texts. The 'favourable wind' is a literary commonplace and very common in hagiography. The common formula involves the saint being a person capable of raising a favourable wind when no one else can, thus elevating him above others. The frequent reference to this factor, however, still demonstrates it to be a major concern in western sealanes navigation. In the navigation of the northern seas a favouring breeze is crucial. The windward performance of early medieval craft was poor. Various factors account for this. For a vessel to perform well to windward requires it to possess certain key design features. Firstly it must displace sufficient space to present a barrier to leeward slipping, or possess a keel or leeboard/centreboard structure to fulfill the same role. It must also be of sufficient mass to stay down in the water and broad enough to maintain its balance sailing across the wind. Severin's experiments with the curach *Brendan* in 1976-7 showed it to perform very poorly to windward. It was able to sail only to within 6 points of the wind and, being an extremely light craft, made of lightweight materials it lost an average of 2 points to leeward while this closely hauled[186]. A second important range of factors relate to the sail itself. A square sail is not an efficent instrument for windward sailing, but there is no evidence that fore-and-aft style sails were in use by this period. The yard on the Broighter Boat and the evidence of the Viking Age vessels all point to square sails being the only type in use in northern Europe before the Early Modern period. A square sail tends to concede ground every time the vessel changes tack. With a fore-and-aft sail the boat can be 'brought about' by pointing directly into the wind and pulling the sails

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[184]*Vita Samsonis* XXXVIII (ed. R. Fawtier, *La Vie de Saint Samson*, Paris, 1912p. 134). See pp. 225-6.

[185] E.g. *Vita Columbae* I.1 (ed. Anderson and Anderson, p. 196), I.18 (p. 244), II.15 (p. 356), II.45 (p. 452).

[186] Severin, *The Brendan*, p. 290; McGrail, 'Cross-Channel', p. 300.

across. In a square rigged vessel, the boat must be 'gybed' at the end of each tack, by turning the boat so that wind passes around the stern (otherwise the sails blow back and can break the mast). Often during this manouevre the boat is blown backwards. The square sail does not, either, present a very efficient shape to the wind unless the vessel is running with the wind directly astern. An episode in the *Vita Columbae*, in which a favourable wind is raised by miraculous intervention, indicates that the sailors would row until such time as they are able to raise up the 'yards cross-wise' *(antemnas crucis)* - i.e at a right-angle across the mast[187]. Finally, a long, narrow boat is most unsuitable to windward sailing, as turning such a boat is very much hampered by the length of the keel. A *longa navis,* we might speculate, must then have been primarily a rowing boat - like the Viking longship. In strong tidal waters, in any event, a vessel with poor windward performance will make little progress against the tide. Even with a favourable wind, progress can be poor. It is likely then that navigation of the western sealanes depended upon waiting for a favourable wind and tide, the latter predictable, but not the former. Few questions of sailing with seasonal winds would enter the picture, once north of Spain.

Rowing *(remigo)* is certainly referred to, however, though we must be careful to consider the implications arising from its use. Both in economic terms and from sheer practicality it must be assumed that oars were only used when sail was impracticable. In the northern seas there appears to have been no adaptation of ships to make them actual weapons of war (unlike, say, the Mediterranean galleys with fitted rams). The favouring of oars in a warfare context would chiefly be for manouevrability. Warships clearly carried oars and the implicit design features of the *longa navis* and *cyul-* types would make them difficult to sail. A notable person being conveyed in style might also have carried sufficient oarsmen to be propelled

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187 Adomnan, *Vita Columbae* II.45 (ed. Anderson and Anderson, pp. 454-7).

by their force. In most cases, however, the implication is simply that oars were used to enter or exit harbour (for example in the *Vita Columbani*[188]) or to escape danger *(Vita Columbae*[189]). In a craft only carrying a small crew, progress against the wind is often impossible under oars, though they are useful in travelling with the tide. Mostly it is simpler to await the change of wind and/or tide.

Replica craft are our principal source of evidence for speed estimates. Severin's replica curach made an average performance of 2 to 3 knots in a average day's run of 40 miles and speeds could sometimes be as high as 7 to 12[190], though we must take account of his anachronistic second sail[191]. Magnus Andersson's Gokstad replica averaged 10-11 knots over the same route[192], again with an anachronistic second sail. Performance statistics for experiments with *knörrs* are not yet available, but would be more comparable with ships of the 400-800 period on the western sealanes - they would be likely to be lower than Andersson's figures. It is likely that wooden vessels would average higher than curachs, being heavier and hence less prone to leeway slippage and able to sail closer to the wind. Severin's curach could sail within 6 points of the wind, but slipped 2 to leeward[193]. Andersson's vessel had a slippage of around 1 point[194]. McGrail rightly points out, however, that the presence of a foresail might improve windward direction by as much as point, so within 7 points of the wind might be the real limit.

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[188] Jonas, *Vita Columbani* XXIII (ed. Krusch, p. 97).

[189] Adomnan, *Vita Columbae* I.19 (ed. Anderson and Anderson, p. 246).

[190] Severin, *The Brendan*, pp. 289-90.

[191] *Ibid.*, pp. 25.

[192] Johnstone, *The Archaeology*, p. 72.

[193] Severin, *The Brendan*, pp. 290.

[194] Johnstone, *The Archaeology*, p. 72.

McGrail's conclusion is that an average daily performance for all pre-Viking craft is unlikely to have been above 2.5 knots[195] which might put the average for light wooden craft around 3-4 knots daily, with an average 60-70 miles elapsed per day. The optimum may be estimated as 6-7 knots. A ship such as the Yassi Ada craft, by comparison, with a deeper hull and possibly fore-and-aft sail, would have appreciably better windward performance.

A distinct difference between the northern and southern traditions is in the area of displacement and tonnage. Northern shipping was circumscribed by the need to negotiate estuaries and by a lack of deep harbours. Hodges, for example, notes the relocation of many harbours after the ninth and tenth centuries with the increasing depth of ships[196]. The creation of more effective harbours and dredged channels also sees the abandonment of less sheltered and convenient harbours, which is one of the reasons adduced by Alcock for the rise of Glasgow at the expense of Dumbarton, which had previously been the head of navigation[197]. Severin's 12 metre curach replica was only 5 tons, while the Broighter archetype might have been 20 to 30 tons. The Yassi Ada ship, by comparison, was around 40 tons and the Fos-sur-Mer 50. The latter two would have been more limited in landing potential. They could use deep harbours, if such were available. Otherwise they would have landed most effectively on a beach at the turn of tide, where they would either lay over on one side or use supports ('legs') to stand the vessel upright. They would have been less easily able to negotiate an estuary.

Even with geographically appropriate ships in a region with such strong winds and tide there would always have existed a need to cope with shipwreck, or

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195 McGrail, 'Cross-Channel, p. 300.

196 Hodges, *Dark Age*, pp. 97-8.

197 L. Alcock, 'Early Historic Fortifications in Scotland', in G. Guilbert, ed., *Hillfort Studies: Essays for A. H. A. Hogg*, Leicester, p. 159.

in a milder form, the threatening character of the shore. The western sealanes are a severe testing ground. On the one hand, as McGrail observes, this may have bred a somewhat casual attitude - evinced, he feels, in Sidonius' comments on the Saxons' casual attitude to shipwreck[198]. The surviving commentaries upon the no longer extant Old Irish *Muirbretha* (Sea Laws) describe the fate of the cargoes of wrecked ships and the dues to be paid by the proprietors of the voyage if a vessel 'came consigned to a certain person, and it was not into his land they happened to be driven, but into the land of another'[199]. This evidence highlights the degree to which the old sailors adage 'the trouble begins when you get near land' held true on the shores of the western sealanes, as elsewhere. This is a point which few landlubbers writing about this region appreciate. Sailing practice of the Viking Age saw the development of a sailing technique *(sigla til brots)* whereby a storm-driven ship could make land without loss of crew or cargo, but at the expense of the ship[200]. Modern Irish curach sailors use a similar technique[201] and such vessels and sailing techniques would have existed also in early medieval Ireland. It may be this sort of practice that the *Muirbretha* reflects. The experience of Egbert, who while waiting for a favourable wind to leave Ireland, was struck one night by a storm of such violence that his ship was left 'lying on her beam ends among the

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[198] McGrail, 'Cross-Channel', p. 303. See pp. 59-60.

[199] 'In tan tainic fo thomus duine airithi hi 7 ni 'na lesc lama-sin fein dorala iat s a ferann duine aile 'na comocus', (ed. Binchy, *CIH*, p. 315).

[200] Marcus, *The Conquest*, pp. 103-4. For an example: Var þá engi annarr til en stefna á land upp...sigldu þá til brots ok komu at landi vid Humru mynni; þar heldusk menn allir ok mestr hluti fjar annat en skip; þat brotnadi í span: There was no other course but to steer onto the shore...they sailed onto the shore and came to land at the Humber mouth; all the men and other goods on board were rescued, but the ship broke up', *Egils Saga* LIX (ed. S. Nordal, Islenzk Fornrit II, Reykjavik, 1933, p.177).

[201] Marcus, 'Factors', p. 312.

waves'[202], though with part of her stores salvageable, is further illustration of the problems of wind, tide and unpredictable weather in conjunction. These conditions are the hallmark of the western sealanes. Sinking in deep water is less often mentioned[203]. Stranding by an ebb-tide (rather than the deep-sea storm in the story of his Biblical namesake [Jonah]), was sufficient adversity to bring about the release of St Columbanus[204]. We need to be sensitive to the implications of terminology in maritime events. In an episode in Gregory of Tours's *Historia Francorum*, Waroch's ships sink *en route* to Belle Île:

> Waroch was fleeing to the islands in ships laden with gold, silver and his other possessions; a violent storm blew up, the ships sank, and all his property was lost[205].

Thorpe would translate *dimersis* (presumably from *demergere*) as 'founder'[206], implying no involvement of the land, but simple overwhelming of a ship by waves. These are especially notorious waters for shoals, however, and as Waroch escapes

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202 'Atque oportunos aliquot diebus uentos expectarent, facta est nocte quadam tam saeua tempestas, quae perditas nonnulla ex parte his quae in naui erant rebus, ipsam in latus iacetem inter undas relinqueret', Bede, *Historia Ecclesiastica* V.9 (ed. Colgrave and Mynors, pp. 478-9).

203 A rare example is *Annals of Ulster* s.a. 737: 'Felbe filius Guaire Mael Rubi, .i. heres Crosan, in profundo pilagi dimersus est cum suis nautis numero xx.ii - Failbe son of Guaire, heir to Mael Rubh of Applecross, drowned in the great depth of the sea with his sailors, numbering 22' (ed. G.MacNiocaill and S.MacAirt, Dublin, 1983, p. 190).

204 Jonas, *Vita Columbani* I.23: 'Cum iam remigera arte, prosperantibus zepheris, navis ad alta pelagi tenderit, undarum moles obvenit navemque ad litus redire coegit planoque terris solo depulsam reliquid, collectuque in sinibus aequor quievit - When they were rowing the ship on a course for the sea, with a favourable wind, a massive wave met their ship and drove them back onto the shore where they remained, as the wave drew away quietly to the channel' (ed. Krusch, p. 97-8).

205 'Warocus in insulis fugire cupiens cum navibus oneratis auro argentoque vel reliquis rebus eius, cum alta maris coepissent commoto vento, dimersis navibus, res quos imposuerat perdidissent', *Historia Francorum* X.9 (ed. Krusch, p. 492).

206 L.Thorpe, trans., *Gregory of Tours: The History of the Franks*, Harmondsworth, 1974, p. 557.

the shipwreck with only loss of cargo we should assume that he was driven aground.

Against these geographical hazards, however, should be balanced the very obvious political hazards. While piracy was common in the fifth century, when Saxons roamed the sealanes off the western coast of Gaul and the Channel mouth and Vandals were sighted off the coast of Spain, people and cargoes were probably safer well out in ocean than close to land. In 585:

> Certain ships which were sailing from Gaul to Galicia had been looted on the orders of King Leuvigild, their cargo stolen, their crews wounded or even killed, and some of their men taken captive[207].

Royal piracy of this type shows the vulnerability of merchants and other foreign persons in lands or waters (we do not know which in the above case) other than their own. Routes of overseas travel were governed by the ownership of the shores upon which they touched, as the *Muirbretha* commentaries, for example, make clear. The neutrality of the sea is a fundamental factor influencing the early medieval use of the western sealanes. In the Roman period traders bringing goods from the Mediterranean to southern and western Britain, and the reverse, operated via land routes across Gaul to the north and west coasts; and thence by sea to Britain. In the sixth century AD goods from the Eastern Mediterranean came by a longer route, via the Straits of Gibraltar and touching only upon Portugal and Spain. Reasons for the new choice of route are easily enough found. Gaul, by the sixth century, was no longer ruled by the same powers as controlled the Eastern Mediterranean. A Byzantine mercantile expedition, crossing the territory of a Frankish ruler, as citizens of an empire which was seeking to expand right to his borders, might not be warmly welcomed and might pay heavy dues. Currency paid to a Frankish king,

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[207] 'Navis, quae de Galleis in Galliciam abierant, ex issuo Leuvieldi regis vastatae sunt, res ablatae, hominis caesi atque interfecti nonnuli captivi abducti sunt', *Historia Francorum* VIII.35 (ed. Krusch, p.404 - trans. Thorpe, p. 469).

or even trade with Frankish merchants, would enrich those outside the empire - which might not please the Byzantine ruler[208]. Foreigners were often subject to political investigation. That Mediterraneans were treated with suspicion in the Frankish kingdom even in the seventh century can be seen in the incident where Bishop Hadrian, accompanying Theodore of Tarsus to Britain in 668, was imprisoned by Ebroin who 'suspected him of having some mission from the emperor to the kings of Britain, which might be directed against the kingdom over which at that time he held the principal charge'[209].

It could be contended that comparisons between natural maritime routes and the actual pattern of overseas travel in the early medieval period is entirely worthless, without reference to other factors. These causal relationships are without exception governed or mitigated to some degree by economy, politics and technology. Few scholars setting up such causal relationships ever take account of the necessary controls to their hypotheses. There is a natural tendency to accept the landlubber's innate belief that the mariner's first instinct is to remain within sight of land. More likely the mariner would have been afraid to go near the shore considering the geographical factors! Comments such as Kenneth Dark's assertion that Port William (Trebarwith) is a 'far superior' harbour to Tintagel are hasty judgements with no real support from maritime evidence[210].

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[208] Much is made of this point by A. R. Lewis, 'Byzantine Lightweight Solidi and Trade to the North Sea and Baltic', in *idem, The Sea and Medieval Civilisation,* Variorum Reprints, 1978, V, p. 140.

[209] 'Hadrian autem Ebrinus retinuit, quoniam suspiciabatur eum habere aliquam legationem imperatoris ad Brittaniae reges aduersus regnum, cuius tunc ipse maximam curam gerebat', Bede, *Historia Ecclesiastica* IV.1 (ed. Colgrave and Mynors, pp. 332-3). Admittedly this was an unusual circumstance: the presence of the emperor Constans II in Sicily may have made Ebroin more suspicious than normal.

[210] K. R. Dark, 'The Plan and Interpretation of Tintagel', *CMCS* 9 (1985), p. 16. Dark's judgement seems to hinge on the question of access up from the harbour. The harbour itself at Port William has emergent rocks and does not even rate a mention in the *Admiralty Pilot.*

Finally, there is the issue of landing sites and the navigational criteria required for them. McGrail has defined a set of basic criteria for port-sites in Iron Age northern Europe, which will be quoted here as a text for discussion, as they are broadly applicable to a post-Roman environment. The landing site must have:

> Nearby natural features (headlands etc.) which make a good landfall and can be readily distinguished. The approach must be well-defined and usable, almost regardless of wind-direction, and the landing-place itself should have an aspect such that it is sheltered from the predominant wind and swell. A moderately sloping beach of sand, shingle or mud where the boat can easily take the ground is also to be preferred[211].

These criteria do not take account of possible man-made navigation aids such as lights and channel markings, but, as stated above, the presence of these in either the pre- *or* post-Roman environment of the western sealanes is difficult to discern. It is best to assume that natural features played a primary role. A harbour such as Padstow in Cornwall, for example, may be one of the best in its region today, but it has extensive shoals and is dangerous without local knowledge. It may have been a quite inconvenient estuary in which to unload a ship without its current retaining walls and quays compared, say, to the controversial harbour at Tintagel, where steep cliffs overhanging the bay make quite useful winching-points (and were so used in the last century[212]). Such a judgement, however, must also take account of the likely nature of the ships involved and their degree of acquaintance with the terrain. A Mediterranean ship with a heavy, cumbersome cargo of amphorae seems to have come to Tintagel instead of putting into the Camel estuary, whereas St Samson of Dol used the latter harbour on his shorter-distance, voyage from

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211 McGrail, 'Cross-Channel', p. 311.

212 See C. Thomas, *Tintagel Castle* (English Heritage Guide), London, 1986, p. 6.

Wales[213], in a local ship of surely much lower tonnage than those coming from the Mediterranean to harbours such as Tintagel[214].

Chapter 2.4 Landing Sites and their Hinterland

Natural features are only one factor in the choice of landing places and the location of harbours must be understood in terms of their relations with local networks. This is a controversial topic, badly in need of clarification before we can fully understand the context of our evidence for maritime traffic.

Coastal Traffic and Redistribution

Where objects are found distributed along a coastline and inland from that coast, and where we have accounts of travel by sea and inland from the sea, we seek explanatory models for their paths of movement. Are all the seaside sites landfalls for ships from outside the region, or are some sites primary landfalls from which secondary voyages distribute goods through 'coastal' traffic? Where objects are found inland from the sea we need to explain from which point they have travelled inland. Then we are confronted with the issue of the mechanics of such activity. Is trade responsible for most movement of goods? Or are we looking at complex models of exchange within kinship or political networks, to secure political and social prestige for those who control the source of imports? A crucial question here is whether the primary landing site is hence more a commercial or a political centre.

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[213] See pp. 225-6

[214] See pp. 67-8.

This has implications in many part of the western sealanes, where we are unclear as to the status of various sites and where a standard typology for settlements is often lacking. It also has implications for the degree to which the needs of the political authorities, and the degree to which the needs of the mariner, are taken into account when a site is chosen for a harbour.

Various models have been set up to explain distributions and accounts of travel along the western sealanes, often interpreting the same evidence in fundamentally different ways. O. G. S. Crawford explained archaeological distributions inland from landing sites as evidence of 'peninsular roads': routes of traffic in such goods which carried the goods overland to avoid difficult sailing conditions. We would today interpret many of his 'peninsular roads' as distributions from coastal ports to centrally-located inland sites, which drew goods inland from *both* shores - this model will be discussed at length below. Other approaches use simple spatial inferences to designate sites as primary and secondary in the importation process. Some apply more complex theoretical paradigms to explain distribution.

Very recent critiques of western sealanes traffic have discussed the distinction between long- and short-distance traffic and have suggested that approaching the subject of maritime distirbution from the long-distance perspective has unnecessarily confused the picture[215]. Some of the erroneous elements of Crawford's thesis arise from the lack of such a clear distinction: for example, he interprets St Samson of Dol's crossing of Cornwall as use of a 'peninsular road' to avoid the voyage around Land's End (a superficially reasonable interpretation)[216], but also uses the idea that Patrick travelled *directly* from Southern Ireland to

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[215] D. Griffiths, ' Territories and Exchange in the Irish Sea Region 400-1100', in R. A. Hall, R. Hodges and H. Clarke, eds, *Exchange and Trade, Medieval Europe 1992, Pre-printed Papers*, Volume 5, pp. 9-10; Mytum, *The Origins*, pp. 7ff; 252ff.

[216] Crawford, 'Western Seaways', pp. 195-6.

western France and *thence* overland to the Mediterranean as another example of the same phenomenon![217]

How does long-distance traffic relate to short-distance? From the earliest prehistory exchange must have occurred on a local basis, for the purpose of gathering raw materials and obtaining food. Such activity may have operated both overland and across short distances of sea, the latter often termed 'coastal' exchange. 'Down-the-line' exchange occurs when a series of short-distance exchange links, often initially set up for local exchange, are used to distribute goods over a longer distance. Redistributive exchange may occur when short-distance links are utilised to distribute goods which have arrived at a primary importation site from a long-distance away: the routes and ships involved in transit to the secondary sites in the network may be the same as are used in local, 'coastal' exchange in raw materials and produce.

Long-distance maritime exchange involves the use of the sea as a more direct means of travel, bypassing short-distance exchange mechanisms until the incentive to travel further disappears. In making a case for the existence of long-distance voyages, much importance must be attached to evidence which specifies the presence of ships which have unquestionably travelled over a long distance. Sometimes such evidence may be an unambiguous literary reference, sometimes distributional evidence leaves little doubt. At a certain point, however, the long-distance voyage will cease and secondary networks will take over. This is not a simple matter, a combination of factors may provide a lack of incentive for continuation of the voyage.

Long-distance traffic has received the greater attention in western sealanes studies, and recent critiques have seen this as a result of the tendency to attribute to

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[217] *Ibid.*, pp. 192-3.

identifiable long-distance links the role of a cultural *deus ex machina*[218]. David Griffiths, however, would single out those, such as Hodges[219], who have applied the typology of the *emporium* to the western zone of Britain before 800AD, as implying the existence of a type of trading network which did not exist in the early medieval period and he questions the emphasis placed upon the study of the imported ceramics in terms of the likely minor *economic* role of long-distance exchange in the Irish Sea basin.

> Coastal sites show every indication that they depended more on fishing, farming and local redistribution than on long-distance trade routes with exotic, but occasional, imports....the existing political role of the royal sites (and their relationship to sites within their territories) can be said to be far more important than their long-distance trading links[220].

Peter Hill has raised some similar objections in a study of the early economy of Whithorn, though more clearly noting the degree to which previous studies lacked the clear evidence to make studies of middle- and short-distance exchange[221].

The economy of the Irish Sea zone has previously been something of a mystery. The fact that many high-status sites were selectively drawing upon large agricultural economies is only now becoming clear from the studies of animal bones from sites such as Dinas Powys[222] and Whithorn[223] - and texts such as the eighth-

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218 Mytum, *The Origins*, p. 7ff. For a classic case of overemphasis see pp. 251-4, on Arculf.

219 Hodges, *Dark Age*, p. 67; R. Hodges, 'Reply to Comments on Ports of Trade in Early Medieval Europe', *Norwegian Archaeological Review* 11 (1978), p. 11.

220 Griffiths, ' Territories and Exchange', p. 10.

221 P. Hill, 'A Thousand Years of Contact: the Economy of Whithorn from 450-1450', in R.Hall *et al.*, eds, *Medieval Europe 1992, Exchange and Trade, Pre-printed Papers*, Volume 5, pp. 19-24.

222 R. Gilchrist, 'A Reappraisal of Dinas Powys: Local Exchange and Specialised Livestock in 5th-7th Century Wales', *Medieval Archaeology* 32 (1988), pp. 50-62.

223 Hill, *pers.comm.*

century *Críth Gablach*[224]. These data would suggest that select foods, for example choice cuts of meat, were brought from the hinterland to sites which controlled manufacturing and exchange of prestige goods, which in turn were redistributed back down the line. Into this process also fits the gathering of prestige imports through international trade and the gathering of raw materials for manufacturing of broochs, combs, beads and other items. We must proceed carefully with this model, however, as the conjuring up of images of many small vessels going every which way with local goods and materials is dangerously unspecific and unfounded, whatever its likelihood, and inclined to leave us with a picture no less chimerical than that of Bowen's multiplicity of saintly seafarers.

Where the imported ceramics are concerned we must be clear that the issue of overemphasis is so far an archaeological rather than an economic one. That imported ceramics have a major role to play in identifying routes and ports of maritime exchange would seem to be taken for granted in a range of studies of the Irish Sea basin, as well as in the study of North Sea and related exchange[225]. Arnold, however, has expressed strong criticism of Hodges's implicit corollory between ceramic distributions and commercial networks[226]. But we have seen in our discussion of the historical role of archaeology[227] that studies of archaeological finds should not to be expected to cover gaps in the writing of history: they are not economic or social history, but archaeological studies. Marx (thinking in terms of tool-making industries and the Three-Age system) suggested the superiority of

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[224] D. Binchy (ed.), *Críth Gablach*, Dublin, 1940; also M. Gerriets, 'Kingship and Exchange in Pre-Viking Ireland', *CMCS* 13 (1987), pp. 39-72.

[225] D. Griffiths, 'The Coastal Trading Ports of the Irish Sea', in J. Graham-Campbell, ed., *Viking Treasure from the Northwest: the Cuerdale Hoard in its Context*, Liverpool, 1992, p. 63. L. and E. Alcock, 'Excavations at *Alt Clut*, Clyde Rock, Strathclyde, 1974-5', *PSAS* 120 (1990), pp. 119, 130-8.

[226] C. Arnold, Review of R. Hodges, *Dark Age Economics'*, *Scottish Archaeological Review* 2 (1983), pp. 80-1.

[227] See p. 9.

archaeology was that it emphasised the importance of production through its focus on the 'osseous systems' (tools) not the 'vascular systems' (containers)[228]. In early medieval archaeology, however, the need to establish firm *datum* lines for Insular chronology has seen the vascular systems brought to the fore. As firmly datable finds, the imported ceramics provide the framework for dating other production and exchange activities - as Hill recognises when calling upon the evidence of B ware to date relevant industries at Whithorn[229]. As Mytum says 'they can be of significance because they can be provenanced, their distributions plotted and the mechanics of trade and distribution suggested'[230].

This point may serve to defend an approach initially informed by long-distance imports. However, it is certainly time we reconsidered the relationship between long- and short-distance traffic in historical study. Does one grow directly out of the other? Though as Mytum observes the evidence more often suggests that identifiable goods arriving in the Irish Sea basin do so in foreign vessels[231], we will see in a later chapter that there is some potential to see this traffic as having an identifiable link with Gaulish coastal traffic[232]. We should also observe that coastal networks in the Irish Sea may have been stimulated by inclusion in foreign import processes. The causal model is more likely to be the reverse, however, with the ability to absorb imports indicating a level of demand for goods acquired through internal exchange.

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[228] Marx, *Capital*, p. 172.

[229] P. Hill, *pers. comm.*

[230] Mytum, *The Origins*, p. 252.

[231] Mytum, *The Origins*, p. 261-2.

[232] See pp. 264-6.

The 'Peninsular Road' Model

We now should examine some prominent models used to explain land/sea/exchange relationships in the western sealanes. In looking at the question of distribution, Crawford[233], Bowen[234] and Miller[235] placed considerable emphasis on the existence of 'peninsular roads', a model which Crawford imported from a Mediterranean context - most particularly inspired by the isthmus of Corinth[236] - and first applied to prehistoric distributions around the Irish Sea[237]. In his seminal study of the early medieval use of the western sealanes, however, he integrated his prehistoric data with historical evidence which he took to demonstrate the validity of this model. Distributions of artefacts and the locations of monuments in Wales have been invoked to support the existence of peninsular roads across the tips of Dyfed, Gwynedd, Cornwall, the Mull of Galloway and Kintyre[238]. This model and its relevance must be regarded as dubious in the extreme. That peninsulas were fearsome zones to the mariner is undoubted, this does not imply that traders would have unloaded their ships and carted goods overland to avoid them. The cost of land transport is massively greater than that of sea-travel. The Corinth case also needs to be understood in the context of the *distance* of the voyage around the Peleponnese, leaving aside the unreliable seas of the Southern Aegean. The voyage

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[233] Crawford, 'Western Seaways', p. 185.
Seas

[234] Bowen, "'Britain and the British Seas'", p. 14.

[235] Miller, 'Hiberni', p. 317.

[236] Crawford, 'Western Seaways', p. 185.

[237] See pp. 25-6.

[238] Bowen, "'Britain and the British Seas'", p. 19.

around, say, Dyfed is of nothing like the same length. If landing sites exist at the ends of paths that cross the peninsulas, this presumably implies the existence of central places straddling these paths and requiring links to each shore.

The example of St Samson of Dol, though an example of a person who travelled overland across Cornwall, does not aid the 'peninsular road' theory. In his *vita* he sets out to be 'a pilgrim, and beyond the sea, great in the church'[239]. Landing in the estuary of the Fowey[240], he appears quite willing to make his home in Cornwall and when he crosses to the Continent 'according to his promise'[241], the promise in question was simply to travel across the sea until he found a place to settle. In other words, the hagiographer believed that Samson left Wales *without* the explicit intention of travelling as far as Brittany. There is no case then to argue that he travelled across Cornwall to avoid the seas off Land's End.

Quite different circumstances may be found in Scotland, where at least two likely peninsular roads existed, across Kintyre and between Loch Ness and the Moray Firth. The site of Dunadd commands the Crinan isthmus and its hinterland relations clearly extend into the Clyde estuary, as well as into Dalriada, to the west[242]. Here we must be conscious of the likelihood of a peninsular transit from the evidence of E ware pottery. The maritime conditions between Fairhead and Kintyre are truly intimidating[243] and this seems to be reflected in the lack of finds of E ware at distribution points which necessarily reflect use of this channel. The

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[239] *Vita Samsonis* XLV (ed. Fawtier, p. 141).

[240] *Ibid.* XLV (p. 142).

[241] *Ibid.* LII (p. 147).

[242] Nieke and Duncan, 'Dalriada', pp. 16ff; Campbell, 'A Cross-marked', pp. 105-117.

[243] See p. 39.

furthest south find-site in Dalriada on the west side of Kintrye is Ardifuir, which must certainly be in overland contact with Dunadd. Nieke and Duncan convincingly explain finds near the tip of Kintyre on the east side as secondary from Dunadd[244].

Very relevant here is the much discussed episode in the *Vita Columbae* where the saint prophesying a disaster in Italy, tells a man that 'before the present year is ended...Gallic sailors from the provinces of Gaul will tell you the same'[245].

> After some months, these words proved to have been correct. For this Lugbe went, along with the holy man, to the chief place of the district; and he questioned the master and sailors of a ship that arrived, and heard those things about the city and its inhabitants related by them[246].

The identification of this 'chief place' *(caput regionis)* has been discussed at length several times[247], most discussions favouring Dunadd, though rejecting the possibility that *caput regionis* is a direct equation with Old Irish *cenn tire* (Kintyre). Alcock has argued that Dunollie is the 'chief place' of the 'Iona district'[248] and it is certainly true that Dunadd's claim to be the capital of Dalriada as a whole rests on ambiguous evidence[249]. There are certainly good reasons why a ship might only

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[244] M. Nieke and H. Duncan, 'Dalriada', pp. 17-18.

[245] 'Et antequam praesens finiatur annus gallici nautae de Galliarum provinciis adventates haec eadem tibi enarrabunt', Adomnan, *Vita Columbae* I.28 (ed. Anderson and Anderson, pp. 262-3). Note the the Andersons' *the* gallic sailors' prejudices this passage unduly, so I have omitted it here.

[246] 'Quae verba post aliquot menses veridica fuisse sunt conprobata. Nam idem Lugbeus simul cum sancto viro ad caput regionis pergens, nauclerum et nautas adventantis barcae interrogans, sic omnia illa de civitate cum civibus ab eis audit enarrata', *Ibid.*, I.28 (ed. Andersons, pp. 252-5).

[247] W. Watson, *The History of the Celtic Place-names of Scotland*, Edinburgh, 1926, p. 92; Campbell, 'A Cross-Marked', p. 114; Thomas, 'Gallic *Nautae*', p. 3; L. and E. Alcock, 'Excavations at Dunollie Castle, Oban, Argyll, 1978', *PSAS* 117 (1987), p. 143.

[248] Alcock and Alcock, 'Excavations at Dunollie', p. 143.

[249] A. Lane, 'Some Pictish Problems at Dunadd, in J. Friell and W. Watson, eds, *Pictish Studies* (BAR British Series 125), Oxford, 1984, p. 43.

come as far as the good harbour at Dunollie to land goods, maritime conditions around Iona being much less predictable. On the other hand, if we are to imagine Dunadd to be the *caput regionis*, the fact that ships from abroad must stop so far from Iona would be more worthy of mention. It is hard to imagine, if ships regularly came to Dunollie, that they would not have sometimes come to Iona. If so, would Adomnan have bothered to specify a ship at Dunollie for this incident?

In the northeast of Scotland, the Inverness region commends itself as an obvious peninsular road. A Pictish capital at Inverness in the sixth century opened up links: with Dalriada, by boat along Loch Ness[250]; and north to the Orkneys[251]; as well as south to the east coast forts such as Dunottar and Clatchard Craig[252], by sea along Moray Firth.

In both the above cases we are dealing with peninsular roads which should be regarded, not as part of the western sealanes, but as traversing peninsulas which isolate generally separate thalassocracies from the western sealanes.

Exchange Sites: Typological Approaches

When Crawford proposed his 'peninsular road' model there had been little theoretical discussion of redistributive networks in the spatial arrangements and location of landing sites. We would now be inclined to see the same evidence as indicating redistribution of goods by inland routes and coastal traffic.

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[250] Adomnan, *Vita Columbae* II.34 (ed. Anderson and Anderson, pp. 404-7).

[251] *Ibid.*, II.42 (pp. 440-1), dealing with a time when monks of Iona were for the first time exploring the western sea route to the Orkneys and Columba, in Inverness, sought assurances from the king of Orkney, who had come to Inverness, that they would be safe if they came to Orkney.

[252] J. Close-Brooks, 'Excavations at Clatchard Craig, Fife', *PSAS* 116 (1986), pp. 117-84.

How does a landing site relate to regional commerce and exchange? McGrail's definition of the likely relations of a landing site is worth quoting as a starting point:

> The [landing] site should ideally be at the centre of the regional economy or with good access to it. The natural economic and political centres for many regions lie away from the coast and in these cases the trader's ideal site would be inland, up a river and possibly at a ford as at Dublin.....The political authority requires a well-defined, possibly defended, site, preferably near the coast (i.e. as near the common frontier as practicable), where traders can be segregated, protected and supervised, justice imposed and tolls collected. Settlements in coastal zones on promontories or islands are suitable locations for these activities[253].

The crucial question for the western sealanes is whether we would see sites with these criteria as purely trading sites, or whether sites with imported goods which fit these criteria may have other political or religious functions. McGrail's criteria are derived from an extensive theoretical discussion in prehistoric archaeology, which is in turn founded in comparative anthropology: defining sites which are usually purely for exchange. The classic typology of *emporia* (market sites where locals are resident to service the needs of commercial visitors) and 'gateway communities' (boundary sites where traders can be isolated and the movement of goods into society regulated) has intruded into western sealanes studies: Dalkey Island has been described as a 'gateway community'[254]; Longbury Bank and Whithorn as *emporia*[255]. Various sites along the western sealanes have features which superficially fit McGrail's criteria: Tintagel and Dumbarton are defended promontories; Scilly, Dalkey and Caldey are islands which have produced evidence for overseas exchange[256]. Thomas has recently suggested that this debate is of

253 McGrail, 'Cross-Channel', pp. 311-12.

254 E.g. Mytum, *The Origins*, pp. 262-3.

255 E. Campbell and A. Lane, *Excavations at Longbury Bank 1988*, Interim Report, Cardiff, 1988, no pagination; Alcock and Alcock, 'Excavations at Alt Clut', p. 121.

only marginal relevance to the traffic of the western sealanes in our period[257], though it has played a major role in the interpretation of the Frisian and Viking commercial networks in the early middle ages[258]. Thomas, with Alcock, would see the coastally-located import centres as seats of *political* power, using wealth derived from levies and tributes to acquire prestige goods to be redistributed through family networks and levelling mechanisms. A brief discussion of the theoretical debate on exchange systems is therefore necessary.

Commerce and Exchange

Zimmer and his contemporaries do not seem to have been in any doubt that trade of a large-scale, commercial nature was predominant on the western sealanes and this model underpinned interpretation of the distribution of imported ceramics until the early 1980s, as we will see in the following chapter. Studies of exchange systems in prehistoric societies underwent a revolution in the 1930s, however, with the anthropological fieldwork of Malinowski[259] and Mauss[260] providing alternative models to trade to explain circulation of imported goods in early societies. These are explained in terms of such methods as prestige gift-giving and exchange at neutral points, external to the society, with non-commercial social networks used to redistribute goods. A specialised terminology has been developed by those who

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256 We should note that Nendrum, cited more than once by Mytum (*The Origins*, pp. 262-3; 266), has produced no E ware, which is the evidence upon which his case rests - M. O'Donnell, E. Campbell, *pers. comms.*

257 Thomas, 'Gallic *Nautae*', p. 10.

258 Hodges, *Dark Age*, esp. pp. 13-25.

259 Malinowski, *Argonauts*.

260 M. Mauss, *Essai sur le Don* - trans. I. Cunnison, *The Gift*, London, 1954.

consider formal economic terms to be inappropriate to anterior economies: with such terms as the 'port-of-trade' and 'gateway community' introduced to explain sites set aside for landing and trading of goods. The strongest use of this terminology (known as 'substantivist') in western sealanes studies has been by Hodges[261] and Doherty[262].

The substantivist debate entered the study of early medieval trade with the work of Grierson in his classic polemical paper[263], which questioned many of the basic assumptions of early medieval trade activity. This deeper study led to the identification of the nature of the exchange mechanisms of the North Sea basin, with its typologically regular pattern of *emporia* from around the seventh century onward. In the work of Hodges this has led to the definition of a complex hierarchy of site typology, with development from exchange sites on borders through to central markets - the validity of which is still a controversial point.

Attempts to extend this debate to the western seaboard, however, have tended to be typologically-driven: Dalkey Island has been singled out for comment on several occasions on account of its enclosure in the sixth or seventh century (cf. McGrail's criteria) and its location on an island. But the substantivist terminology is only vaguely applicable in this context. Archaeology along the western sealanes is able to define neither which ethnicities operated which sites nor for what lengths of the year. In the case of Dalkey Island, more than reference to the simple evidence of enclosure on an island may be necessary to indicate a role in regulated

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[261] Hodges, *Dark Age*, p. 67; 'Reply to Comments on "Ports of Trade in early Medieval Europe"', *Norwegian Archaeological Review* 11 (1978), p. 115.

[262] Doherty, 'Exchange and Trade', pp. 67-70.

[263] P. Grierson, 'Commerce in the Dark Ages', *Transactions of the Royal Historical Society* 9 (1959), pp. 123-4.

commerce - indeed the function of commercial neutrality could be indicated by either factor, but probably not both.

The variety of sites which seem to have operated as political centres warns us against expecting a consistent typology for landing sites and ports of trade. Centres with imported ceramics in the Celtic lands vary in size, and range in form from unenclosed farmsteads, through crannogs, hillforts and monasteries. Western Gaul likewise has failed to reveal consistent patterns of settlement in this period (M. O'Hea, *pers. comm.*). It also cannot be assumed that all sites of one type (e.g. 'monastery'; 'hillfort') fulfill the same functions with respect to their hinterland. There are many examples of sites whose classification has changed in successive interpretations. It is not clear whether Whithorn, with its wide range of imported artefacts, and located five kilometres from a good harbour[264], is a secular centre with a cemetery and church attached, a separate episcopal seat, or an early monastery[265]. Excavation seems to have dispelled this last notion thoroughly[266], but we are still left with the problem of categorising the site. Tintagel, of course, has been similarly the subject of revision - away from the 'Celtic monastery' paradigm[267], but again into other generalised categories. Sites such as South Cadbury in Somerset, or Clogher in Tyrone are very large hillforts which seem to

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[264] P. Hill, 'Whithorn: the Missing Years', in R. Oram and G. P. Stell, ed., *Galloway Land and Lordship*, Edinburgh, 1991, pp. 39-40. I would like to take the opportunity to thank Peter Hill for much useful discussion on the Whithorn evidence.

[265] See P. Hill, *Whithorn 3: Excavations at Whithorn Priory 1988-90*, Interim Report, Whithorn, 1990, pp. 1-7.

[266] The site was previously persistently classed as a monastery and it was even suggested that the church of St Ninian would be a classic 'Celtic' hermitage and hence most likely at the Isle of Whithorn, not Whithorn itself (W. D. Simpson, *St Ninian and Christian Origins in Scotland*, Edinburgh, 1940, p.75). The sheer scale of activity at Whithorn in the fifth through seventh centuries can now be set against the negative evidence from Simpson's era. See P. Hill, *Whithorn 2: Excavations 1984-7*, Interim Report, Whithorn, 1989, pp. 2-3, for listing of previous excavations.

[267] I. Burrow, 'Tintagel - Some Problems', *Scottish Archaeological Forum* 5 (1973), pp. 88-103.

be obvious political centres. South Cadbury was doubtless the seat of a ruler, Clogher certainly so[268]. Imported pottery is at these sites, both located at considerable distance from any possible port. A crannog, in the case of Lagore, could be a royal centre[269]. Sites such as Longbury Bank[270] and Forteviot, show major sites can be unenclosed[271].

These inconsistencies of settlement pattern render difficult any attempts to define an economic model, either agreeing or disagreeing with the theoretical paradigms. Thomas has stressed the likely political importance of putatively primary import sites for pottery in the Irish Sea basin: stressing the political status of Tintagel, Dumbarton and Dunadd[272]. He extends this model to propose that a royal centre in the Boyne region, rather than Dalkey, is the major import centre in eastern Ireland and Downpatrick would be more likely than a monastic centre in the north. All of this is taking the evidence a little too far: after all, there have been doubts cast upon the conclusiveness of the evidence of the 'royal' status of Dunadd[273], while Tintagel has only recently been even proposed as a royal centre. How are we to be sure that these are not gateway communities, or even the seats of trade magnates? In particular, there is a danger of using this model to dismiss such alternative

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[268] L. Alcock, '...By South Cadbury is that Camelot', London, 1972, pp. 174-193; R.Warner, 'A Case Study: Clochar macc nDaimini', Bulletin of the Ulster Placename Society 4 (1982), pp. 27-31.

[269] Most recent discussion in R.Warner, 'The Date of the Start of Lagore', Irish Journal of Archaeology 3 (1985-6), pp. 75-7; H. O'N. Hencken, 'Lagore Crannog, An Irish Royal Residence of the 7th to 10th Centuries AD', PRIA 53C (1950), pp. 1-247.

[270] E. Campbell and A. Lane, Excavations at Longbury Bank 1988, Interim Report, Cardiff, 1988, pp. 5-7.

[271] L. Alcock, 'Forteviot: A Pictish and Scottish Royal Palace', in S. M. Pearce, ed., The Early Church in Britain and Ireland (BAR British Series 102), Oxford, 1982, pp. 211-39.

[272] Thomas, 'Gallic Nautae', pp. 10-11, 21.

[273] Lane, 'Some Pictish Problems at Dunadd', p. 43.

hypotheses as Mytum's that the church was central to the entry of these goods into Ireland[274].

Doherty and Hodges have attempted to explore the theoretical paradigm in the case of Ireland: beginning with enclosed trading and assembly sites on the boundaries of kingdoms, and running through to the development of trading leases in connection with monasteries in the eighth century onward[275]. Attempts to identify the earlier style of market site have been inconclusive, however, with Hodges's example of Knockdhu depending too much on formal comparisons[276] and Dark's investigation of Arrallas in Cornwall, resting too much on the suggestive character of a name (from *arghans* *lys*: 'silver court'[277]), which is of indeterminate, perhaps pre-medieval, date[278]. Location near a boundary may have been significant at later dates, but for reasons unique to the early medieval period, not as an indicator of an anterior form of market. Tintagel is located near an ancient boundary[279]. Orléans is on the boundary between Neustria and Burgundy and there are implications for its involvement in economic activity[280]. We may also note that gateway community model is applicable in some modern contexts, such as Hong Kong, where it is scarcely in an evolutionary context. Alcock has recently

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[274] Mytum, *The Origins*, pp. 263-4.

[275] Doherty, 'Exchange and Trade', p. 80ff.

[276] R. Hodges, 'Knockdhu Promontory Fort', *Ulster Journal of Archaeology* 38 (1975), pp. 19-24.

[277] A. Preston-Jones and P. Rose, 'Medieval Cornwall' *Cornish Archaeology* 25 (1986), p. 138; O. J. Padel, *Cornish Place-name Elements*, London, 1985, p. 244.

[278] This name is one of a class of names which Padel would date as an earlier stratum than the average, on account of the generic/qualifier elements being in the reverse of the usual order, *Cornish Place-name Elements* , p. xv.

[279] C. Thomas, 'Settlement History in Cornwall', *Cornish Archaeology* 3 (1964), pp. 70-9.

[280] See p. 132.

warned against application of external paradigms to post-Roman societies which display complexities which belie the models[281] and Peter S. Wells has further suggested that the evidence of historic archaeology must be held to show that some exchange models, taking input from anthropology, are too simplistic for even the Iron Age contexts which they were developed to interpret[282]. We may note in conclusion the need for discrimination in the use of the substantivist terminology and models, which carry a baggage of evolutionary debate which has not been adequately comprehended in the western sealanes context.

Basic Exchange Models from Historical Sources

Much exchange was probably non-commercial in nature, or at least at some point. The *Muirbretha* appears from the commentaries to have stated that a cargo would be 'consigned to a certain person'[283], or 'to a certain tuath'[284], but if washed onto another's land a portion would be forfeit. Does this imply then that goods would not be brought into Ireland unless they were earmarked for an individual customer? Alcuin has goods purchased in Gaul with his own money by a follower there and shipped to him in York[285]. This may also imply that commercial purchase is only possible in Gaul, not in Britain, though there may be other explanations. St Filibert

[281] Alcock, 'The Activities of Potentates', p. 22.

[282] P. S. Wells, 'Origins and Content of Early Medieval Trade: A Long Perspective', in R. Hall, R. Hodges and H. Clarke, eds, *Exchange and Trade: Medieval Europe 1992, Pre-Printed Papers Volume 5*, York, 1992, pp. 43-9. I would like to thank Professor Wells for helpful discussion on this point.

[283] 'In tan tainic fo thomus duine airithi hi', Commentaries on the *Muirbretha* (ed. Binchy, CIH, p. 315, lines 24-5).

[284] 'In tan tainic fo thomus tuaithi airithi hi' (*ibid.*, p. 315, line 17).

[285] *Epistolae* VIII (ed. Duemmler, *MGH: Epistolae* II, Berlin, 1895, p. 33).

receives oil from Bordeaux by prior arrangement[286], but there may be difficulties in taking the information of saints' lives literally. The *topoi* of hagiography require fortuitously arriving mariners with gifts or delayed orders to demonstrate the omniscience and patience of the saint, but these examples may still be drawn from the everyday activity of the time of the hagiographer. Consignments of goods from abroad may be gifts, which presumably prompted reciprocal gifts. Alcuin sends gifts of roofing tin and wine to Eanbald of York[287]. There are accounts of high-status gift-giving in Gregory of Tours[288], Bede[289] and a range of other sources. This sort of exchange, exhaustively studied by Mauss in his classic essay[290], may range from: gifts given by an outsider to facilitate social intercourse, or to cultivate a powerful visitor; gifts of a reciprocal nature amongst high-status equals (kings, churchmen and the like); or from a ruler to a client - the latter taking the form of ritual feasting as an affirmation of the political relationship. Imported goods may be passed down the line in this way, from a central place to quite humble holdings. Such redistributive exchange systems serve to explain the range of sites where objects such as the imported ceramics are found on western British and Irish sites - these objects passed on along with prestige items manufactured in the distribution centres.

Exchange of raw materials might be accomplished by reciprocity. An episode in the *Vita Columbae* may provide an insight into this process:

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[286] *Vita Filiberti* XXXVII (ed. Levison, p. 602).

[287] *Epistolae* VI (ed. Duemmler, p. 32).

[288] Gregory of Tours, *Historia Francorum* VIII.1 (ed. Krusch, p. 370).

[289] Bede, *Historia Ecclesiastica* III.5 (ed. Colgrave and Mynors, p. 226).

[290] Mauss, *The Gift*.

> At one time, the saint sent his monks to bring bundles of wattle from the field of a certain layman, for the building of a guest-house. When, having filled a freight-ship with the aforesaid materials of wattle, they returned and came with the saint, and said that the layman was much distressed on account of this loss, the saint immediately gave instructions saying: 'Therefore lest we offend the man, let twice three measures of barley be taken to him from us; and let him sow the same at this time in ploughed land'[291].

This is duly done, and the crop flourishes to the profit of the man and the monastery. Miracles aside, it demonstrates the unstructured nature of resource acquisition and compensation. Both secular and church leaders might have made such levies. The growth of a market economy in the Irish Sea basin was another matter. Whether the tribal assembly *(óenach)* was actually used as a market place is a debatable point. Certainly, however, monastic assemblies took on this role in the eighth century or later[292]. In view of the existence of monastic fairs in Gaul, however, and movement between Gaulish and Irish monasteries, it is possible that this was an idea carried over from Gaul to Ireland.

Gaulish exchange systems in the period 400-800 were certainly more sophisticated than in the British Isles. Coin was in extensive use - Werner would suggest more in western Gaul than elsewhere[293]. A reference in Gregory of Tours to merchants selling food at exorbitant prices (in coin) in time of famine suggests sophisticated commercial exchange even at the level of basic necessities[294].

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[291] Alio in tempore sanctus suos misit monacos, ut de alicujus plebei agellulo virgarum fasciculos ad hospititium afferent construendum. Qui cum ad sanctum oneraria repleta navi de supradictus virgularum materiis reversi venirent, dicerentque plebeum ejusdem causa dispendii valde contristatum, sanctus consequenter precipiens dicit: 'Ne ergo illum scandalizemus virum, ad ipsum a nobis bis terni deferantur ordei modii; eosdemque his in diebus arata ipse seminet in terra', Adomnan, *Vita Columbae* II.3 (ed. Anderson and Anderson, pp. 328-9).

[292] Doherty, 'Exchange and Trade', p. 81.

[293] J. Werner, 'Fernhandel und Naturalwirtschaft im Östlichen Merowingerreich', *Bericht Römischen Germanischen Kommission* 42 (1961), p. 307-46.

[294] *Historia Francorum* VII.45 (ed. Krusch, p. 365).

Cargoes of wine and oil being imported into Gaul[295], which was already a primary producer of these items, suggest a market economy where supply and demand might be met through competing sources, providing different quality of goods. The provision of a loan by the crown to the businessmen of Verdun[296] suggests that we should beware of importing any but the most sophisticated interpretive models to explain the Gaulish economy in our period.

Commercial Shipping

Where did shipping fit into this picture and how was it operated? This is a much less discussed topic than the question of redistribution. In the Mediterranean at this time sources such as the *Rhodian Sea Law* give evidence of the transition to owner-operated ships, mostly using their own capital to buy and sell cargoes. The poignance of the position of the sea-captain who must accept a cargo from the church in *The Life of St John the Almsgiver*[297] shows that the independence of these operators was a matter of some pride. In the western sealanes we must also presume the existence of owner-operated vessels. We find ships working regularly for monasteries, such as in the *Vita Filiberti*[298], though Adomnan would also suggest that monks could themselves be sailors[299].

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[295] *Ibid.* VII.29 (p. 348).

[296] *Ibid.* III.34 (pp. 129-30).

[297] See p. 177.

[298] See p. 265.

[299] In an episode where Libran goes to Derry where sailors 'sed ipsi non suscipientes refutaverunt eum quia non erant de monacis sancti Columbae - repelled him and would not receive him because they were not of the monks of Saint Columba',*Vita Columbae* II.39 (ed. Anderson and Anderson, p. 428-9). Whether the sailors were actually monks is somewhat ambiguous, but not improbable.

In 1986[300] the writer discussed the idea that the modern 'tramp steamer' provided a model to assist in explaining the nature of western sealanes shipping. This term has been used by others recently in a slightly different sense to my use and requires clear definition. A 'tramp steamer' is a vessel which travels from port-to-port, wherever a cargo is available. It may sail one route regularly, but does not rely on doing so. Its cargo may vary from a single element, to a composite of elements - maybe consigned to more than one destination. Some elements may have cartage pre-paid, some may be ordered in advance and the operators may also have bought goods on a speculative basis. If the price was right a passenger might be all that is carried, though one would suspect that goods for sale would be carried on the chance that extra profit might be made. There is little doubt that western sealanes traffic was mostly on this model. Most references to ships imply independence from either ecclesiastical or royal control - at least ambiguity on this point. The model has validity in helping to explain trade in various goods in recurrent patterns and can offset the monolithic image of established trade conditioning the movement of travellers. In the case of wealthy churchmen, who are almost our only recorded passengers on voyages over long distances, it is possible that commissions to carry passengers made viable longer-distance voyages and that trade goods were carried initially only as a sideline. The tramp steamer might go to ports in a different order on different voyages and might sometimes take coastal traffic as well as international.

Archaeological use of the 'tramp steamer' model has been too limited in the western sealanes context: with Thomas and Campbell citing the term only in a polemical response to those who would accept a minimal number of cargoes as

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300 J. M. Wooding, 'Some Evidence for Cargoes in Trade along the Western Coasts of Europe, AD 400-900, *Sailing Ships and Sailing People, Papers,* Perth (Western Australia), 1987, Section V, pp. 1-17. In this I was following the suggestion of my colleague John Pryor.

being responsible for bringing imported ceramics to western Britain and Ireland. This question will be discussed further in subsequent chapters. This suspicion of reductionism is typical of archaeological approaches to assemblages which are far from fully known - Alcock's recent discussion of the problem of estimating the number of amphorae from sherd quantities is making the same point[301]. These are arguments against the imposition of single-element, bulk cargo models. The tramp steamer model has little to offer these arguments, however, as the likelihood is that a 'tramp steamer' would *not* have repeatedly made the same long voyage over many years - in the case of both the amphorae and E ware pottery the evidence does not suggest importation over a long period.

In the following chapters the data discussed above will be related fully to the evidence for communication and commerce from century to century. From our analysis it is clear that, while maritime data may be used to explain why traffic might fall into certain preferred geographical patterns, both shipping and technology were well adapted to the task of navigating the western sealanes. Overland routes were used, not out of fear of the sea as Crawford would suggest, but as access routes to the hinterland (in some cases, such as Dalriada[302], to reach a hinterland which was itself a maritime zone). The generally 'tramp steamer' character of trading voyages, requiring political tolerance or support to land, played a greater part than geography in determining the nature of maritime traffic, which was sporadic and varied as to route and cargo carried.

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301 Alcock and Alcock, 'Excavations at *Alt Clut'*, pp. 138-9.

302 Also see p. 318 on the overland link, in Ireland, between Co. Meath and the Shannon.

Chapter 3: Discontinuity and the Fifth Century

The question of continuity is crucial in study of the fifth century. The fifth century has been a misunderstood century for the study of the history of western Europe, straddling what Haywood in a recent study has aptly termed 'one of the great, artificial, dividing lines of history'[1]: that between antiquity and the early middle ages - being somewhat marginalised by specialists in both subject areas and treated as something of a vacuum. For Atlantic Europe, however, there is no lack of written accounts: St Patrick, Prosper, Sidonius and Hydatius are all good sources, written within reach of the shores of the western sealanes. That they are often vague as to location or ethnicity at crucial points does not excuse the tendency to read their evidence in terms of its implications for later centuries: which is done to St Patrick's evidence for the spread of Gaulish Christian culture to Ireland: or, as we have seen above[2], by those theorists on Saxon seafaring who chose to dismiss the testimony of Sidonius. There is a need to endorse Thompson's plea to read the text of Patrick, and all the fifth-century sources, without the mass of secondary accretions which condition every interpretation[3] and which are often linked to debates concerning neighbouring centuries. Attempts to discern change in communication patterns are genuinely hampered by an archaeological vacuum in the form of a lack of identifiably fifth-century artefacts, there having been particular problems in dating fifth-century forms even in unbroken series of ceramics such as

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[1] Haywood, *Dark Age*, p. 1.

[2] See pp. 58-61.

[3] E. A. Thompson, *Who was St Patrick?*, Woodbridge, 1985, p. xiii, discussing J. B. Bury, *The Life of St Patrick and his Place in History*, London, 1905; R. P. C. Hanson, *St Patrick his Origins and Career*, Oxford, 1968. Soundest treatment of the problem in D. A. Binchy, 'St Patrick and His Biographers, Ancient and Modern', *Studia Hibernica* 2 (1962), pp. 7-123.

African Red Slipware[4]. The continuity problem is clearly seen in maritime study, where there has been a tendency to carry over patterns from the centuries to either side. Problems in dating the western Insular ceramic types have seen the contacts indicated by imported ceramics, of probably sixth century and later date, pushed back into the fifth century. This continues a tendency of both Zimmer and the geographers, who drew even more sweeping generalisations (in a similar fashion to the way that Pirenne did with the Mediterranean evidence of the fifth century[5]).

The following comment by Thomas is an excellent example of the continuity debate and will be quoted here as a text for discussion:

> Small ships that could carry jars and mortaria and perhaps wine in little casks could of course carry people - people like Patrick in the fifth century, Columbanus in the sixth, let alone the merchants from the land of the Franks and the occasional Frankish mercenaries who brought their swords with them.
>   That Christians, in the early fifth century including pilgrims on their way to the Levant, could have travelled this way is certain; and it is in the highest degree probable[6].

This comment embraces the Mediterranean and Gaulish ceramic groups from western Britain and Ireland, the 'Frankish' metalwork from Lagore, and Zimmer's 'wine trade' under one model[7]. Thomas is not blind to changes which occurred from century to century, as a recent study shows[8], but in supporting a cultural

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[4] See pp. 175-6; also J. Hayes, 'North African Flanged Bowls: A Problem in Fifth-Century Chronology', in J. Dore and K. Greene, eds, *Roman Pottery Studies in Britain and Beyond* (BAR Supplementary Series 30), Oxford, 1977, pp. 279-283.

[5] See p. 164.

[6] Thomas, *Christianity,* p. 271.

[7] All these imports will be discussed in Chapters 4 & 5.

[8] Thomas, 'Gallic *Nautae',* pp. 11-14.

thesis, in this case, he is content not to minimalise the continuity of the pattern, observing that: 'Traders always prefer to ignore both politics and war'[9].

Another example is from E. A. Thompson:

there is evidence for substantial seaborne trade between Gaul and Galicia in the later sixth century[10] and we shall find some facts easier to account for if we assume that this trade was already flourishing in the fifth century[11].

Patterns indicated by texts and imported artefacts are treated as likely to be continuous, even if the evidence is discontinuous, if they fit the cultural connection required. Contrary to most of the statements in Thomas' passage, it will be demonstrated that direct links between Ireland and Gaul are unlikely in the fifth century and earlier - though Thompson's Gaul-Galicia link will be seen as more likely, if without any solid evidence. We will see that the direct Mediterranean connection which brought ceramics to early medieval sites in the Celtic west is also absent from the fifth century, even trading links between the western Mediterranean and Portugal are doubtful. That the activities of the Germanic pirates on the western sealanes are responsible for this lack of continuity will be seen to be less likely than changes in populations and government.

3.1 Traffic Prior to the Fifth Century

As continuity across several millennia is asserted by the 'western seaways' theorists we will begin by tracing the pattern in the centuries prior to the fifth century AD to assess what continuity might have existed. The western sealanes enter history in

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[9] Thomas, *Christianity*, p. 300.

[10] Discussed below, pp. 208-12.

[11] E. A. Thompson, *Romans and Barbarians*, Madison, 1982, p. 143.

the reports of Mediterranean mariners, who ventured north from western Mediterranean Phoenician and Greek colonies. The voyager Pytheas c.325 BC was one of these, his voyage possibly connected with unfulfilled Alexandrian interests in northern Europe[12]. There has been a tendency in the modern era to accept the existence of even earlier accounts derived from Phoenician sources, suggesting an early interest in Britain as a source of tin[13]. These should be regarded as very doubtful, however, with tin mines in Spain, rather than Britain being the likely terminus of Phoenician voyages - though some classical and later authors may have been under the same misapprehension as modern readers.

These early accounts, controversial as to detail, are of relevance to the present study insofar as later classical and medieval written accounts refer to a discourse derived from the earliest voyages. When we find Strabo writing of the tides of the western sealanes[14], or even Dicuil as late as the ninth century discussing pack-ice north of 'Thule'[15], they are making reference, directly or indirectly, to Pytheas' periplus Περι του Ωκεανου (now no longer extant, but quoted heavily in extant sources). References to Atlantic voyaging in Strabo, Caesar and Sidonius (and even the sixth- and seventh-century Byzantine authors who describe tin as a British product[16]) must be understood in terms of knowledge of these earlier writers.

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[12] C. F. C. Hawkes, *Pytheas: Europe and the Greek Explorers,* Oxford, 1977.

[13] Full discussion of all the sources in J. F. Kenney, *The Sources for the Early History of Ireland: Ecclesiastical,* New York, 1929, pp.118-38; C. F. C.Hawkes, 'Ictis Disentangled and the British Tin Trade', *Oxford Journal of Archaeology* 3 (1984), pp. 211-33; R. Penhallurick, *Tin in Antiquity,* London, 1986, pp. 123-131.

[14] Strabo, *Geographica* I.1.8 (ed. Jones, Vol.1, pp. 16-19), III.3.3 (pp. 66-7).

[15] Dicuil, *Liber de Mensura* XIII (ed. Tierney, pp. 74-5).

[16] See pp. 177-9.

The 'western seaways' theorists also made much of the early evidence to assert the existence of traffic between the Continent and Ireland. It will be shown that there is no evidence for such a link, however, which should remove from debate a basic element in many theories of Irish cultural formation.

The fourth century and earlier voyages were most probably direct voyages from the Mediterranean, which are not typical of the pattern over the next few centuries. In the final centuries BC this knowledge is supplemented by data from a gradually escalating commerce conducted by the peoples along the northern and western shores of Gaul to Britain and Spain, under Roman impetus. In the process of the conquest of western and northern Europe by Rome, these peoples were interviewed to provide data useful to the conquerers. Diodorus Siculus[17] describes a trade in tin from Belerion (identified by Ptolemy as Land's End), through a trading centre on a tidal island, *Ictis* (often identified as St Michael's Mount), to the coast of Gaul and overland to the Mediterranean[18]. The powerful Venetic people of Armorica, who at the time of their defeat at the hands of Caesar 'had a large fleet plying between their own ports and Britain'[19], would most likely have operated the western sealanes end of this trade, which seems to have declined by the time of the Roman occupation of Britain - it is not clear, however, whether Caesar brought about its cessation. Earlier references to Atlantic tin trading were conflated with the existence of a genuine traffic in British tin around the last century BC. Though trade between the western coast of Gaul and the south coast of Britain continued throughout the Roman period, there is no certain evidence that the Veneti traded into the Irish Sea basin. There is no question of their capacity to do so, as in Caesar's

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[17] Diodorus Siculus, *Historical Library*, V.22 (ed. Oldfather, vol.III, pp. 156-7).

[18] Hawkes, 'Ictis Disentangled', pp. 211-33.

[19] Caesar, *Bellum Gallicum* III.8 (ed. Edwards, pp. 146-9).

description they appear to have been excellent seamen, with ships well equipped for western sealanes travel[20].

Caesar questioned merchants for details regarding Britain, before setting sail in 55 BC:

> Interviews with numerous merchants elicited nothing as to the size of the island, the names and strength of the native tribes, their military and civic organisation, or the harbours which might accommodate a large fleet.... Of all this the Gauls knew virtually nothing; for no one except traders makes the journey with any regularity, and even their knowledge is limited to the sea coast immediately facing Gaul[21].

This latter comment, by itself, cannot be taken to indicate a total lack of contact between Gaul and the Irish Sea basin in the first century BC. It may simply indicate that Caesar did not interrogate those merchants involved in such trade or, alternatively, that the Gauls in question were uncooperative. Nonetheless, Caesar is known to have had contacts with more than one western Gaulish seafaring group, at least the Veneti, and 'Gallic ships conscripted in Poitou, Saintonge and other subject areas'[22]. If western Gaul and the Irish Sea were in contact during this period it would be surprising if Caesar could learn nothing from seafarers from such areas apart from details of the south coast of Britain.

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[20] *Ibid.* III.13 (pp. 154-5).

[21] 'Itaque vocatis ad se undique mercatoribus neque quanta esset insulae magnitudo, neque quem usum belli haberent aut quibus institutis uterentur, neque qui essent ad maiorum navium multitudinem idonei portus, reperire poterat'; 'quae omnia fere Gallis erant incognita. Neque enim temere praeter mercatores illo adit quisquam, neque eis ipsis quidquam praeter oram maritimam atque eas regiones quae sunt contra Gallias notum est', Caesar, *Bellum Gallicum*, IV (ed. Edwards, pp. 204-6); translation from J. Warrington, *Caesar: War Commentaries*, London, 1953, p. 64, which preserves the sense of the passage better than Edwards's.

[22] 'Gallicisque navibus, quas ex Pictonibus et Santonis reliquisque pacatis regionibus convenire iusserat', *Bellum Gallicum* III. 11 (ed. Edwards, p. 153).

From the *Agricola* of Tacitus (98 AD) it is clear that sometime in the first century AD trading contacts were maintained with Ireland from either Britain or Gaul:

> we are...informed, thanks to the trade of merchants, about the approaches to the island [Ireland] and its harbours[23].

Tacitus notes that Ireland is easily accessible from the seas off Gaul[24]. In the same passage, however, he describes it as lying between Britain and Spain, which would put it unrealistically near to Gaul. This detail is thus likely to be derived from intellectual geography, rather than the experience of mariners plying between Gaul and Ireland. The details which classical writers give regarding the orientation of Britain and Ireland in relation to the Continent, and of the distances of the various landmasses from each other, from the first century AD onwards seem to reflect a continuing lack of input from direct sea voyages along the western sealanes into the Irish Sea. Pliny, for example, gives only one measure of distance in orienting Ireland: the distance of the shortest crossing from Britain. He provides no details concerning the distance from Ireland to Gaul[25]. He does, however, provide accurate distances for the orientation of Britain with Gaul. A range of writers from Caesar through Strabo even to Procopius suggest that the coast of Ireland lies opposite Spain and the Aquitaine[26].

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23 '...aditus portusque per commercia et negotiatores cogniti', Tacitus, *Agricola* XXIV (ed. & trans. M. Hutton, LCL, 1914, p. 211).

24 *Ibid.*, XXIV (p. 211).

25 Pliny, *Naturalis Historia*, IV.16 (ed.H. Rackham, LCL, 1942, p. 198).

26 J. J. Tierney, 'The Greek Geographic Tradition and Ptolemy's Evidence for Irish Geography', *PRIA* 76C (1976), pp. 257-265; J. F. Killeen, 'Ireland in the Greek and Roman Writers', *PRIA* 76C (1976), pp. 207-15.

Classical writers were to maintain this ignorance of the orientation of Ireland in relation to the Continent. It was to give rise to the Milesian legends of medieval Irish tradition, which used the false belief that Ireland was only just out of sight of Spain to explain the earliest settlement of Ireland as being from Spain[27]. This legend has both directly and indirectly influenced the notion of the 'western seaways' school that early direct links with the Continent were probable. It has also led to more far-fetched arguments for cultural unity along the western seaboard[28].

It is with some reservations that we should accept that the sources of Graeco-Roman geography and cartography are any more than a general indication of the range of routes involved in commercial contact between Britain, Ireland and Gaul. Earlier details were worked into a cartographical tradition where they were distorted by Greek geometric models. A writer as early as Tacitus seems to be working from maps which show the sorts of distortions evident in the (later) work of Ptolemy[29]. The crucial texts of Pytheas, Marinus and Posidonius are lost and the early date of the underlying sources of Avienus's *Ora Maritima*, crucial in Hencken's influential reconstruction of early Irish Sea trade routes[30], are now much debated. Avienus's work is also said to depend on earlier sources[31]: a Greek *'Massiliote Periplus'* as well as a commentator, but doubts now attach to whether

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[27] *Lebor Gabála Érenn* (ed. R. A. S. Macalister, Dublin, 1938-56. The link between this text and the classical legends is via Orosius and Isidore.

[28] See e. g. Quinn, *Atlantean.*

[29] R. Baumgarten, 'The Geographical Orientation of Ireland in Isidore and Orosius', *Peritia* 3 (1984), (pp. 189-203), pp. 195ff.

[30] H. O'N. Hencken. *The Archaeology of Cornwall and Scilly*, London, 1932, pp. 168, 181ff.

[31] J. Murphy, *Rufus Festus Avienus Ora Maritima*, Chicago, 1977, v-vi.

this was an otherwise unknown *periplus*, or whether Avienus's work is derived totally from known authors.

Whether many voyages were conducted by the Romans along the sealanes of the Irish Sea basin is not clear. The 'circumnavigation' of Scotland described by Tacitus, for example, seems only to have involved sailing to Cape Wrath from the east and turning back[32]. That mariners were making east-west voyages from Britain to Ireland seems most likely[33]. Voyages on a north-south line are not recorded.

The detail in the works of Strabo and Avienus is able to be re-examined in the light of archaeology. Strabo (c. 64 BC-19 AD) describes a range of trading links between western Gaul and the south of Britain, by way of the southern part of the western sealanes:

> There are only four passages which are habitually used in crossing from the mainland to the island, those which begin at the mouths of the rivers - the Rhenus (Rhine), the Sequana (Seine), the Liger (Loire), and the Garumna (Garonne)[34].

Zimmer maintained that this trade from the Garonne and Loire most likely took in Ireland as well as Britain[35], but we should note that Strabo definitely does not mention Ireland in this connection. Moreover where he does mention Ireland, elsewhere, it is only in most erroneous terms[36]. We should also note, with

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[32] Tacitus, *Agricola* XXXVIII (ed. Rackham, p. 236).

[33] *Ibid.*, XXIV (ed. Rackham, p. 211).

[34] Strabo, *Geographica* IV.5.2 (ed. Jones, vol.2, p. 253). For recent discussion see B. Cunliffe, 'Relations between Britain and Gaul in the First Century BC and Early First Century AD', in S. MacReady and F. H. Thompson, *Cross Channel Trade between Gaul and Britain in the Pre-Roman Iron Age*, London, 1984, pp. 24-36.

[35] Zimmer, 'Zeugnisse für Westgallisch', pp. 563-400.

[36] Strabo, *Geographica* IV.5.4 (ed. Jones, p. 258-9).

Richmond[37] the sparseness of evidence for western Ireland in the geography of Ptolemy. And we must always be conscious of the confusion of Roman sources regarding the orientation of Ireland to the Continent.

Both Tacitus and Ptolemy cite merchants as their major source, Ptolemy providing more inland detail than Tacitus. Tacitus's merchants seem then to have stopped at boundary trading sites, rather than penetrating the interior. These voyages clearly favoured the east and south coasts. The likelihood that all these Roman, and immediately pre-Roman, contacts with Ireland were from Britain is also confirmed by the lack of the sorts of prestige goods, notably amphorae, found in the Channel trade network. The western sealanes traffic described by Strabo is separate and seems to follow the same pattern described by Diodorus in connection with tin trading: with goods being shipped along the Gaulish rivers to and from the Mediterranean[38]. A range of archaeological evidence seems to confirm the lack of involvement of Ireland in such traffic emanating from Gaul. The distribution of the amphorae of Dressel types 1-4 and related imports, arriving in Britain during the late second through first century BC, relates to the pattern of contact described by Strabo which brought 'grain, cattle, gold, silver and iron...hides, slaves and dogs'[39] back to the Continent, presumably in return for the contents of the amphorae and related cargoes. The distribution of the amphorae[40], and their discovery in Channel shipwrecks[41], again indicate that the voyages which brought

[37] I. A. Richmond, 'Ancient Geographical Sources for Britain north of Cheviot', in *idem.*, ed., *Roman and Native in North Britain*, Edinburgh, 1958, p. 144.

[38] P. Gaillou, 'Days of Wine and Roses? Early Armorica and the Atlantic Wine Trade', in S. MacReady and F. H. Thompson, *Cross Channel Trade between Gaul and Britain in the Pre-Roman Iron Age*, London, 1984, pp. 3-23.

[39] Strabo, *Geographica* IV.5.2 (ed. Jones, pp. 254-5).

[40] On the amphorae see D. P. S. Peacock and D. Williams, *Amphorae and the Roman Economy*, London, 1986, pp. 87-106.

Distribution of Amphorae
of
Dressel Types 1A and 1B
(based on Gaillou, 'Days of Wine and Roses', p. 25)

● Dressel Type 1A
○ Dressel Type 1B
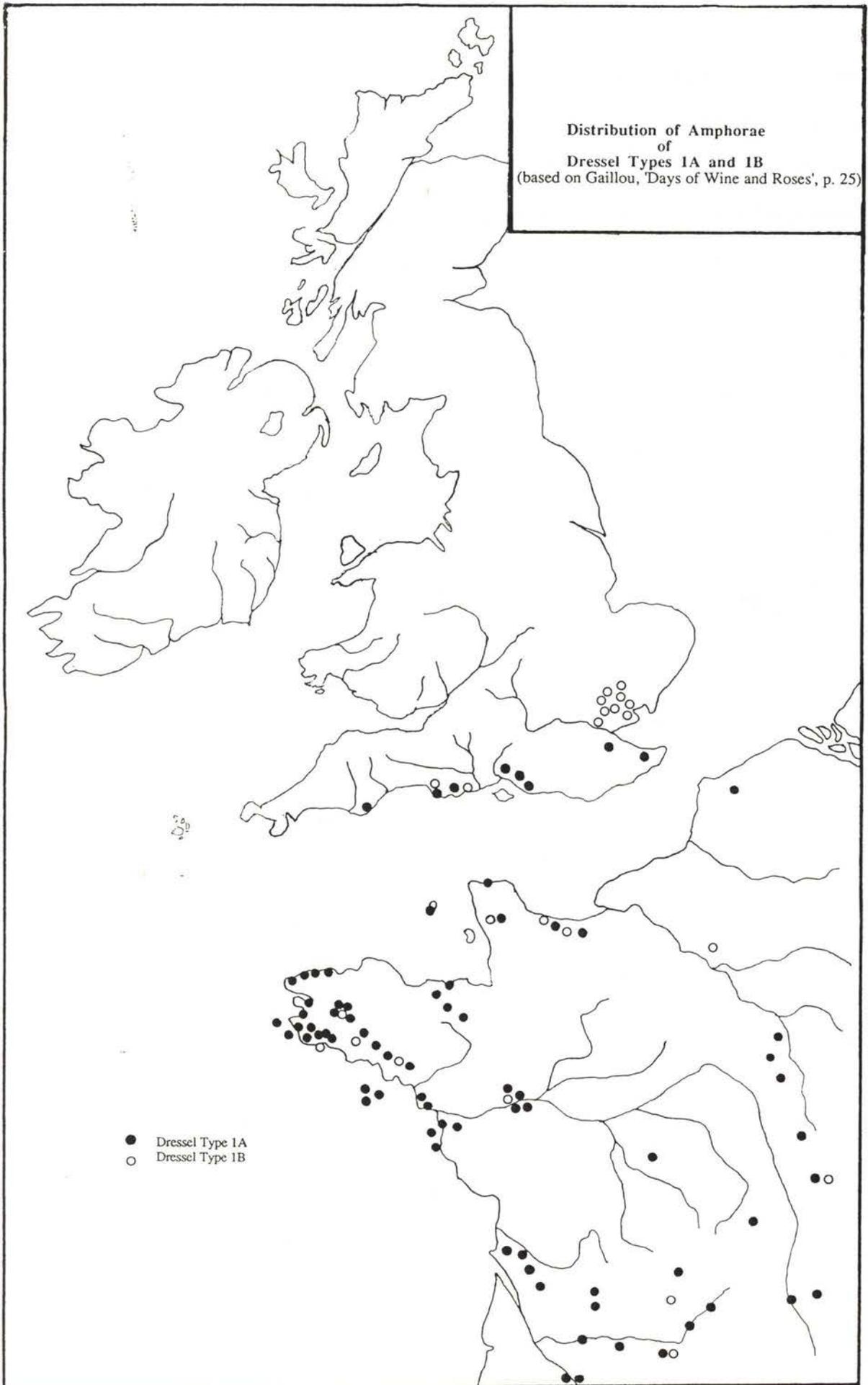
Fig. 2

them to Britain commenced in western Gaul, but rounded Brittany into the Channel, and did not proceed into the Irish Sea. Other recent archaeological finds may relate to this traffic. A shipwreck from Ploumanac'h, discovered in 1983, contains a range of lead ingots including some bearing inscriptions of the north and eastern British Iceni and Brigantes. The link again is obviously via the English Channel, not the Irish Sea[42].

Fulford has mustered evidence from distribution of late-Roman tablewares of the fourth century to support a continuation of this pattern of commerce. *Céramique dite à l'éponge* is the most relevant of these finds, as a distributional study implies a western Gaulish origin[43], with the distribution extending to southern Britain in the fourth century AD. Concentrations of finds are in Dorset, Hampshire and Sussex, with a scatter of finds in Kent, Devon and the head of the Bristol Channel. This would clearly indicate a seaborne importation around Brittany, with a major landfall in the Solent. Fulford[44] and Thomas[45] have suggested further landfalls in the Bristol Channel - which they suggest 'prefigures' the D and E ware importations. A distribution of the ware in Cornwall or South Wales, however, would be needed before the Bristol connection is explicable as anything more than an overland distribution from the Channel ports. Finds of Argonne ware in Gloucestershire, Shropshire, north Wales and eastern Ireland

[41] M. Rule, 'The Romano-Celtic Ship Excavated at St Peter Port, Guernsey, in S. McGrail, ed., *Maritime Celts, Frisians and Saxons*, London, 1990, pp. 49-56

[42] M. L'Hour, 'Un Site Sous-Marine sur la Côte de l'Armorique l'Epave Antique de Ploumanac'h', *Revue Archéologique Ouest* 4 (1987), pp. 113-31.

[43] P. Gaillou, M. Fulford and M. Clement, 'La Diffusion de la Céramique 'a l'éponge' dans le Nord-Ouest de l' Empire Romain', *Gallia* 38 (1980), pp. 265-78.

[44] M. Fulford, 'The Interpretation of Britain's late Roman Trade: the Scope of Medieval Historical and Archaeological Analogy', in J. Du Plat Taylor and H. Cleere, eds, *Roman Shipping and Trade: Britain and the Rhine Provinces*, London, 1978, pp. 58-69.

[45] Thomas, *A Provisional*, p. 4.

LATE-ROMAN TABLEWARES
(After Fulford)
Argonne Ware

Probable Region
of Origin

LATE-ROMAN TABLEWARES
(After Fulford)
Éponge Ware

Probable Region
of Origin
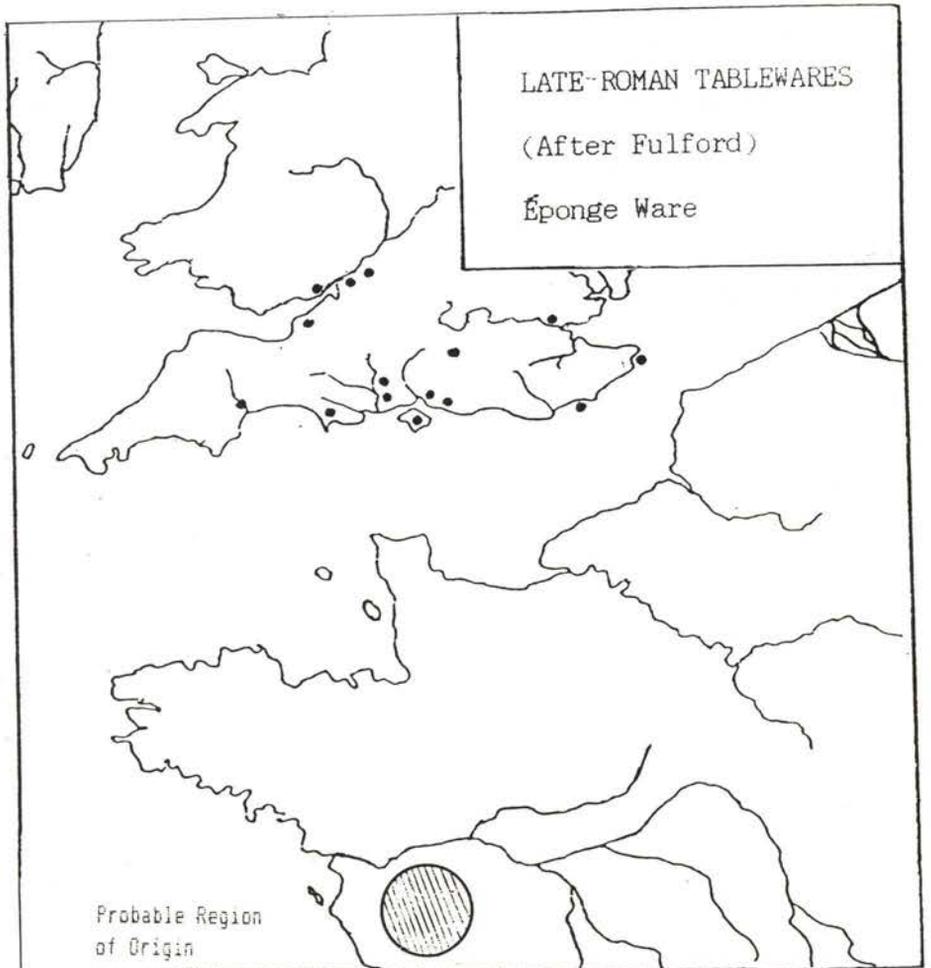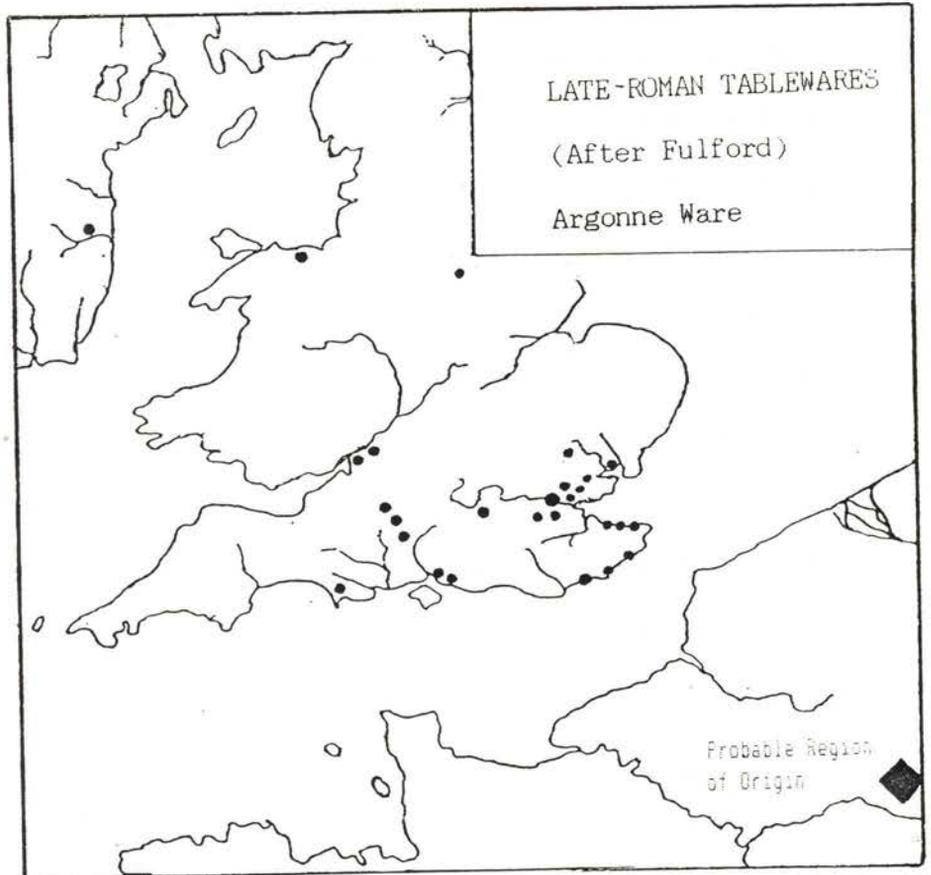
Fig. 3

seem, likewise, good evidence of such an overland path from the Channel, though further identifications and discoveries may change this picture, which is so far only based on a limited series of finds. In this connection we should note Gildas' references to 'the Severn...along which luxuries from overseas used to be brought by ship'[46], though it is not clear whether this implies contact with the Continent through the mouth of the Bristol Channel. In any event, by the mid-sixth century - allowing that Gildas's floruit is only with caution dated to that time - the Bristol Channel, at least, had seen the voyages which brought in the sub-Roman Mediterranean wares - though Gildas is far more likely harking back to a Roman period image. In any case, as Gildas also suggests that the sea all about Britain is 'uncrossable' *(intransmeabili)* apart from the crossing to Calais[47], he may be indicating an internal network only.

The northern end of Roman period traffic thus seems to have excluded direct contact with the Irish Sea. In the sixth and seventh centuries contact was to extend into the Irish Sea basin, direct from Gaul, as a new development. In Roman and pre-Roman Gaul itself the river routes seem to have been oriented towards overland traffic, not simply as feeder routes to take material inland from a maritime network, though undoubtedly they also would have filled such a role. Such activity is notably less frequent in an early medieval context[48], and certainly less often involves the types of bulky goods traded in the Roman period. This pattern, then, undergoes a break in continuity. In the sixth century, overland traffic of Mediterranean goods through eastern Gaul was to continue intermittently. Where

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[46] 'Sabrinae...per quae eidem olim transmarinae deliciae ratibus vehebantur', Gildas, *De Excidio et Conquestu Britanniae*, III.1 (ed. Winterbottom, p. 90).

[47] *Ibid.* III.1 (p. 89).

[48] James, *The Merovingian*, p. 220.

contacts by sea from western Gaul into the Channel continued[49], however, they no longer carried goods from the Mediterranean.

The work of Avienus (c. 400 AD)[50] has had an influence on theories of western sealanes disproportionate to its reliability on account of its use by Hencken to assert the existence of contacts between Cornwall and Ireland as part of the tin trade and related long-distance trade focussing on Cornwall and Armorica. As we have seen, there is nothing in Strabo's discussion, or in the evidence of archaeology, to suggest an involvement of Ireland in this network - the distance between Ireland and Cornwall is not great, but there is no evidence.

Hencken's theory depends on an acceptance that Avienus's work is based on a *periplus* from antiquity which reflects an actual ocean voyage from the western Mediterranean as far as Armorica.

> Under the head of this promontory, the Oestrymnic bay lies open for the natives. In it the islands called Oestrymnides stretch themselves out. They lie widely apart and are rich in tin and lead. There is much hardiness in the people here, a proud spirit, an efficient industriousness. They are all constantly concerned with commerce. They ply the widely troubled sea and swell of monster-filled Ocean with skiffs of skin. For these men do not know how to fashion keels with pine or maple. They do not hollow out yachts, as the custom is, from fir trees. Rather they always marvellously fit out boats with joined skins and often run through the vast salt water on leather.
> But from here, there is a two-day journey for a ship to the Holy Island - thus the ancients called it. This island, large in extent of land, lies between the waves. Again the island of the Albiones lies near[51].

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[49] *Ibid.*, pp. 221ff.

[50] J. Murphy, *Rufus Festus Avienus Ora Maritima*, Chicago, 1977, v-vi.

[51] 'Sub huius autem prominentis vertice sinus dehiscit incolis Oestryminicus, in quo insulae sese exerunt Oestryminides laxe iacentes et metallo divites stanni atquae plumbi, multa vis hic gentis est, superbus animus, efficax solertia, negotiandi cura iugis omnibus, netisque cumbis turbidum late fretum et beluosi gurgitem Oceani secant non hi carinas quippe pinu texere et acere norunt, non abiete, ut usus est, curvant faselo(s), sed rei ad miraculum navigia iunctis semper aptant pellibus corioque vastum saepe percurrunt salum. Ast hinc duobus in sacrum, sic insulam dixere prisci solibus cursus rati est. Haec inter undas multa[m] caespitum iacet, propinqua rurus insula Albionum patet', Avienus, *Ora Maritima* ll. 94-112 (ed. Murphy, pp. 8-9)

These men 'constantly concerned with commerce' make a colourful counterpart to Childe's 'neolithic argonauts'[52], but this is a very vague text upon which to rest any serious argument. We must question the idea that Avienus's text represents the core of a real sailing manual, certainly dismiss the idea that the *Albiones* have anything to do with Albion, and see the tin-mining and skinboats as proof of an Iberian, rather than British, connection. Hawkes has quite rightly questioned the distances involved and has stressed that in terms of the distances described in the text the tin-producing Oestrymnides are better identified with some point on the Iberian coast[53]. The detail on skin boats and dugouts is close to that of Strabo's on Iberia[54], the description of a lack of dugouts then is easily explained as a distinction of the Oestrymnides from other Iberians. A people called the *Albiones* lived in Galicia. Finally, that the Oestrymnides are a 'two day journey' from Ireland would be better explained by the usual classical error regarding the orientation of Iberia to Spain.

Both the writings of Strabo and Avienus describe traffic from the western coast of Spain through the Straits of Gibraltar into the Atlantic:

> But all the foreign trade of the country is carried on with Italy and Rome, since the voyage as far as the Pillars is good, except, perhaps, for a certain difficulty in passing the strait, and also the voyage on the high seas of Our Sea. For the sea-routes all pass through a zone of fair weather, particularly if the sailor keeps to the high seas; and this fact is advantageous to the merchant-freighters. And further, the winds on the high seas are regular[55].

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[52] See p. 25.

[53] Hawkes, *Pytheas*, pp. 3ff; also R. Penhallurick, *Tin in Antiquity*, London, 1986, pp. 127-8.

[54] See p. 65.

[55] Strabo, *Geographica* III.2.5 (ed. Jones vol. 2, pp. 30-1).

Strabo also describes the redistributive traffic along the river systems[56], servicing this exchange. The goods involved are: 'grain and wine... olive oil... wax, honey and pitch... Kermes... salt... salted-fish and wool[57,] and a range of minerals[58].

In the first century AD the early forms of Dressel amphorae appear in Portugal, paralleling their appearance on the northern arm of the western sealanes. Later imports are rarer, with the manufacture and distribution of later amphorae series in Portugal itself being taken to indicate a flourishing of local production in wine and other luxury goods at the expense of imports. As Alarcao observes, the study of Portuguese amphorae abroad might be indicative of movement in the opposite direction[59], but such evidence is only slowly becoming available. Italian fine wares were common in Portugal in the first century, but fell away with the establishment of the local sigillata industry. That these were mostly products of Arezzo, Pozzuolli and the Po may be suggestive of their having been part of the same traffic across Gaul described above in connection with Britain, in that they are from a region of Italy in close proximity to the eastern end of the overland route, but this is not any more likely than a maritime distribution. In the third century the appearance of Byzacena (Class 34) amphorae from North Africa may be noted[60]. At the same time importation of African Red Slipware (hereafter ARS) begins to dominate western Iberian assemblages, continuing through to around 450 AD. Something of a hiatus may be identifiable in the importation after this point, with

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[56] *Ibid.* III.2.4 (ed. Jones, vol. 2, pp. 26-9).

[57] *Ibid.* III.2.6 (ed. Jones, vol. 2, pp. 32-3).

[58] *Ibid.* III.2.8 (ed. Jones, vol.2, pp. 38-41).

[59] J. de Alarcao, *Roman Portugal*, vol.1, Warminster, 1988, p. 88.

[60] G. Cardoso, 'Anforas no Museu do Mar', *Conimbriga* 17 (1978), pp. 63-78.

common fifth-century types not being found. It is also to be noted that our evidence for fifth-century sites in Portugal is limited - albeit this is in part a reflection of the crucial diagnostic value of ARS itself. Despite the long held belief that later ARS finds at Conimbriga were datable to the last phase before the destruction of that city in 465, it is now clear that these finds are evidence of later occupation, which is itself a warning against readily accepting historical chronology in site dating - though historical sources support later occupation anyway[61]. A short second period of importation is now identifiable, contemporary with the influx of Phocaean Red Slip Ware (henceforth PRS)[62]. The ARS forms found in this phase are almost identical with a narrow chronological range found on western British and Irish sites. Other evidence from this horizon in Britain indicates that this importation is certainly by way of the Straits of Gibraltar and is no earlier than the last quarter of the fifth century and most probably later still.

It is obviously of some significance to identify when communication shifted from the river routes across Gaul to the direct route via the Straits of Gibraltar. The finding of a Class 49 (Amalgro 54) amphora at Bordeaux[63] is perhaps some indication of the continuation of river traffic across Gaul as late as the fourth or fifth century. On the other hand, some of the series of ARS may have been entering Spain and Portugal by way of maritime distributions through the Straits of Gibraltar

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[61] See Thompson, *Romans and Barbarians*, p. 213.

[62] J. W. Hayes, *Late Roman Pottery*, British School at Rome, 1972, maps p. 462; *Supplement to Late Roman Pottery*, British School at Rome, 1980, p. 521, but ignore his dates in light of M. Fulford and D. P. S. Peacock, *Excavations at Carthage: The British Mission Volume 1.2: The Pottery from the Avenue du President Habib Bourguiba*, vol.1, 2, Sheffield, 1984, pp. 114; N. Prieto, 'Algunos datos sobre las importaciones de cerámica "Phocean Red Slip" en la peninsula Iberica', in T. Blagg, *et al.* eds, *Papers in Iberian Archaeology*, Oxford (BAR International Series 193), 1984, pp. 540-8.

[63] S. J. Keay, *Late Roman Amphorae in the Western Mediterranean* (BAR. International Series 196 i & ii), Oxford, 1984, p. 656.

as early as the third or fourth century[64]. Further distributional study will doubtless refine this point, though we should be clear that tablewares alone are not a good guide to direct maritime contact in the absence of larger objects such as amphorae which are less likely to have been portaged across the Meseta.

When, in the mid-fifth century, Germanic piracy becomes particularly rife on the western sealanes, Vandal pirates raided Spain, probably by way of the Straits of Gibraltar. Hydatius describes Vandals off the coast of Galicia in 445:

> Ships suddenly appear at Turonium on the coast of Galicia and Vandals deplete many households[65].

This was undoubtedly the *Turonium,* near Tuy, mentioned in the sixth-century *parochiale* of Galicia[66]. The inspiration behind the voyage is difficult to assess. Tranoy preferred to believe that these were Heruls, not Vandals, but again as with the Saxon raids we should be wary of jumping to a conclusion that such a voyage was unlikely[67]. Certainly it would be a considerable voyage from Africa. An embassy from Africa had been to Galicia in c. 458, though whether this had any connection with the earlier raids must remain an open question[68]. This Vandal activity requires further consideration in the light of the changes occurring at this time in western Mediterranean trade. Did the well-established late-Roman African

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[64] Hayes, *Late Roman Pottery,* p. 423.

[65] 'Vandali navibus Turonio in litore Gallaeciae repente advecti familias capiunt plurimorum', Hydatius, *Chronicon* n.131 (ed. T. Mommsen, *MGH: AA,* XI, Berlin, rpr.1961, p. 24). See Haywood, *Dark Age,* p. 60.

[66] 'Ad Tudensem ecclesias que in vicinio sunt: ...9. Turonio' (ed. P. David, *Études Historiques sur la Galice et le Portugal du VIe au XIIe Siècle,* Paris, 1947, p. 43).

[67] A. Tranoy, *Hydace,* Vol. 2, Paris, 1974, p. 83.

[68] 'Legati Gothorum et Vandalorum pariter ad Suevos veniunt et revertuntur', Hydatius, *Chronicle* n. 192 [s.a. 458?] (ed. Mommsen, p. 31).

trade with Iberia give way to piracy? Pentz has argued that the Vandals did nothing to interfere with the escalating import traffic from the east into Africa[69], but they may have been responsible for a disruption to trade westward in African products. Purely Atlantic activity, such as Herul piracy on the Iberian coasts, would be less likely to disrupt traffic from the Mediterranean.

3.2 Raids and the Fifth-Century Migrations

The Atlantic piracy of the Heruls, Saxons and Vandals also remains a much neglected topic, though pleasingly now given suitable treatment by Haywood[70]. The crucial question for our purposes is the effect this activity had on trade and communication patterns in the fifth and following centuries. Did Saxon and Herul piracy disrupt extant trading activity in the fourth and fifth centuries? Did Frankish and Visigothic conquest of western coastal regions bring a new control of trading activity, such as existed? The Visigoths seem to have quickly drawn upon shipping resources to protect the coastline, just as Caesar had done four centuries previously. Sidonius, however, suggests that some of these recruits came from the ranks of the Saxons and Heruls themselves, as well as Gallo-Romans such as Namatius, who were not necessarily regular mariners. Whether invading groups became involved in trade is another interesting question. Saxons were resident in the area near Tours in c.584, most likely they are the descendants of the Saxons in this area in the previous century. That they are found working with a merchant of Tours trading with Orleans in 585[71] may imply a general involvement in mercantile activity, but

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[69] P. Pentz, 'Changing Patterns of Late-Roman/ Early Medieval Trade in the Western Mediterranean', in R. Hall, R. Hodges and H. Clarke, eds, *Exchange and Trade, Medieval Europe 1992, Pre-Printed Papers, Volume 5*, York, 1992, pp. 1-7.

[70] Haywood, Dark Age, pp. 23-50.

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there is no proof that this has any maritime link. In the case of the *Britanni* who made their way down the sealanes to Brittany and Galicia, the involvement in exchange may be more likely. The simple migration pattern of these groups bespeaks a maritime capability sufficient to cross the English Channel and the Bay of Biscay. Presumably this continued to be utilised in coastal traffic, if not continuing contact with Britain.

In Iberia continuity remains more likely, especially in the light of the limits of Visigothic interest outside of the Meseta, though we may note that Leuvigild was quick to interfere with maritime traffic at the time of his conquest of the Suevic kingdom[72]. We should also note the depredations of the fleets of Iberia during successive barbarian invasions[73].

Raids by seaborne Celtic and Germanic groups upon the northern coasts of the sealanes occur from the third century onwards. Initially these were by groups such as the Scots, Picts, Saxons and Heruls, which had a developed maritime capability. They were to remain the most numerous in western sealanes raiding into the fifth century. The Scots, Saxons and groups of Britons later became seaborne colonists.

Some of these groups are part of migration patterns which begin before, and finish after, the fifth century. For the sake of convenience they will be discussed primarily at this point. In part this is to recognise that they figure in the disruption of the previous pattern, which has its profoundest effect on maritime traffic in the fifth century. By the sixth century most groups had ceased raiding and formed colonies in the areas they had previously raided. Further conquest and migration in the sixth century seem mostly to have followed on lines commenced, and into areas

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[72] See p. 84.

[73] Haywood, *Dark Age*, pp. 30-1.

established, in the fifth. For example, by the sixth century the Breton migration is no longer really settlement, but exchange of people from Britain to another region which has an established British population. This ongoing interface may be obscured by models of migration which fail to appreciate the questions of ethnic identity involved. As will be discussed below, church councils in Gaul and Spain[74] show that British groups maintained separate identities where they settled abroad - likewise Gregory of Tours provides more than one example of early fifth-century migrants continuing to see their identity as distinct. The implications of ongoing interface between colonists and their ethnic homelands is often underappreciated. An early medieval colony might be established by refugees, but remain in regular contact with its homeland and even be the focus of royal intervention from that homeland. This was later to be the case in Scandinavian Iceland, for example. We are not sure as to the basis of the foundation of Dalriada, of which the name - meaning 'portion of Riata' - discounts the legend of the individual Fergus Mor and his eponymous sons[75] and implies corporate foundation by the Dál Riata in Ireland. We are at least clear that ongoing contacts were maintained and periodic attempts to control Dalriada from Ireland accompanied this process[76]. There are at least hints that Brittany was under the aegis of Dumnonia for some of the sixth century, also, though the sources which suggest this have considerable problems[77].

[74] See pp. 129-30, 212-13.

[75] Bannerman, *Studies*, p. 121-3.

[76] *Ibid.*, pp. 18; 157-70.

[77] See O. J. Padel, 'The Cornish Background to the Tristan Stories', *CMCS* 1 (1981), pp. 72-3.

Let us now look closely at where these raiders and colonists went. The Irish and the Picts are listed as seaborne raiders by Gildas and earlier writers, though it is uncertain whether the Picts ever raided the western coasts of Britain. Whatever seaborne commerce there was along the shores of the Irish Sea was presumably disrupted by this activity. Irish colonists certainly made their way to western Scotland and Irish migration to Dyfed is undoubted[78]. Ogham stones also testify to an Irish influence in North Cornwall and Gwynedd, though this is not so clearly a migration as those to Dyfed and Dalriada[79].

British migrations are on a considerable scale, doubtless in the form of Gildas' refugees who 'headed for lands overseas'(*alii transmarinas petebant regiones*[80]). There were evidently direct refugee migrations in the face of Saxon conquest - though we should not discount previous links which might have existed between Armorica and the south west of Britain. Anthemius is also said to have brought some British mercenaries to Gaul to fight Euric[81]. The migrations are dateable to at least the 460s from the writings of Sidonius[82] and from the signature of the 'British bishop' at the church council of Tours in 461[83]. Suggestions that the migration went also to Normandy are less certain, where they are based on the

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[78] M. Richards, 'The Irish Settlements in South-West Wales', *JRSAI* 80 (1960), pp. 133-62; D. McManus, *A Guide to Ogam*, Maynooth, 1991, pp. 46ff; T. Coplestone-Crow, 'The Dual Nature of the Colonisation of Dyfed in the Dark Ages', *Studia Celtica* 16/17 (1981-2), pp. 1-24.

[79] C. Thomas, 'The Irish Settlements of Post-Roman Western Britain', *Journal of the Royal Institution of Cornwall* 6 (1972), pp. 260-5.

[80] Gildas, *De Excidio* XXV (ed. Winterbottom, p. 98).

[81] Jordanes, *Getica* (trans. C. Mierow, 1915, p. 118); Sidonius, *Epistolae* VIII.6 (ed. Anderson, vol.2, pp. 418ff.

[82] Sidonius, *Epistlolae* III.9.2, *to Riothamus* (ed. Anderson, Vol. 2, pp. 36-7).

[83] First Council of Tours, 461 (ed. A. W. Haddan and W. Stubbs, *CEDRBI*, vol.2, Oxford, 1878, pp. 72-3). We should be wary of the assumption that the existence of a separate diocese of Britons (see Morris' note to Winterbottom's edition of Gildas) is any indication of how recent its establishment was. The existence of a separate diocese of British in Spain for some time should be noted in comparison.

Bretteville group of names[84], which might just as easily indicate Norman period translocation of Bretons[85]. A group certainly seem to have made their way along the sealanes to Galicia, though they do not appear in the sources until the sixth century[86]. The evidence of Procopius is controversially held by Thompson to suggest a further, sixth century, migration[87], but the likely reality is that persistent migration occurred throughout the fifth and sixth centuries and we should be wary of setting up simple causal relationships with any single event.

The Saxons are understood to have been raiding off Britain as early as the fourth century and in Armorica by 287[88]. Historians have tended to overemphasise the eastern British end of their activity, with its lasting political consequences, at the expense of their other activities, some of which certainly took them into the western sealanes. The Saxons are a persistent presence in northern and western Gaul onward into the sixth century, not simply as raiders, but as settlers. Gregory of Tours, for example, describes Saxons as settled on the Loire where, as early as the reign of Childeric I, they were attacked by the Franks on islands between Saumur and Angers[89]. The word 'Saxon' admittedly might have been used by late-Roman writers as one of a number of generic terms for 'barbarian'[90], but, as stated above, we should regard this as a dangerous assumption and follow Haywood in accepting statements of ethnicity at face value, unless there is real cause to do otherwise. As

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84 J.Morris, *The Age of Arthur*, Chichester, 1977, vol.1, p. 89.

85 Though admittedly this usually involved the abandonment of vestiges of Breton ancestry. See R. H. C. Davis, *The Normans and their Myth*, London, 1976, pp. 36ff.

86 See pp. 212-3.

87 Thompson, 'Procopius on Brittia', pp. 498-507.

88 Haywood, *Dark Age*, pp. 23ff.

89 Gregory of Tours, *Historia Francorum* II.19 (ed. Krusch, p. 65).

90 Haywood, *Dark Age*, p. 4.

we have seen, the presence of Saxon raiders seems to have inspired the Gothic rulers of Bordeaux to take steps to maintain a naval force to counteract their raids. Namatius was one Gallo-Roman recruited by Euric in this connection, around 466. As Sidonius writes to him in reply to a message from Saintes, we may presume that Saintes was a base for Namatius' activities. M. E. Jones has cast doubt upon Sidonius's real knowledge of the Saxons - and even sees fit to dismiss the existence of the messenger from Saintes[91]. However the existence of Saxons as raiders in the Bay of Biscay, perhaps from bases on the Loire, need not be doubted. G. J. Marcus's correction of 'Saxons' in Sidonius' *Panegyric to Avitus* to 'Irish'[92] is not acceptable, as we have seen[93].

In the sixth century a group of Saxons living near Bayeux were mobilised by Fredegund[94] and Saxon involvement in the foundation of the emporium at Quentovic in north-east Gaul seems undoubted[95]. Archaeological investigation has also added details to this picture, as Saxon objects, such as saucer brooches of sixth-century date, have been identified on sites in Normandy[96]. The site of Herpes, in Charente-Maritime (western France), has also produced square-headed brooches of undoubtedly Saxon type and sixth-century date[97]. Finds such as this

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91 Jones, 'Literary Evidence', forthcoming. Sidonius, *Epistlolae* VIII.6 (ed. Anderson, Volume 2, p. 428).

92 Marcus, 'Factors', p. 313.

93 See pp. 60-1.

94 *Historia Francorum* X.9 (ed. Krusch, p. 492).

95 I. Wood, *The Merovingian North Sea*, Alingsås, 1983, esp. pp. 18-19.

96 C. Lorren, 'Des Saxons en Basse Normandie au VIe siècle', *Studien zür Sachsenforschung* 2 (1980), pp. 231-69.

97 With Style One animals, in the British Museum Delemain Collection. On Herpes D. Kidd, 'The History of the Early Medieval European Collections in the British Museum', *Journal of the History of Collections* 1 (1989), pp. 105-6.

raise interesting questions, however, which deserve more attention than they have received in recent scholarship and will be discussed in chapter 4.2.

The evidence for raiding and settlement raises a series of issues. Undoubtedly any claims for continuity of usage of the western sealanes through the sixth century are affected by this evidence. The Saxons and the Irish came to settle regions where first they had raided, just as the Vikings were to do some three to four centuries later. Whether these settlements (like those of the Vikings) were a result of a direct transition based on political and social developments at home, or the simple expansion of raiding bases into colonies, cannot be determined. The British, on the other hand, are portrayed as reluctant migrants by Gildas, without this earlier raiding profile[98]. The Vandals only took to raiding by sea after reaching the Mediterranean. An aspect of continuity might be seen in the continued presence of the two clearly more active maritime groups in commerce in the sixth and seventh centuries. Irish ships are seen in traffic to the Continent in the seventh century[99]. Saxons are seen working for a merchant involved with transporting wine by riverboat between Orléans and Tours in the sixth[100]. The presence of Saxon objects in southwest Gaul in the sixth century may also imply Saxon maritime links. British maritime activity seems less present after the migration period, though British vessels visit Noirmoutier in the *Vita Filiberti*[101].

The raids and migrations of the fifth century must be considered to have had other effects. The nature of settlement along the shores of the western sealanes may well have changed. Conimbriga, for example, was destroyed by the Sueves[102].

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[98] Gildas, *De Excidio* XXV (ed.Winterbottom, p. 98).

[99] *Vita Filiberti* XLII (ed. Levison, p. 603).

[100] Gregory of Tours, *Historia Francorum*, VII.46 (ed. Krusch pp. 365-6).

[101] *Vita Filiberti* XL, XLI (ed. Levison, p. 603).

The abandonment of this site, however, is now seriously in doubt[103]. Presumably other towns extended their fortifications in the face of raids. The evidence for significant use of a coastal site such Tintagel, in the region of Cornwall with the clearest evidence for Irish activity, may be in some way linked with the activities of Irish raiders or migrants[104], a network of Irish contacts may even explain why ships called there in the fifth-sixth century. Considerations of this kind are important in understanding the limited picture of fifth-century activity.

The weight of political change in the fifth century makes it a logical point at which to seek change in western sealanes activity, or a starting point for a new pattern. That there would be radical change in the maritime pattern should not be seen as inevitable. Nor was it inevitable that change had to follow the collapse of Roman government in north-western Europe. Often central political change makes little change to private shipping activities. This must remain an even stronger caveat for marginal areas of the empire than it does for the Mediterranean. In other cases, maritime activity may have been evolving with the changing pattern of late Roman politics: in a period in which so much ethnic relocation occurred, we should be wary of asserting any continuity of use of routes if we are not sure if the people using them are ethnically the same as their precursors.

Roman period communication had favoured overland traffic through Gaul, both for persons and goods. As Africa came to play a greater economic role, and Rome a politically less significant one, this perspective shifted somewhat: with African products going directly by sea to western Iberia. In the northeast of Europe, however, overland traffic persisted, with Class 45 amphorae and African tablewares still travelling northward to eastern Britain overland. A fifth-century

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102 Hydatius n. 241 [s.a.468?] (ed. Mommsen, p. 34).

103 See p. 124.

104 I owe this suggestion to Oliver Padel.

decline in most distributions finds some textual corollary in accounts of piracy at sea and migrations overland. We cannot know how much traffic continued to use western Gaulish or Irish Sea ports. We can stress the lack of evidence for voyages from Gaul to Ireland, though there may have been voyages from western Gaul to the Bristol Channel in the fourth century indicated by tablewares.

For international travellers the fifth century brought definite changes of priority. A writer such as Rutilius Namatianus characterises changing attitudes. Writing about a voyage from Italy to Mediterranean Gaul in 416, he notes that he is travelling by sea because the land is politically unstable[105]. It is not his choice of mode of transport which we should see as characterising the era. A few decades later the Mediterranean might have become more dangerous than the land. It is the basis of his choice which is significant. No longer is one method of travel chosen simply for reasons of relative economy or convenience. It is safety which is the primary factor. Rutilius implies that he would, in the normal way, have travelled by land. We would assume then that persons in the fifth century would maintain continuity of practice of travel where possible. Hence it is not until late in the fifth century, when all vestiges of Roman control over the sub-kingdoms of Gaul have declined, with the Frankish takeover, that use of the overland routes begin really to give way in favour of the sea. The same is probably true in the British Isles, with early fifth-century travellers to and from Ireland probably still travelling through Britain. Once the pattern has seriously altered, however, direct sea travel becomes more in evidence. By the early seventh century we can definitely state that St Columbanus would more likely have travelled by sea from Ireland directly to Gaul. It is impossible to identify the sorts of clear discontinuities in practice which some

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[105] 'Postquam Tuscus ager postquamque Aurelius agger, perpessus Geticas ense vel igne manus, non silvas domibus, non flumina ponte coercet, incerto satius credere vela mari: Since Tuscany and since the Aurelian highway, after suffering the outrages of Goths with fire and sword, can no longer control forest with homestead or river with bridge, it is better to entrust my sails to the wayward sea', Rutilius, *De Redito Suo* I, ll. 37-42 (ed. Duff, pp. 766-7).

would like to see in the fifth century. Fifth-century societies went through several phases of change in which Roman political models declined by stages. And fifth-century travellers were not automata, but made choices - as Rutilius demonstrates. On the western sealanes the choices may have been more limited compared with the range of Mediterranean transport facilities. In the absence of fourth-century shifts of route in the north, this would suggest a persistence of Roman patterns until political circumstances made them unviable: especially where we can see the seas becoming especially dangerous through piracy.

3.3 Zimmer, Contact, Christianisation and Consumption

Behind the uneven picture of fifth-century history we can discern significant cultural events taking place: the spread of Christianity to Ireland and western Britain, and the acquisition of literacy alongside of it. Investigation of the character of these acquisitions, to identify the routes by which they were spread, would seem to offer potentially important detail on communication and commerce along the western sealanes.

The fact that the sources are often ambiguous seems to have encouraged attempts to locate earlier and later movements within the *terra ignota* of the fifth century - Ireland, for example, had by the fifth century experienced foreign contact and the spread of Christianity and literacy for more than a century. In archaeology, too, the fifth century has been treated as something of a dumping-ground for the beginning and ending of chronological sequences. There is now little evidence to assume that any of the imported ceramics found on western British sites are any earlier than the very late fifth century. In particular, E ware should never have been associated with the fifth century, and was so only largely on the basis of an

association with Zimmer's historical model[106]. The imported Mediterranean wares seem to experience a hiatus in the west precisely in the fifth century[107].

Zimmer however, along with his continuator Meyer, put the fifth century at the centre of debates concerning the spread of foreign culture to Ireland - though they were concerned with dating some processes of contact to even earlier centuries. The core of Zimmer's thesis, which concerned the arrival of Christianity and Christian culture in Ireland, was a study of Ireland's trading connections with other European regions[108] - his conclusion being that Ireland was in close contact with Gaul in the fifth century and earlier. A measure of the impact of this theory was that Kenney ranked it ahead of all other potential influences in the creation of a Christian culture in Ireland[109]. This link, which Zimmer saw as having its origins in the Roman period, was seen to be in the form of a regular trade built around large cargoes of wine. These conclusions were not reached from a basis purely in economic history, but were necessitated by what Zimmer saw as inescapable conclusions as to the scale of classical influence in Ireland by the sixth and seventh centuries - and the particularly Gaulish character of the heresies and more orthodox movements, such as monasticism, which found root in early medieval Ireland.

That the study of trading links can provide insights into the potential routes by which culture may be spread - and the dates at which scholars and texts could travel - is a sound enough approach. Zimmer's thesis tended to play down links with Britain, however, and assert too early a date for direct contacts with Gaul. The latter now cannot convincingly be shown to begin before the mid-to-late sixth century. Even though the attendant cultural thesis has largely been discredited,

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[106] Thomas, 'Imported Late-Roman', p. 254.

[107] See pp. 175-6.

[108] See above pp. 21-2.

[109] Kenney, *The Sources*, p. 159.

however, Zimmer's wine trade is still looked to as one of the major means by which cultural influences were disseminated. Indeed, the idea that a trade in wine was the primary cargo in western sealanes traffic in the early medieval period has been taken up by nearly every scholar concerned with this topic[110].

Zimmer had a particular interest in proving the existence of direct contacts between the Bordeaux region and Ireland as early as the fifth century, on account of a now generally discounted theory of the origins of the classical tradition in Ireland. This theory was fuelled by a note in a Leyden manuscript referring to an exodus of scholars from the Continent, following the invasion of the Huns, Goths and Alans:

> ...at the devastation of whom all the wise men on this side of the sea took flight and in the lands overseas, that is Hiberia and wherever they went, greatly increased the wisdom of the inhabitants of those regions[111].

I have translated *sapientes* literally here as 'wise men'. 'Learned men' is the more common translation made of this text, but this may be prejudiced by Zimmer's theory that they were *rhetorici* - rather than, say, the men wise in government (the loss of whom would have been indeed lamented in fifth-century Europe). The manuscript text is a discursive note in a glossary, of mostly different character to this entry, in a manuscript (Leyden Voss. Lat. F.70, f.79) no earlier in date than the eleventh or twelfth century. The text does not refer to any departure point for the exodus. Zimmer inferred this to be Bordeaux. His argument rested upon the references to the Bordeaux rhetorician Ausonius in Latin texts of debateably Irish origin[112] and the possible (now discounted) Aquitanian origin of the grammarian

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110 See above p. 7.

111 Sub quorum vastatione omnes sapientes cismarini fugam ceperunt et in transmarinis videlicet in Hiberia [sic] et quocumque se receperunt maximum profectum sapientiae incolis illarum regionum adhibuerunt', ed. L. Müller, *Neue Jahrbuch für Philologie und Pädagogik* 93 (1866), p. 389.

Virgilius Maro Grammaticus - whom medieval tradition ascribed to Toulouse[113].
Zimmer also placed undue emphasis upon what he saw as the general trading
significance of Bordeaux, which he compared in a dramatic passage to the
Hamburg of his own era[114] - so as to establish the likelihood of operating sea
routes by which the refugees might have travelled to Ireland.

Zimmer's methods were very critical and comprehensive by the standards of
his era, but obviously more positivistic than would be the case today. In the
tradition of his era, exemplified by his contemporary Mommsen, Zimmer sought to
make a comprehensive assembly of sources and dissect them. The relative
chronological value of the sources escaped him, however, while the volume of the
references which he uncovered exaggerated the scale of activity between Ireland and
Gaul. The Leyden glossary entry is six or seven centuries after the event, without
any intervening textual tradition, and must be held to be inadmissable as evidence as
a result. The fact that the glossary's *Hiberia* is not *Hibernia* oddly enough might be
its sole claim to authenticity[115]: it is the form used by St Patrick[116] and close to that
used by St Columbanus[117] and Isidore of Seville[118]. Even so, in a medieval
manuscript it is far more likely to be an error - or, less likely, a very learned high
medieval forgery. The whole passage has the air of having been written by some

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[112] E.g. *Hisperica Famina* ll. 41, 58, 92, 117, 273 (ed. M. Herren, Toronto, 1974, pp. 66-73;
84).

[113] Zimmer, 'Der Gascogner', pp. 1031-98.

[114] Zimmer, 'Galliens Anteil', p. 591. This view of Virgilius is amusingly put into the mouth of
Umberto Eco's character William of Baskerville, in *The Name of the Rose*, London, 1984, pp.
311-13.

[115] Kenney, *The Sources*, p. 142.

[116] *Confessio* XVI (ed. Hood, p. 25).

[117] *Epistolae* II (ed. G. S. M. Walker, *Sancti Columbani Opera*, SLH II, Dublin, 1957, p. 22).

[118] Baumgarten, 'The Geographical', p. 193.

ingenious medieval scholar, literally a precursor of Zimmer, to explain how classical learning arrived in Ireland early enough to produce master scholars by the eighth century. Zimmer's expansion of its testimony itself raises sufficient problems. Zimmer took Virgilus Maro Grammaticus to be the fifth century 'Virgilius Moro' referred to by Ennodius[119]. Michael Herren's researches have firmly demonstrated the grammarian's indebtedness to Isidore of Seville, hence his *floruit* cannot have been as early as the fifth century[120]. Doubt has even been cast upon Virgilius' real links with an Irish milieu, though some Irish influence seems undeniable[121]. Paralleling this has been a decline in the belief in an early presence of advanced classical scholarship in Ireland. The Irish achievement is seen as founded in energetic research abroad, based on a sound grammatical approach, rather than any extensive text-based learning in Ireland[122].

Zimmer's earlier work also involved a maritime contact model and likewise emphasised a link with western Gaul. The same critical facility which Zimmer applied to non-contemporary sources in the *sapientes* thesis, he used to brilliant effect on this topic. Zimmer was one of the first scholars to take issue with the unscholarly acceptance of the role of St Patrick in the conversion of Ireland, seeing the model favoured by scholars in his era as overemphasising the role of one individual and following the propaganda of Armagh[123]. Again, however, he overemphasised the Gaulish connection.

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[119] Ennodius, *Opera* (ed. F. Vogel, MGH AA VII, Berlin, 1961, p. 242).

[120] M. Herren, 'Some New Light on the Life of Virgilius Maro Grammaticus', *PRIA* 79C (1979), pp. 21-71; *idem.*,'*Bigerro Sermone Clefabo*: Notes on the Life of Virgilius Maro Grammaticus', *Classica et Mediaevalia* 31 (1970), pp. 253-7.

[121] V. Law, *Insular Latin Grammarians*, Woodbridge, 1982, ch. 4.

[122] James, 'Ireland', pp. 372ff.

[123] Zimmer, *The Celtic Church*, pp. 117ff.

Even those who have made sensible criticism of Zimmer's use of the source materials have seriously understated the weakness of the case for wine trading. Perhaps we see here the influence of the tastes of modern people obscuring their vision of the tastes in the past. We know, from Adomnan, that in Ireland in the sixth and seventh centuries, wine was 'necessary for the most holy mysteries'[124]. The early church must have been obtaining wine for the mass by some means. We cannot overlook Bede's comment that the vine does grow in Ireland[125] (even though Giraldus was later to state the opposite[126]).

Wine for the Mass would not need to have been of high quality and wine being poured into water in the chalice was part of early Irish liturgical practice[127]. On this basis it cannot have amounted to a trade in its own right. Wine is listed in the commentaries upon the *Muirbretha* as only one of the goods which might be found in the cargo of a wrecked ship[128]. It is accorded no especial status in the laws. Only two out of the corpus of surviving Old Irish legal texts make reference to wine - and both of these are commentaries referring to the one tract: the lost text *Muirbretha* ('Sea Laws')[129]. Hence there is only one actual legal reference and there it was in the context of a likely ship's cargo, of equal status with a range of other goods.

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124 'Ad sacrosancta misteria necessarium vinum', *Vita Columbae* I.1 (ed. Anderson and Anderson, p. 196). Also second reference to same episode at II.1.

125 Bede, *Historia Ecclesiastica* I.2 (ed. Haddan and Stubbs, p. 20).

126 See p. 143.

127'Fin iarum arhuisque hicaelech', *Stowe Missal* (ed. G. F. Warner, London, 2 vols, 1906 & 1915 - repr. in one volume, Woodbridge, 1989, p. 37).

128 See pp. 255-7.

129 See p. 255.

In saints' *vitae* there are as many miracles of turning water into ale, as to water into wine[130]. In the Irish Laws the drinks of secular men of high status were more likely to be mead or ale[131] - though when dealing with the Irish Laws there is a potential for deliberate archaism. Hence we must be wary of the fact that the goods described might be more likely those which are traditionally of value i.e. a newly acquired aristocratic taste may not be seen as a traditional symbol of legal status. We must adopt a critical view of the chronology of Irish legal texts, so it is especially pleasing that the *Críth Gablach* describes ale as a king's drink. It is neither one of the canonical texts - being unglossed and separate from *Senchus Mar* - nor of abstract date: references to Saxons[132] and the *Cáin Adomnain*[133] provide a *terminus post quem* and indicate that it was authored to be relevant to contemporary situations[134]. Jonas, writing in a continental Irish milieu in the late-seventh century, observes that the Irish, like most north Europeans, prefer ale to wine as a beverage[135].

There are references in Irish sagas to Gaulish wine being consumed in high status contexts and involved in gift-giving and exchange between high status persons. A good example is in *Tochmairc Emire,* where Forgall Manach comes to Conchobar's court disguised as an ambassador from Gaul, bringing gifts of wine and gold objects[136]. These material descriptions in Ulster Cycle literature,

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[130] E.g. *Vita Brigidae* VIII.2 (trans. S.Connolly and J.M.Picard, *JRSAI* 117 [1987], p.16).

[131] D. Binchy, 'Brewing in Eighth-Century Ireland', in B. G. Scott, ed., *Studies in Early Ireland,* Belfast, 1981, pp. 3-6.

[132] *Críth Gablach* 38 (ed. D. Binchy, Dublin, 1940, pp. 21, xiv) - referring to the invasion of 684. However see F. Kelly, *Early Irish Law,* Dublin, 1989, p. 264 for possible conflation of the text.

[133] *Ibid.* 38 (pp. 21, xiv) - completed c. 690.

[134] See T. Charles-Edwards, *'Críth Gablach* and the law of Status', *Peritia* 5 (1986), pp. 54-73.

[135] Jonas, *Vita Columbani* I.16 (ed. Krusch, p. 82).

however, must be regarded as having no historical value before the eighth or ninth century AD - the date around which their language shows them to be written. Jim Mallory's statistical study of references to metal values in the Ulster Cycle showed that one third of references were to silver, a metal effectively unknown in pre-christian Ireland. This questions the received wisdom that they are a 'window on the Iron Age' and adds to the growing suspicion regarding the other 'Celtic' images in these stories[137]. The references to wine probably reflect the values of an audience of the 800s or 900s who had by then developed a genuine taste for wine - or perhaps some deliberate creation of an 'heroic age' image. Reluctance to abandon the idea of a widespread taste for wine amongst any early Celtic group may be attributed to the seductive quality of Diodorus Siculus' clichéd remarks on the Celtic taste for wine[138]. There is certainly no evidence, however, that the stories of the native cycles reflect any actual state of affairs before 700 AD. The law codes, which are earlier in language than the sagas, depict tastes in alcohol which are the opposite of the above. This distinction between the sources needs to be made.

If Zimmer's wine consumption model were to have any merit, we would have to suppose a taste for wine amongst the Irish probably acquired through 'prestige goods' exchange with the Roman world. The absence of literary evidence for Roman-period links of Ireland with the Continent, and the absence of archaeological finds of the early Dressel series of amphorae from Ireland, must

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[136] K. Meyer, 'The Oldest Version of *Tochmairc Emire*', *Revue Celtique* 11 (1890), p. 443. Further vernacular literary references conveniently in Vendryes, 'Les Vins', pp. 19-24.

[137] J. P. Mallory, 'Silver in the Ulster Cycle of Tales', in D. Ellis Evans, ed., *Proceedings of the Seventh International Congress of Celtic Studies*, Oxford, 1987, pp. 33-64. *Contra* K. Jackson, *The Oldest Irish Tradition: A Window on the Iron Age*, Edinburgh, 1963. See also Wooding, 'How Did Irish History Begin?', pp. 50-60.

[138] See p. 7.

firmly discredit this idea. Reliable references to wine consumption outside of church services only occur in the *Paenitentiale Cummeani*[139] and the *Book of Armagh*[140], in the celebrations of 807. But even there the context is consumption by churchmen, and in connection with church activities.

Zimmer assumed that commodity trading between Ireland and France must have existed to explain the high level of wine consumption: such as existed in the high-medieval period - and, he assumed, had existed in the Roman period, or before. Here he seems to have conflated the references to the activities of the Veneti, the trade out of Bordeaux into the Channel in the Roman period and a variety of references to early medieval traffic. His failure to recognise the differences between the activities described in the various accounts is not so blameworthy, the archaeological clues to assist in this were not available to him and, unlike many of his sucessors in this field, he at least quoted most examples accurately and discussed them at length. We cannot, either, criticise his positivistic treatment of texts. The serious methodological flaw in his work is that he stressed a continuity by arguing backwards across time. His study of the wine trade begins with a citation of the familiar passage from Giraldus Cambrensis in the twelfth century:

> Imported wines, however, conveyed in the ordinary commercial way, are so abundant that you would scarcely notice that the vine was neither cultivated nor gave its fruit there[141].

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[139] 'Inebriati igitur vino', *Paenitentiale Cummeani* (ed. L. Bieler, Dublin, 1967, p. 110). This text is possibly mid-seventh century.

[140] W. Stokes, *Tripartite Life of Patrick with other Documents Relating to that Saint*, Dublin, 1887, p. 282.

[141] 'Vina tamen transmarina ratione commerti tam habunde terram replent, ut uix propaganis prouentusque naturalis in aliquo defectum percipias', Giraldus Cambrensis, *In Topographia Hibernie* 2 (ed. J. J. O'Meara, *PRIA* 52C [1949], p. 121 - trans. O'Meara, *The History and Topography of Ireland*, Harmondsworth, 1982, p. 35).

This model is then pushed back over a scattering of sources to suggest the continuity of this trade pattern over most of the first millennium. It need hardly be said that this treatment of Giraldus' comment as a model fails to take account of the circumstances of medieval commerce. Wine trading between Ireland and France was predicated upon the development of south-west France as a producer of wine, at the expense of other, subsistence, production. Irish voyages to France depended in that period upon a demand for grain and hides in France: French ventures to Ireland upon capital provided by Italian bankers[142]. These factors are extremely unlikely to have obtained on this scale in the economy of pre-800 Europe. Zimmer's large scale, single cargo, model was too much driven by his cultural thesis.

The wine trade and *sapientes* must be totally rejected - except insofar as there is little doubt that wine was traded, but not as a 'wine trade'[143]. Zimmer's intensely diffusionist cultural model is also clearly simplistic, seeking a wholesale transplantation of foreign scholars to explain the high quality of early Irish learning. Not surprisingly, it was principally taken up by non-Irish scholars such as Meyer and Vendryes!

With the removal of the wine trade thesis and the *sapientes* from serious consideration, the evidence for a seaborne link between Ireland and Gaul in the fifth century becomes virtually non-existent. There is no maritime reason which should be adduced for this, the question is simply historical and economic. Such links had not previously been maintained with Ireland and there is no evidence that any began in the fifth century. There was considerable influence of the Gaulish churches upon the growth of the church in Ireland - which may be a separate matter to the basic

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[142] T. O'Neill, *Merchants and Mariners in Medieval Ireland,* Dublin, 1987, p. 44ff.

[143] See pp. 155-7.

dissemination of christianity - but there is no single case where the intermediary of the British church is not involved.

British clergy seem to have visited Gaul from at least the fifth century onwards[144]. In a letter (c.465) to Faustus, the British-born bishop of Riez, Sidonius talks of an encounter with the British cleric Riochatus, who is travelling from Gaul back to Britain or Brittany[145] - with a copy of a recent work by Faustus. Clearly this is overland traffic and we may note, in answer to Hillgarth, that the traffic involves books[146]. Direct maritime links are thus not necessary to carry cultural influences. We should not be sidetracked by the debate as to whether Riochatus was resident in Britain or Brittany[147]: here is clear evidence of a continuing link between Gaul and Britain after the Saxon conquests. A more interesting question might be whether the sea-crossing to Britain used was only across the Channel, or around Land's End into the Irish Sea.

No Irish are commemorated in continental sources or monuments, but travellers from Britain are commemorated in fifth century cemeteries. A Dumnonian woman was buried in Dalmatia in 425[148] and a Tolosanus *Britannus natione* in Arles, sometime in the mid-400s[149]. The spread of such fifth-century lapidary

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[144] J. K. Knight, *'In Tempore Iustini Consulis:* Contacts Between the British and Gaulish Churches before Augustine', in A. Detsicas, ed., *Collectanea Historica: Essays in Memory of Stuart Rigold,* Maidstone, 1981, pp. 55-62.

[145] Sidonius, *Epistolae* IX.9.6-11, To Faustus (ed. Anderson, pp. 534-90).

[146] Hillgarth, 'Spain', p. 14. See pp. 249ff.

[147] There is controversy over whether Faustus was British or Breton (see Anderson pp. 508, 535; Knight, *'In Tempore'*, p. 57), but it seems more logical to assume that he was from Britain. Knight would read Sidonius's comment that Riochatus was 'twice exile in this world' as indicating his dual exile as a monk and as a refugee to Brittany - but Anderson's reading it as a reference to his being *both* 'priest and monk' is more satisfying.

[148] Knight, *'In Tempore'*, p. 57.

formulae as *hic iacet* to western Britain can be explained by these links, as Knight has emphasised[150] - a quite separate matter to traffic along the lines of Zimmer's model. Only selected formulae are borrowed, which suggests the input of individuals who have been resident in individual parts of Gaul, rather than a comprehensive contact with the Gaulish tradition. These questions will be discussed further in chapter 4.2.

Palladius, a bishop of Gaulish birth, was sent in 431 to organise the Christian communities in Ireland ('the Irish who believed in Christ'[151]). We cannot overemphasise the importance of this definite statement as to the existence of pre-Patrician Christianity in Ireland[152]. Here the often doubtful question of whether the appointment of a bishop implies earlier Christian presence is explicitly answered by the text. The Gaulish origin of Palladius, however, has been overemphasised[153]. That Palladius was the deacon from Auxerre named by Prosper as the instigator of Germanus' mission to Britain in 429, and that his mission was as an extension of Germanus' against Pelagianism in Britain, cannot be in doubt. The conjunction of the dates alone is suggestive. St Jerome described Pelagius as 'heavy with Irish porridge'[154] - if nothing else, conceptually linking the Pelagian problem in Britain to Ireland. Pope John's letter to the northern Irish

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[149] Knight, *'In Tempore'*, p. 57.

[150] *Ibid.*, pp. 57-8. V. Nash-Williams, *Early Christian Monuments of Wales* (ECMW), Cardiff, 1950, pp. 8ff.

[151] 'Ad Scottos in Christuom credentes', Prosper, *Chronicon* (ed. T. Mommsen, MGH AA IX, 1961, p.473).

[152] Also overlooked is Patrick, *Confessio* LI, which implies that some regions are more pagan than others:
> 'I travelled amongst you and everywhere for your sake...even to the remote districts beyond which there was no-one and where no-one had ever penetrated to baptise or ordain clergy or confirm the people'.
Clearly this is a contrast *within* Ireland, these districts are not the entirety of Ireland.

[153] E.g. Mytum, *The Origins*, p. 40; Thomas, *Christianity*, p. 301.

[154] *'Praegravatus pultibus Scothorum'*, see Wooding, 'What Porridge', pp. 12-17.

bishops (640) a century later is still rebuking them for following Pelagian doctrines[155]. The British links of the anti-Pelagian mission, however, are crucial. Palladius was in Ireland to fight a heresy that the *British* were also following. No uniquely Irish connection with the Gaulish church is being followed here. In travelling to Ireland for the same purpose as Germanus did to Britain, Palladius was almost certainly acting on information from British informants, or Germanus himself. There is hence every likelihood he would have followed Germanus' path to Britain, rather than have sailed directly to Ireland. Muirchu, in the seventh century, explicitly states that Palladius died in Britain, *en route* back to Gaul[156], but the source of this information is not known and has no claims to reliability.

We turn now to the most complex and controversial case:

> I, Patrick, a sinner, quite uncultivated and the least of all the faithful and utterly despicable to many, had as my father the deacon Calpornius, son of the deacon Potitus, a priest, who belonged to the town of *Bannavem Taburniae*; he had a small estate nearby and it was there I was taken captive. I was then about sixteen years old. I did not know the true God and I was taken into captivity in Ireland with so many thousands[157].

The birthplace of Patrick, in the words of his own *Confessio* a native of Britain, is located by Thomas in north Britain[158]. His activities would seem to have been largely focussed on the north of Ireland, though we may follow Zimmer in emphasising just how much this inference depends upon the propaganda of his later

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[155] Bede, *Historia Ecclesiastica* II.19 (ed. Colgrave and Mynors, pp. 200-1).

[156] Muirchu, *Vita Patricii* VI (ed. Hood, p.64).

[157] 'Ego Patricius, peccator rusticissimus et minimus omnium fidelium et contemptibilissimus apud plurimos, patrem habui Calpornium diaconum, filium quondam Potiti presbyteri, qui fuit vico Bannavem Taberniae; villulam enim prope habuit, ubi ego capturem dedi. Annorum eram tunc fere sedecim. Deum enim verum ignorabam et Hiberione in captivitate adductus sum cum tot milia hominum', *Confessio* I (ed. Hood, pp. 23 & 41).

[158] Thomas, 'St Patrick', pp. 83-4.

cult at Armagh. Little may be gained by rehearsing the arguments regarding the date or birthplace of Patrick, the reader is referred to the massive literature on these topics. Neither of the two sets of annalistic dates[159], nor the attempts to date the Coroticus who is the addressee of Patrick's *Epistle*[160], inspire any confidence. We may simply observe that Irish tradition puts him later than Palladius. There were good reasons why they might not have wanted this to be true - most particularly a desire to assert the primacy of Patrick. It even seems to have led to some convolutions, most notably the dating of Patrick to 432, one year after Palladius' mission, to diminish the importance of the latter's presence: we might therefore put some value on the fact that the Irish considered the priority of Palladius such an inescapable truth that they would not put Patrick's mission even a year earlier. None of this would greatly have concerned Zimmer, who was convinced that the two figures were one and the same person. The later association of Patrick with Germanus and Auxerre, in Irish tradition[161], is more likely to reflect later confusion of the Patrick and Palladius than any real knowledge of Patrick. Dáibhi Ó Cróinín's typically ingenious study of Cummian's citations from a 19 year easter cycle introduced by *Patricius, papa noster* identifies this computus with Palladius, not Patrick[162]. Though we are forced to make certain assumptions concerning Patrick's cultural background before accepting this theory, we may note with Ó Cróinín the ease with which two figures with the title Patricius may have been conflated from a very early date.

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159 E.g. *Annals of Ulster* s.a. 431 & 432 (ed. MacNiocaill and MacAirt, pp. 38-9) 461 (46-7); 492 (54-5); 493 (55-7).

160 Thomas, 'St Patrick', pp. 86, 93.

161 Muirchu, *Vita Patricii* VI (ed. Hood, p. 64).

162 D. Ó Cróinín, 'New Light on Palladius', *Peritia* 5 (1986), pp. 276-283.

Patrick definitely travelled on the western sealanes, however - and as Thomas has rightly said: 'any evidence of 5th-century travel is desirable'[163]. The route of his journey remains problematical however - to quote Thomas again, from his 1990 study of links between Gaul and the Irish Sea:

> Patrick, a Briton, narrating in his *Confessio* how as a lad he escaped from slavery in the north of Ireland (this in the late 430s) and from some point on Ireland's southern coast sailing in a ship to - I believe myself - the north coast of Armorica[164].

Here, even after several long and incisive discussions on the subject[165], the route taken by Patrick is confessed to come down to a matter of faith. The problem lies in the ambiguity of Patrick's own words. Patrick himself simply states that his escape after six years in captivity was to a port 'not near at hand but perhaps two hundred miles away'[166], from whence he took a ship abroad[167]. Some details are provided. The ship's master and crew are pagan[168]. Patrick converses with them. This does not assure us that they are Irish; they might also be British, or Gaulish - Patrick, from his Latinity, seems likely also to have been a Latin speaker[169]. There is little doubt that Patrick could make his way in all three tongues. It is tempting to suggest that their paganism makes them less likely to have been Gaulish. The cargo of the ship is unknown. Traditionally favoured has been a less likely manuscript

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163 Thomas 'St Patrick', p. 82.

164 Thomas, 'Gallic *Nautae'*, p. 3.

165 Thomas, *Christianity in Britain*, pp. 81-101; Thomas, 'St. Patrick'.

166 'Et non erat prope, sed forte habebat ducenta milia passum', *Confessio* XVII (ed. Hood, p. 26).

167 *Confessio* XVII-XVIII (ed. Hood, p. 26).

168 *Confessio* XVIII (ed. Hood, p. 26).

169 C. Mohrmann, *The Latin of St Patrick*, Dublin, 1961, p. 3.

variant *canes* over *carne* to allow the idea that the cargo was Irish wolfhounds[170] (*et bene refecti et canes [carne] eorum repleti sunt*). Thomas would suggest 'the attractive notions of about exports of Irish wolfhounds...ought to be relegated to folklore'[171]. Perhaps this is a trifle extreme if we are contemplating commerce in general, Strabo and Symmachus both indicate that a continental market for British and Irish dogs had existed[172], and hunting did not end with the Roman period - even if circuses did. However, Thomas' stricture is entirely appropriate for the Patrick legend.

Further details have been interpreted either too imaginatively, or too literally. Patrick states:

> we set sail at once. Three days later we made land and wandered through a wilderness for twenty-eight days, and they ran out of food and a hunger overtook them[173]

Most interpretations of this have been too literal, considering the unspecific nature of the comments. Let us accept, for the sake of argument, that Patrick travelled from somewhere in the north of Ireland to a port in the south: the most common interpretation. Three days sailing may have taken him to Britain or to Gaul. At an average speed of three-to-five knots this could fit a voyage to Gaul. It may agree with Patrick's comment which follows: 'And again a few years later when I was in

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[170] *Confessio* XIX (ed. Hood, p. 26). Taken to extraordinary lengths by Crawford, 'Western Seaways', p. 193 - who explains this as an unusual 'direct' voyage to 'Gaul', without taking the supposed peninsular road over Cornwall: accountable to the difficulties of travelling overland with dogs!

[171] Thomas, 'Gallic *Nautae*', p. 16.

[172] See p. 118; Symmachus, *Epistolae* II.77 (ed. O. Seeck, *MGH: AA* 6, Berlin, 1883, p. 65)

[173] 'Et protinus navigavimus. Et post triduum cepimus et viginti octo dies per desertum iter fecimus, et cibus defuit illis et fames invaluit super eos', *Confessio* XVIII-XIX (ed. Hood, pp. 18-19).

Britain with my kinsfolk they welcomed me as son and asked me earnestly not to go off anywhere'[174]. We must be wary in our interpretation of this comment, however, in that it could be easily taken to mean that he had made his escape to Britain initially and then referred ahead to a time when he was again in Britain.

In his *Epistola* Patrick professes knowledge of Gaulish customs[175], while the *Confessio* vaguely supports the later traditions of a sojourn in Gaul by Patrick:

> And even if I wanted to part from them and head for Britain - and I would have been only too glad to do so, to see my homeland and family, and not only that, to go on to Gaul to visit the brethren and to see the face of my Lord's holy men[176].

He would expect to travel onward to Gaul via Britain. The fact that his family home lay on this route does not lessen this point. Even so, these words must not really be taken to prove a Gaulish sojourn. As Herren observes[177], Patrick consistently contrasts the positive qualities of Gaulish Christianity against the weakness of the British. That he professes knowledge of Gaul is proof of his espousal of an ethos of Gaulish origin[178], not of his having been in Gaul - especially as his view is an idyllic one. *Fratres* is a term with a spiritual context

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[174] 'Et iterum post paucos annos Brittanniis eram cum parentibus meis, qui me ut filium susceperunt et ex fide rogaverunt ut vel modo', *Confessio* XXIII (ed. Hood, p. 27).

[175] *Epistola* XIV (ed. Hood, p. 37).

[176] 'Unde autem etsi voluero amittere illas et ut pergens in Brittanniis - et libentissme paratus eram quasi ad patriam et parentes; non id solum sed etiam usque ad Gallias visitare fratres et ut viderem faciem sanctorum Domini mei', *Confessio* XLIII (ed. Hood, p. 31).

[177] M. Herren, 'Mission and Monasticism in the *Confessio* of Patrick', in D. Ó Corráin *et al.*, eds, *Saints, Sages and Storytellers, Studies in Honour of James Carney*, Maynooth, 1989, pp. (76-85) 81-2.

[178] *Ibid.*, p. 81-2.

which need not imply actual acquaintance. Indeed the desire to look upon the faces might even imply that he had not before done so.

Turning now to the detail in Patrick's account, we must observe the serious danger in taking literally any of Patrick's numbers[179]. After three days voyage he wandered twenty-eight days in a 'wilderness'. Elaborate arguments have been made to the effect that this was Brittany, but this seems a little ingenuous. It is hard to imagine anywhere where one could wander in a wilderness for twenty-eight days in early medieval western Europe and it is conceivable that this episode and the great length of time involved are allegorical, something analogous to the Biblical ordeal in the wilderness[180]. His captivity was for six years[181]. After thirty years he is persecuted[182]. Many years later he is captured for sixty days[183]. The blessed lady of Irish birth who becomes a 'virgin of Christ' takes six days to decide[184]. Multiples of three are strongly in evidence. Twenty-eight is not a multiple of three, though added to the three day's voyage (allowing for the landing and first day in the wilderness to be the same) it becomes thirty. This sort of argument is profitless, however, except insofar as Patrick is writing for edification, not as a guide-book, and there is no more reason to take the wilderness story literally than to accept the details in a more metaphysical miracle story. Finally, we may contrast Patrick's care to locate some episodes in Britain with his lack of precision with regard to the wilderness story. There seems, then, no specific landfall which can be determined

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179 *Contra* the example of Thomas, 'St Patrick', p. 88.

180 My friend Christopher Kelly of Cambridge, whom I would like to thank for much useful discussion on this point, notes that the total of numbers, without account for overlap, equates to the biblical total. This is interesting, but possibly coincidental.

181 *Confessio* XVII (ed. Hood, p. 26).

182 *Ibid.*, XXVIII (p. 28).

183 *Ibid.*, XXI (p. 27).

184 *Ibid.*, LXII (p. 31).

from Patrick's escape. Even Muirchu, it must be noted, places St Patrick's stay in Gaul at the terminus of a separate journey[185].

Turning to the broader question of cultural contact, there is a range of evidence which has implications for fifth-century and later patterns of communication across the Irish Sea. Sources other than literary texts were introduced very early into this topic with Christian Sarauw's study of loanwords into early Irish[186]. Recent work on the topic of early literacy and its implications has revived interest in this evidence[187]. The loanwords and Sarauw's typology were taken up by O'Rahilly and Jackson[188], though we again see the issue of circular argument in their use of the words to defend the idea of Continental and other contacts. O'Rahilly followed Sarauw in separating Latin loanwords into two putative strata which he equated with the respective activities of Gaulish and British missions. The strata were defined on the criteria of their treatment of Latin phonemes /c/ and /t/ and labelled by the convenient contrast provided the phonemic substitution in forms of the same name: *Cothrige/Pátraic*. O'Rahilly contended that the *Cothrige* stratum reflected the introduction of words by speakers of classically pronounced Latin where post-vocalic /c/ and /t/ were spirantised: 'this class of loanwords can only have been introduced by the Palladian missionaries, educated Gauls and Italians of the fifth century, who had preserved in their speech the classical values of the Latin consonants'[189]. He contrasted this with the more

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[185] Muirchu, *Vita Patricii* IV & VI (ed. Hood, pp. 63-4).

[186] C. Sarauw, *Irske Studier*, Copenhagen, 1900, pp. 5-9.

[187] J. Stevenson, 'The Beginnings of Literacy in Ireland', *PRIA* 89C (1989), pp. 127-65; A. Harvey, 'Early Literacy in Ireland: the Evidence from Ogam', *CMCS* 14 (1987), pp. 1-15; D. McManus, 'A Chronology of the Latin Loanwords in Early Irish', *Ériu* 34 (1983), pp. 21-72.

[188] T. F. O'Rahilly, *The Two Patricks*, Dublin, 1942, pp. 42-5; K. H. Jackson, *Language and History in Early Britain*, Edinburgh, 1953, pp. 122-48.

[189] O'Rahilly, *The Two Patricks*, p. 43.

obviously British origin of the latter group. This judgement quite obviously reflects Zimmer's theory of the presence of *rhetorici*. In fact current studies of Gaulish and Italian Latin in the fifth century[190] show that these were no more classical in these values than British[191]. Anyway, why should we assume that all of Palladius's party were Gaulish, even if he was?

In a well-argued study Damien MacManus[192] has firmly buried the supposed dichotomy: explaining the words as gradual borrowings across time, with adaptation occurring to different degrees as comprehension of Latin varied. Words which suggest acquisition prior to the loss of final syllables or the first appearance of lenition (Sarauw's phonological criteria were very selective) can be linked to various stages of linguistic evolution in Ireland - whereas the previous bi-partite model necessitated their consideration as a group within a limited chronological phase. What must be stressed in this case is the confusion caused when a use of linguistic data to defend or expand historical evidence, or at least to integrate with it, is confused with linguistically derived conclusions. McManus makes this clear, though in respectfully describing Jackson's study as objective he is still, perhaps, perpetuating this problem. As Harvey has observed[193], Jackson sought to tie his chronology to historical dates - coming obviously unstuck on using 432 as a benchmark for the Patrician mission[194]. The method was not unsound: but the historical errors do invalidate the conclusions derived from them and this is rarely appreciated by the non-linguist.

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190 D. McManus, 'The So-Called *Cothrige* and *Pátraic* Strata of Loanwords in Early Irish', in P. Ní Chatháin and M. Richter, eds, *Irland und Europa, Die Kirche im Frühmittelalter*, Stuttgart, 1984, p. 82.

191 *Ibid.*, pp. 188.

192 *Ibid.*, pp. 179-96.

193 A. Harvey, 'The Significance of *Cothrige*', *Ériu* 36 (1985), pp. 1-9.

194 Jackson, *Language and History*, e.g. p. 142.

A range of evidence not available to Zimmer comes from the archaeological side. These data offer the opportunity to date and provenance voyages in and out of Ireland - though this evidence too has been subject to attempts to use it to prove direct Continental connections. The evidence for Roman contact with Ireland is mathematically small. Dermot Bateson and Richard Warner have identified two basic groups of Roman imports: the first dating from the earliest centuries AD; and the second centring on the fourth century. The latter group is consistently associated with the raiding period, while Warner has defined the former group as arriving by a variety of means - with a Roman agency for some made likely by finds such as the typically Roman cremation burial at Stoneyford[195]. Warner distinguishes these contact phases by asserting the lack of third-century objects in Ireland[196] and he is followed in this by Laing[197]. This bipartite division may be misleading, however, insofar as it allows the sort of dichotomy to be set up that has been seen in the case of the loanwords. That the later group of imports reflect a much more extensive contact need not be doubted, nor need we doubt that it relates to the direct contact of which the raiding is a part. But the earlier 'group' may reflect escalating casual contact over a range of time, for which no discontinuity event is necessary to distinguish them from later activity.

Perhaps more crucial to the present study is the need to establish the routes of arrival. The Roman material in Ireland falls into three geographical groups which are taken to reflect three maritime connections. The northern group of

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[195] Warner, 'Some Observations', p. 274. J. D. Bateson, 'Roman Material in Ireland: A Reconsideration', *PRIA* 73C (1973), pp. 21-97.

[196] *Ibid.*, pp. 267-70.

[197] L. Laing, 'The Romanisation of Ireland in the Fifth Century', *Peritia* 4 (1985), pp. 269-70.

artefacts reflects ongoing Iron Age links between Scotland and northern Ireland[198].
Finds in the vicinity of Leinster might be logical in terms of the natural crossing
from Gwynedd, but the objects from Leinster sites might also be explained by
voyages from further north. The southern group of finds, scattered across Cork,
Waterford and Tipperary, are the crucial group to explain in terms of western
sealanes travel. Such has been the power of the Zimmer and 'western seaways'
theses that most discussions have still been keen to highlight a Continental origin as
being equally likely as a British to explain the presence of Roman objects in
southern Ireland[199]. The considerable links between southern Ireland and Dyfed,
however, provide an impressive testimony to west/east contacts, rather than the
supposition that the south coast of Ireland would look naturally south to the
Continent. If Patrick made his way to southern Ireland, following his escape,
which seems a most reasonable assumption, the escape to the south to take ship for
Britain would not be 'taking coals to Newcastle' - links between the northern
kingdoms of Ireland, and of the northern end of the Irish Sea, would surely have
made the journey of an escaping slave much more difficult than an escape to a port
in the south.

The existence of a predominant link between the very south of Ireland and
Dyfed is clearly seen in the distribution of the ogham alphabet. This is a lapidary
alphabet derived from Latin alphabetical classificatory models of the type

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[198] R. Warner, 'Ireland, Ulster and Scotland in the Earlier Iron Age', in A. O'Conner and D.
Clarke, eds, *From the Stone Age to the '45*, Edinburgh, 1983, pp. 161-87. Note: Warner uses
'earlier Iron Age' to describe the Roman and pre-Roman periods - what I term 'late Iron Age'. The
Scotland-Northern Ireland route is the shortest crossing point to Ireland: hence we should not be
too quick in following Thomas in making modern comparisons highlighting the continuing
importance of the Dublin-Holyhead route. The dominance of this link today reflects the political
turmoil of Northern Ireland and the southwestern political focus of modern Britain.

[199] See most recently Stevenson, 'The Beginnings', p. 132.

Distribution of Ogham Stones in Ireland and Western Britain

• - 1-2 Stones

⊘ - Area where Ogham is ubiquitous

Fig. 4

characterised by the fourth century grammarian Donatus[200] - though Carney is probably correct in asserting that it derives from the work of Donatus's precursors, rather than Donatus himself[201]. The question of its place of origin is unclear, but around 4/7 of the total distribution is concentrated in counties Kerry, Cork and Waterford, with another 2/7 in Cornwall and Gwynedd and, most particularly, Dyfed (we should follow McManus in excluding Pictish oghams from this picture, on account of their obviously later nature, both in the forms used and, more significantly, their alignment on the stones[202]). The ogham stones date from the fourth through sixth centuries AD[203], this is still a matter of some debate, but we should be aware that the colonial occurrences, our principal concern here, are perhaps the best dated as many have bilingual inscriptions of late-fifth/sixth century date[204]. The function of the stones remains mysterious, especially in the pagan context, but the commemorative function is central and appears harmonious with Christian activity in the eastern occurrences[205].

The distribution of ogham is by no means all maritime, and we should be wary of using the finds in Co. Kerry to argue maritime links with Cork - it is the idea which moves, not the stones. Where the alphabet is used on the eastern rim of the Irish Sea, however, it is clear we have evidence of maritime reflux between specific parts of Ireland and their colonies. McManus's clear statement is worth quoting:

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[200] McManus, *A Guide to Ogam*, pp. 23-8.

[201] J. Carney, 'The Invention of the Ogam Cipher', *Ériu* 26 (1975), p. 56.

[202] McManus, *A Guide to Ogam*, p. 9.

[203] *Ibid.*, pp. 40-1.

[204] *Ibid.*, pp. 78ff.

[205] *Ibid.*, p. 43.

the distribution in Britain corresponds more or less in frequency to that of the respective areas in Ireland from which the colonists who brought it across the Irish Sea probably set forth, being minimal (if non-existant) in Scotland as in the adjacent area of north eastern Ireland whence Argyll was settled in, or around, the fifth century, and maximal in south-west Wales colonised by Irish settlers from the south east around the fifth century[206].

Inscriptional evidence thus shows clear divisions between northern and southern Ireland, as well as the northern and southern zones of the Irish Sea. Inscribed stones in the ogham alphabet are rarer in northern than in southern Ireland. Where they occur on the eastern rim of the Irish Sea basin, they are confined to areas no further north than a Dublin/Gwynedd line. The concentrations in Counties Kerry, Cork and Waterford in Ireland, Dyfed and Gwynedd in Wales, the southern tip of the Isle of Man, and the area around the Camel estuary in Northern Cornwall may be said to circumscribe a maritime province excluding for the most part the northern maritime zone of the Irish Sea. It will be noted that there are maritime reasons, both in terms of available winds, currents and visibility of landmasses that encourage the northern lands to at times look more naturally to each other, than to lands south of a Dublin/Gwynedd line. The fact that the oghams in southern Ireland - mostly adjacent to the south, rather than east, coast - have most of their offshoots in Dyfed seems to show clearly that Roman period imports from the same southern Irish region do not look 'naturally' to Continental ports of origin.

The implications of ogham for early encounter with Christianity and Roman culture are considerable. We may only note here again the unlikelihood of the isolation of Ireland from Britain during the early first millennium, which may serve to explain all importation of culture from further abroad. Finally, we should stress likelihood that the shortest crossing, from southern Scotland to Northern Ireland, has been underrated in its importance by the 'western seaways' school. St

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[206] *Ibid.,* pp. 45-7.

Patrick's northern British origins remain controversial[207], but the presence of an early nucleus of southern Scottish Christianity at Whithorn is now being increasingly confirmed by Peter Hill's ongoing excavations[208] - as well as the undoubtedly pre-seventh century 'Latinus' stone[209]. It has become an apposite cliché to observe that it could well be the Galloway region which Tertullian is referring to in his comment that in his day (209 AD) Christianity penetrated 'even those British regions unreached by Rome'[210]. Certainly the assumption of a southern focus for early christian influence in Ireland is based on doubtful evidence, such as the early dedications to Palladius in the Wicklow region[211]. The more we see these arrivals at the narrow crossings, the less we are looking at the existence of a 'maritime culture' before the sixth century, i.e. of backward continuity of the sixth and seventh century pattern.

Without there being direct links with the Continent, contact was occurring. This should be stressed against the images of an Irish Sea basin either looking back to an image of *Romanitas* - or maintaining ongoing links of a fully Roman character. Continuity notions exaggerate both the scale and character of commerce - causing it to be depicted in ways alien to the society of the period. A common assumption has been that the lands bordering on the Irish Sea had developed a dependence on Roman commodities such as wine or oil which lasted into the post-

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[207] Thomas, 'St Patrick', pp. 83-4.

[208] P. Hill, *Whithorn 1, 2, 3 & 4*, Interim Reports, 1986-92.

[209] See now C. Thomas, *Whithorn's Christian Beginnings: When? Where? Whence? and by Whom?*, (Whithorn Lecture 1), 1992, forthcoming.

[210] 'Brittanorum inaccessa Romanis loca', *Adversos Judaeos* VII (ed. Haddan and Stubbs, *CEDRBI*, vol. 1, Oxford, 1969, p. 11).

[211] Bowen, *Saints, Seaways*, pp. 112-3. Thomas, *Christianity*, p. 304.

Roman period and it is pleasing to see this issue finally being firmly dismissed by Thomas:

> The argument that several centuries of Romanitas imbued the collective race-instinct of the native British with a taste for unfamiliar luxuries, a taste that could not be met after the economic collapse postulated in the early 5th century, is not only a trifle naive but implies both a penetration of Roman manners and a degree of everyday continuity far beyond the evidence[212].

There is a strong element of conscious self-criticism here: throw-away lines on consumer tastes have characterised archaeological reports on the ceramic evidence - those of Thomas no less than others[213]. Goods such as wine and oil had probably only trickled into western Britain, as prestige goods associated with sporadic exchange. In the post-Roman period a market might still be found for them, but it quite likely was a different market. Wine and oil have uses in church ritual and celebration. If this is a continuity of *Romanitas* then, as Columbanus said of the Irish church, it owes more to the legacy of the Rome of Peter and Paul than to that of the empire[214]. There seems, likewise, no justification for following Laing in seeing the obvious Roman models behind penannular brooches, hanging bowls, hand-pins, finger rings, bracelets and combs as evidence of deep, politicised, Romanisation of Irish society[215]. These objects need not have had any Roman value by the time they reached Ireland through the filter of northern British 'buffer' kingdoms. That these types of objects continue to be made on both sides of the Irish Sea reflects continuing contact between east and west, rather than a separate, strong legacy of *Romanitas* on each shore established exclusively in the Roman

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[212] Thomas, 'The Context', p. 11.

[213] See p. 110.

[214] Columbanus, *Epistulae* V.11 (ed. Walker, pp. 48-9).

[215] *Ibid.*, pp. 262-8.

period. In this case the notion of an 'Irish Sea province'[216] is more convincing than the isolation model - but the emphasis must really be on the shortest links between neighbouring landmasses, rather than a 'maritime culture province'.

While the sixth- and seventh-century ceramic imports into western Britain and Ireland show some indications of regular trade, there is no evidence of the regularity or the scale seen in Roman period traffic, described for example by Strabo; or in the high medieval traffic between France and Ireland described by Giraldus Cambrensis. Both these trades, cited by Zimmer as continuous with early medieval western sealanes traffic, served markets with wholly different scales of demand to early medieval Britain and Ireland. In the Roman period the market was in eastern Britain, where the tastes of *Romanitas* were far more in evidence; in the high medieval instance the context is cheap commodity movement between France and an Ireland restricted in its market by English trade regulation[217]. These examples are important because both Zimmer and Bowen pushed the earlier and later images across the early medieval evidence to suggest continuity. We will not rule out some continuity of taste from Roman influence. Gildas, for example, is conscious of the importance of wine and oil as images of prosperity[218] - though in his probably mid-sixth century British context he could be remembering the sixth-century traffic discussed in chapter 4, not the Roman period. Nonetheless, it will be proposed here that no commerce in the early medieval period should be supposed to be driven by anticipated consumer tastes.

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216 L. Alcock, 'Was there an Irish Sea Culture Province in the Dark Ages?', in D. Moore, ed., *The Irish Sea Province in Archarology anf History*, Cardiff, 1969, pp. 63-5.

217 O' Neill, *Merchants and Mariners*, pp. 44ff.

218 See pp. We may also recall here the Roman discourse which saw these items as universally appealing to barbarians, as evinced in various late Roman laws. See discussion in Thompson, *Romans and Barbarians*, pp. 10-11.

Some of the same sea routes were used in the post-Roman period as had been used in the Roman. Some of these routes had also been used in prehistory. Ships must have sailed from Ulster to North Britain, or Meath to Gwynedd, from prehistory onward, but not under the same political circumstances. Ships sailed from western Gaul into the English Channel - but when they did so in the post-Roman period it was not necessarily to the same landfalls as before. And if ships still sailed from the western Mediterranean into the Atlantic it was not as an unbroken continuity of Roman traffic: the entrepreneurial eastern Mediterranean push into the western Mediterranean, which Pirenne mistook for a continuity of *mare nostrum* in the sixth century, extends into the Atlantic as a similarly/ misleading 'Roman' continuity[219]. In the sixth through seventh centuries we begin to see searoutes opening up from western Gaul into the Irish Sea basin. The suggestion that these had existed previously is only falsely imposed onto the earlier textual sources. In most cases archaeology now resolves this picture in favour of the discontinuity model.

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[219] See p. 164.

Chapter Four: The Sixth Century

By the sixth century we would assume that migrant populations along the western sealanes had consolidated their settlements and lessened their piratical activity. The conquest of the Aquitaine by the Franks, in 507, would have facilitated Frankish naval control of the waters off Brittany and of the Saxon settlements in the Bessin and Loire-Atlantique regions. Frankish control in western Gaul is doubtless responsible for the appearance of direct maritime contacts between western Gaul and the Channel ports - and the conquest of the Visigoths by the Franks may for a time have diminished links between Gaul and Spain, where the Visigoths remained in control. We cannot be sure how much political change affected commerce, though we may observe that sixth century references to maritime links between western Gaul and Spain are all in the context of political exchange between the Franks and the Galician Suevi, who were hostile to their Gothic neighbours. After the Sueves are conquered, late in the 500s, no such links find mention - in the seventh century overland contact of a military nature is all that is mentioned in the sources[1]. Ports in western Gaul began to look to western Britain and Ireland. A British-focussed phase of activity may precede the flourishing of western Gaulish links with Ireland, which was to dominate the seventh century, though as we will see the evidence for this British phase is equivocal and makes the reasons for its appearance difficult to determine.

In the Mediterranean, the sixth century saw a short resurgence of commerce and communication between the Greek East and the Latin West. The degree to which this was discontinuous with fifth century activity, in all theatres, is now clear from archaeological evidence, especially the reappearance of eastern Mediterranean ceramics in sixth-century phases at sites in Africa,

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[1] E.g. *Chronicle of Fredegar* IV.5 (ed. J. M. Wallace-Hadrill, *The Fourth Book of the Chronicle of Fredegar*, London, 1960, p. 5, IV 10 (p. 8), LXXIII (pp. 60-62).

Italy and Spain after a gap of around a century. The textual data alone are not specific enough in reference, or so comprehensive, as to indicate this discontinuity, which is why Henri Pirenne read references to the arrival of eastern luxuries in Frankish sources spanning several centuries as indicating continuity of east-west exchange, overlooking intermittent discontinuity, and seeing the persistence of *mare nostrum*, oblivious to political change[2]. This was a remarkably similar error to that made by Zimmer with regard to the Atlantic evidence. Adelson[3] took up a polemical stance against Pirenne's model on the basis of the numismatic evidence and the ceramic evidence now offers further scope to identify a Byzantine impetus behind the sixth-century phase. Around the early 500s, the Byzantine thrust into the western Mediterranean extended as a brief *floruit* of direct traffic in eastern Mediterranean goods into the Atlantic sealanes as far as Portugal and Britain. The evidence for this activity, in the form of finds of imported Mediterranean pottery along the Atlantic seaboard, is, as we will see, of primary importance to the study of western sealanes traffic as a whole, despite the fact that its chronological range is narrow and its involvement with cultural transmission doubtful. The historical background to this brief connection is significant, however, hinting at a strong Byzantine interest in northern Europe and in a context where exclusion of contact with the Franks, indicated by the archaeological distributions, can be explained by contemporary politics. We will examine this case first.

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[2] The clearest statement of Pirenne's thesis is in H. Pirenne, *Mohammed and Charlemagne*, trans. B. Miall, London, 1939; useful criticism in F.Havighurst, ed., *The Pirenne Thesis* - also most recently, R. Hodges and D. Whitehouse, *Mohammed, Charlemagne and the Origins of Europe*, London, 1983.

[3] H. Adelson, 'Early Medieval Trade Routes', *American Historical Review* 65 (1960), pp. 271-87.

4.1 The Mediterranean and the Atlantic in the Sixth Century

There is, as we have seen, evidence for voyages through the Straits of Gibraltar in the later Roman period carrying goods from North Africa. The identifiable sixth-century activity was of a separate character, however: the distribution of Mediterranean pottery in western Britain and Ireland from sixth-century sites makes it possible to specify that the vessels entering the Atlantic began their voyages in the Eastern Mediterranean. The very limited textual evidence relating to this Atlantic *floruit,* though by itself of little value, is supportive of the evidence of the ceramics.

That we can establish a narrow chronological range for the Atlantic activity does not diminish either its relevance to western sealanes traffic - or to the study of the wares in general. The narrowness of the *floruit* in fact helps in establishing a benchmark for Insular chronology, while conversely the selection found on Atlantic sites helps in understanding the ways in which certain wares overlap in chronology in the Mediterranean. Conimbriga, a site in Portugal, has in particular attracted much attention in the dating (and misdating) of the tablewares.

The ceramic evidence for this sixth-century use of the western sealanes is considerable in quantity and mostly unequivocal in testimony, though further fieldwork, especially in Portugal, would go far towards confirming the implications of several classes. A range of sites in western Britain, Ireland, Portugal and Spain have produced pottery of Mediterranean origin from fifth or sixth-century contexts. Their potential for refining the chronology of western sealanes sites understandably attracted the most attention initially[4], as these

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4 Discussed widely since the 1940s. S. P. O'Riordain drew attention to the significance of the imports in 'The Excavation of a Large Earthern Ringfort at Garranes, Co. Cork', *PRIA* 47C, 1942, p. 134 and 'Roman Material', pp. 70-1. The widely used alphabetical classification was established by Radford, 'Imported', pp. 59-70. These ideas were taken up and developed by Thomas, 'Some Post-Roman', pp. 15-22; *idem,* 'Imported Pottery', pp. 89-111 and 'Imported Late-Roman', pp. 245-55.

wares are found in the context of long sequences in Mediterranean contexts - sometimes dateable by coin evidence - and provide a datum-line upon which the anumismatic archaeological chronology of the Irish Sea basin must depend. Discussion to date has not entirely neglected the implications of the finds for social or economic history - though historians with such concerns have not made as much use of this evidence as they might. The utilitarian focus upon the obviously datable finds has also drawn attention away from other imports of possibly sixth-century date, chiefly the Gaulish pottery known as *sigillée paléochrétienne grise,* and finds of Mediterranean glass, and caused all the finds to be considered in a nuts-and-bolts fashion, not in their full context.

The bulk of the Mediterranean imports in the Irish Sea basin are found in the south, especially in the southwest peninsula of Britain. Only scattered finds have been made in Atlantic Portugal and Spain to date, but this is a misleading statistic as there is less published excavation of early medieval sites in Iberia than in Britain and Ireland and excavated material probably awaits identification. Hence we should doubt Campbell's suggestion that: 'what is important about this distribution is that the number of vessels from British and Spanish sites is of the same order of magnitude even though the Spanish sites are closer to the source of the pottery'[5]. The finds fall into two broad functional categories: amphorae and tablewares. These can be further subdivided into different classes of these types of vessels. A brief listing of these types will now be made:

Tablewares

> **PRS: Phocaean Red Slipware** (Late Roman C; generally corresponding to previous British Class Ai). This class is made up of bowls and dishes in a soft orange-red fabric. A thin, darker red, slip usually covers the inside and outside surfaces. Stamped decoration (often on a christian theme) is sometimes found on the base and the rims

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5 Campbell, 'The Archaeological Evidence', forthcoming.

are often rouletted[6]. The British finds firmly identified are predominantly of Hayes' Form 3, with a few from Tintagel, which Thomas suggests are of Form 10. The finds from Portugal are likewise of Form 3[7]. A kiln site with Form 3 wasters is known from Phocaea in western Turkey, so an origin in Asia Minor is likely[8]. The general date range of this type in the western sealanes fits within the short western Mediterranean *floruit* of the ware: late-fifth to mid-sixth century[9]. Form 10 may be earlier in the fifth century, in which case the model proposed below would suggest that either these are misidentified or are residual vessels which had already had a long life as fittings on board a visiting ship.

ARS: African Red Slipware (Late Roman B; generally corresponding to previous British Class Aii). The western sealanes finds are of bowls in a darker, harder fabric than PRS with a wash on the external and internal surfaces, similar in colour to the fabric. They are rouletted on the rim, but otherwise undecorated[10]. No kiln site has yet been found, but increasingly it is clear that the origin point is somewhere in the vicinity of Tunisia. The identified western British finds are of Hayes forms 81, 88, 91, 99, 103 and 104. This same collection of later forms is generally paralleled in Portugal, but there is a sequence of earlier forms[11]. Earlier forms appear in Roman contexts in eastern Britain[12], but this earlier activity is clearly unrelated. Date range is variable, according to forms. British examples are early sixth century.

'Eastern Mediterranean Coarsewares'. Recently identified amongst the Tintagel finds these consist of bowls and amphorae, with seven different fabrics so far identified. Mica inclusions would suggest an eastern origin[13].

'Tunisian Tableware'. A mid- to dark-brown tableware found at Tintagel. Similarities between these pieces and coarsewares from

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[6] Hayes, *Late Roman Pottery*, esp. maps pp. 456-8, 463; *idem, Supplement*, pp. 525-7; Thomas, *A Provisional List*, pp. 6-7.

[7] Prieto, 'Algunos Datos', pp. 540-8.

[8] E. Langlotz, 'Beobachtungen in Phokaia', *Archaeologische Anzeiger* 25 (1969), p. 380.

[9] See pp. 175-7.

[10] E. Campbell, 'The Post-Roman Pottery', in N. Edwards and A. Lane *et al., Early Medieval Settlements in Wales A. D. 400-1100*, Bangor and Cardiff, 1988, p. 124. Hayes, *Late Roman Pottery*, maps pp. 460, 464; *Supplement*, pp. 484-523.

[11] See p. 176.

[12] J. Bird, 'African Red Slipware in Roman Britain', in J. Dore and K. Greene, eds., *Roman Pottery Studies in Britain and Beyond* (BAR Supplementary Series 30), Oxford, 1977, pp. 269-77. For discussion see pp. 176-7.

[13] S. Hartgroves and R. Walker, 'Excavations in the Lower Ward, Tintagel Castle, 1986', in C. Thomas, ed., *Tintagel Papers (Cornish Studies* 16), 1988, pp. 24-5.

Tunisia in the Reading University collections have so far been noted[14]. As with the above group, various sherds in the amphora category 'B Miscellaneous' are likely to be of this type, unnoticed because of a lack of formally distinguishable features.

Amphorae or Storage Jars

CLASS 43[15] (British Class Bi). Globular, two handled amphorae with distinctive 'comb' decoration in a band at shoulder point, sometimes spreading out to additional bands below. The neck is usually splayed and the base has a basal knob. The coarse fabric can appear to come in varying colours and compositions, though such differences may well be post-depositional (common in unglazed wares). The Mediterranean evidence suggests, on distributional grounds, an Aegean origin, though Rumanian kilns may also have existed[16]. One kiln site has been found in Southern Greece[17], but this is unlikely to be the only one. Greek letters are often etched on Mediterranean examples. British finds often carry etched graffiti (see below). The date range is between the fourth through seventh centuries - though there are earlier and later forms. In the Atlantic context, however, there is no reason to look beyond the period late-fifth through sixth and on typological grounds none are identifiable as post-sixth century (see below).

CLASS 44 (British Class Bii). Narrow, thin walled amphorae with sharp ribbing over length; widely spaced at middle of the body, closer at the shoulder and base. Red painted Greek characters (dipinti) occur on the shoulder of many Mediterranean examples. Date range is from the fifth to seventh centuries in the Mediterranean[18].

CLASS 45 (British Class Biv). Western sealanes finds of this type are of the (later) two handled form, where there is enough of the vessel surviving to determine this. The one-handled form also occurs in Britain, however, so only the finding of the shoulder provides absolute certainty of post-Roman date, though any western British find is, on distributional grounds, likely to be of the two-handled type. Tall narrow amphorae tapering to a narrow foot. The fabric is hard, with a very distinctive deep red/brown colour and micaceous. The vessels have thin walls with light external ribbing. Egypt and Asia Minor have been proposed as sources for the ware - Peacock and Williams favour the latter on petrological grounds[19]. These vessels have a wide date range in

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[14] C. Thomas, *pers. comm.* (14/2/'89). I would like to thank Charles Thomas for drawing these to my attention very soon after discovery. Carl Thorpe was most helpful in showing me the pieces in question.

[15] Numerical classes are as in Peacock and Williams, *Amphorae:* these will hopefully now become standard. There is, as Thomas has commented, something 'grotesque' about the use of the British labels in a Mediterranean context - and the plethora of other names for these wares makes comprehension difficult.

[16] Peacock and Williams, *Amphorae*, pp. 182-4.

[17] M. Munn, 'A Late Roman Kiln Site in the Hermionid, Greece', *American Journal of Archaeology* 89 (1985), pp. 342-3.

[18] Peacock and Williams, *Amphorae*, pp. 185-7.

[19] Peacock and Williams, *Amphorae*, pp. 188-190.

Mediterranean contexts (first through seventh centuries) though the two-handled type is only common in the fifth century onward.

CLASS 49: AMALGRO 54 (British Class Bvi). Cylindrical, spoutless amphorae with a small everted rim and tapering at the bottom to small, flat base. The vessels have small loop handles and groove decoration on shoulder and base. The fabric is brown and sandy with a greyish core and limestone inclusions. Thought to be from Gaza. Fourth to sixth-century date[20].

CLASS 34: AFRICANA II (British Bv 'Byzacena'). Cylindrical amphorae, a metre or more in length, with a pointed toe and collared rim, of buff to brick red fabric with a pale slip. Provenance is determined by name stamps (on Mediterranean finds) which suggest a central Tunisian origin. Dating is up to the end of the fourth century, but probably continues into fifth[21].

B MISCELLANEOUS (formerly Biii). A collection of untyped sherds. Of sherds previously attributed to this class, many have now been identified firmly as belonging to known classes. The remainder are mostly African and eastern Mediterranean amphora sherds in coarse fabrics[22].

When British finds of these wares were first identified as being of Mediterranean provenance it was natural enough to assume that they would represent evidence of continuing contact with the coasts of Gaul and that the wares had been carried by way of the same river routes across Gaul as had been active in the Roman period[23]. Fieldwork by Bernard Wailes in the 1950s, however, showed these wares to be absent from western France and the evidence continues to confirm this. The absence of finds has continued far beyond the point where it can be attributed to a simple failure of French archaeology to discover examples. Where would we expect to find the wares if the overland routes were being used? Centres such as Bordeaux, Orleans and Tours have all seen extensive exploration and related late-Roman wares are

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[20] Peacock and Williams, *Amphorae*, pp. 198-99. Thomas, *A Provisional List*, p. 16.

[21] Peacock and Williams, *Amphorae*, pp. 155-7; Thomas, *A Provisional List*, p. 15.

[22] Hartgroves and Walker, 'Excavations', pp. 24-5.

[23] Radford, 'Imported Pottery', pp. 68-9.

known from these sites - we would not now expect unidentified PRS or class 43 amphorae to exist in those centres.

Wailes found parallels for the tablewares in Portugal[24] and this evidence was interpreted as attesting to the existence of sea traffic around the Iberian peninsula and through the Straits of Gibraltar - bypassing the overland routes through France. The matter largely rested there for more than a decade. Thomas, who with Wailes conducted much of the early research on the Mediterranean wares in Britain, focussed most attention on investigating the Mediterranean leg of this activity and in awaiting the results of research into the petrolology and Mediterranean dating evidence before attempting any deeper analysis of their socio-economic context in Britain (though he has recently returned to this topic)[25]. It might be argued that the latter is an historical, rather than a strictly archaeological, problem. The role of the imported wares as diagnostic fifth- and sixth-century artefacts is of primary interest to excavators. Historians seemed to shy away from the material as it does not seem to have much corresponding documentary testimony and, further, did not reveal the expected connections with Gaul. Certainly, in the context of the spread of religious or artistic culture it only seemed to link up with a school of 'Mediterranean influence' thought that had cast a misleading and unscholarly obstacle in the path of the discernment of real cultural links[26].

Even so, the phenomenon of direct connections with the Mediterranean must be historically interesting to insular researchers. From the historical standpoint the following questions need to be answered. By precisely which route did these wares reach Britain? What was the chronological range of the maritime ventures which brought them? What was the nationality of the seafarers? Was this direct traffic from the Mediterranean? Were the wares

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24 Wailes, 'Some Imported', pp. 36-46.

25 Thomas, 'The Context', pp. 7-25.

26 E.g. Raftery, 'Ex Oriente..... ', pp. 193-204.

transhipped at any point? Finally, why did these voyages take place? Are they due to commercial, or other impulses? Thomas addressed these questions briefly in 1983[27] and again in 1988[28], while Leslie Alcock has made a recent attempt to answer some of these questions in the context of a reassessment of Dinas Powys[29].

Having ruled out the likelihood of these wares having travelled overland through Gaul (where we might be dealing with a more 'down-the-line' traffic, or traffic in much smaller individual cargoes of amphorae than are implied by direct voyaging), grouping the imports into potential ships' cargoes becomes necessary. Whether we accept the minimalist view espoused by Thomas: involving no more than two or three hypothetical ships; or the more expansive model of Alcock, who believes that the finds are more likely to have trickled in as part of heterogeneous cargoes, all arguments assume these wares were part of shiploads from some foreign centre. The separation of tablewares and amphorae for classification purposes, as is commonly done[30], can obscure more meaningful groupings. Whatever the character of the voyages involved in this activity, it is clear that the tablewares were a lightweight accompaniment for substantial amounts of amphorae. A more important distinction in examining these finds is between eastern Mediterranean tablewares and amphorae, on the one hand, and the African tablewares and amphorae, on the other. The African group is very much smaller than the eastern Mediterranean: forming only around 20% of the entire assemblage of Mediterranean finds in western Britain and Ireland[31], but the greater part of this 20% is the African tablewares, which

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[27] C. Thomas, 'East and West: Tintagel, Mediterranean Imports and the Insular Church', in S. M. Pearce, ed., *The Early Church in Western Britain and Ireland* (BAR British Series 102), Oxford, 1982, pp. 17-34.

[28] Thomas, 'The Context', p. 10ff.

[29] Alcock, *Economy*, pp. 89-92.

[30] Thomas, *A Provisional List*, p. 6ff.

[31] Thomas, 'The Context', p. 12.

would have formed a much smaller part of ships' cargoes than the amphorae. It is not yet clear whether a similar quantitative breakdown occurs at Conimbriga - comparisons could be informative on the question of whether entire Mediterranean ships' cargoes were reaching Britain, or were being transshipped in Portugal.

Another question is whether to group the wares as to date. The distribution of Mediterranean wares in western Britain and Ireland, despite being widely dispersed throughout the Irish Sea basin, represents a limited selection of artefacts which were ubiquitous in the Mediterranean at varying times, but which overlap within a narrower chronological range. Some of these, such as the class 43 amphorae, have been found in widely varying chronological contexts in the Mediterranean and offer problems for finer dating. Some, such as the Africana II amphorae, are not found in contexts in the Mediterranean which are quite as late as their likely western sealanes bracket. The point is that none of the amphorae are confined to a limited dating bracket, therefore dating each individual type does not help answer the question of the date of their arrival in Britain[32]. The collection of finds needs, rather, to be treated as an entire assemblage and the *proportion* of each type of ware compared to proportions at sites producing quantities of these wares in dateable contexts. The Avenue Habib Bourguiba and other sites in Carthage[33] and the comparative material from Rome discussed by Fulford[34] offer an informative basis for such comparisons.

That the Bi and Bii type wares are contemporaneous must be seen as unquestionable. Beyond this point is little agreement. As with the topic of glass

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[32] Cf. Mytum, *The Origins*, pp. 253-7; Miller, 'Hiberni', p. 317.

[33] Fulford and Peacock, *Excavations at Carthage*; J. A. Riley, 'The Pottery from the Cisterns' in J. H. Humphreys, ed., *Excavations at Carthage conducted by the University of Michigan*, vol. 6, Ann Arbor, 1981, pp. 85-124.

[34] Fulford, 'Byzantium and Britain', pp. 1-6.

studies (see below) a type of oral tradition has fuelled suspicion of the c.500 dating provided for these wares by Thomas and others. The wide date-range of Class 44 in the Near East has been taken as indicating a likely irreduceable date-range for the imports (M.Ryan, *pers. comm.*). The late-fifth-century date ascribed to some ARS imports has also been held to indicate *two* chronological horizons on British sites: one late fifth and another, early sixth, century, each of these being seen to reflect separate voyages or sets of voyages[35].

The variety amongst the imports is a red herring. Of course when looking at this evidence through a positivist model, we might see material evidence of a developing pattern of contact stretching over a century or more. The Class 34 amphorae may be early fifth century, as might be some of the PRS. The Class 45 and 49 amphorae are certainly more common in the fifth century and some of the African Red Slipware pieces were dated by Hayes to the late fifth century. Or, alternatively, we might suggest that earlier contacts brought in only the, putatively earlier, African material (ARS and Class 34 amphorae), to be followed by contacts bringing eastern Mediterranean material. The fact that African wares were reaching Portugal in the fifth century could be used to support this developing model. Hayes' initial dates for the ARS forms found in Britain have been disputed, however, as they depend too much on the historical chronology of the destruction phase at Conimbriga. The series found in Britain may be as late as sixth century, taking account of Mediterranean evidence. To be wrong about Conimbriga is, anyway, to be wrong about Britain, as the later series at Conimbriga indicates that it was part of the same network which was bringing the wares to Britain.

Thomas, in his 1981 study, drew attention to the previous occurrence of ARS in Britain[36]. This importation clearly ceased a century or more before the sub-Roman importations began, however, and their greatest concentration is in

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[35] E.g. Miller, 'Hiberni', pp. 315ff; Mytum, *The Origins*, pp. 252-3.

[36] Thomas, *A Provisional List*, p. 4.

south-east Britain[37]. Forms 2, 3, 5, 6, 8, 9, 23, 32, 48, 50, 52 and 67 are the earlier types represented and are totally exclusive of the early medieval British group. As they most likely indicate overland distribution through Europe, Thomas' suggestion of a link may therefore be discounted. Fulford dismissed this possibility as long ago as 1979[38]. There are, likewise, amphorae of Classes 45 and 49 in late Roman Britain, but these are in a clear eastern British province and their progress to Britain is traceable overland through eastern Gaul/Germany[39].

At the Carthage Avenue Habib Bourguiba site, in the horizon c.375-450 AD, Classes 44, 45 and 49 are the predominant eastern Mediterranean types present - eastern Mediterranean types only account for 8% of amphorae found. ARS is extremely common in that horizon. By the 475-500 horizon, however, 24% of the amphorae found are eastern Mediterranean in origin: Class 44 being the most common, but half of the total being of 45, 49 and Palestinian types. In the c.475-500-533 horizon this eastern Mediterranean proportion remains the same, but with 45, 49 and Palestinian types declining, with 43 becoming more common. Class 44 also increases. PRS type 3 is also present for the first time around 500[40]. The c.475-500-533 bracket is thus statistically a close parallel with the combined British assemblages, with the weight upon the post 500 period. There must be no doubt that the majority of voyages to Britain fall into this range. If the types of wares which were commonest at an earlier date were part of earlier shiploads we must assume that they would be commoner in the British assemblages.

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[37] Bird, 'African Red Slipware', pp. 269-277.

[38] M. Fulford, 'Pottery Production and Trade at the End of Roman Britain: The Case Against Continuity', in P. J. Casey, ed., *The End of Roman Britain* (BAR British Series 71), Oxford, 1979, pp.127-8.

[39] D. P. S. Peacock, 'Late Roman Amphorae from Chalk, Kent', in J. Dore and K. Greene, eds, *Roman Pottery Studies in Britain and Beyond* (BAR Supplementary Series 30), Oxford, 1978, pp. 295-300. Cf. map in Peacock and Williams, *Amphorae*, p. 189.

[40] Fulford and Peacock, *Excavations at Carthage*, p. 260.

We will now turn to the dateable tablewares. The dates for all of these have undergone some revision on the basis of the analysis of the material from Carthage. The British finds of ARS are now all more likely to fall between c.475 and 550 A.D. Previously, forms such as A103 and 104 had been dated to the later fifth century, on account of the supposed desertion of the Conimbriga site, following a destruction phase which was identified with the 465-8 date provided by chronicle evidence[41]. Of the Conimbriga pieces, forms 91 through 104 fall into a bracket c.500-550, with only forms 56, 67 and 76 being possibly earlier (and 76 can be as late as c.500). Fulford has indeed noted that most of the commonest fifth century forms are absent from Conimbriga[42]. Form 84, however, is found elsewhere in Portugal. This is generally thought to be fifth century, though its absence in any quantity from Carthage means that dates are less readily refinable. The later Conimbriga material mostly falls into a markedly similar range to the British and Irish pieces and is separated from earlier ARS distributions in Iberia by nearly the entirety of the fifth century. Class 44 amphorae, moreover, are found at Conimbriga - seeming to strengthen the parallel with the British assemblages[43]. The overwhelming number of pieces are thus from forms consistent with the idea of an early to mid-sixth-century horizon. The A81 from Tintagel could, accordingly, be an erroneous identification and earlier forms from Conimbriga may be accounted residual from the earlier Portuguese *floruit* of ARS. The western sealanes assemblage of tablewares can thus easily be made consistent with the chronologically limited model thus postulated.

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[41] See p. 125.

[42] Fulford and Peacock, *Excavations at Carthage*, ch. 4, p. 114 esp.

[43] Keay, *Late-Roman Amphorae*, p. 655.

ARS forms found on British and Portuguese Sites: New Dates from Carthage:

Form (after Thomas 1981)	Earliest	Floruit
104	c.500[44]	c.525-
103B	c.500	c.500-75.
99	c.500[45]	c.525-35 ditto Conimbriga.
96	c.525-75[46]	
91C	525-550[47]	
81	Early 5th.	
67	360 - 425-50 (Can be confused with 103)	

(PRS Form C latest: c.530--[48])

The chronological evidence seems to demonstrate that the sixth-century voyages to Portugal and Britain by Mediterranean ships constituted a very short episode. We may not completely deny the possibility of voyages, slightly earlier or later, which are lost to history because they did not carry pottery. The possibility of this is diminished, however, when we consider the ubiquity of pottery in Mediterranean enterprise over a much wider period. It might be argued that coin, likewise, is ubiquitous and not found in Britain. The movement of coin, however, is far more subject to regulation than the movement of pottery - and

[44] Fulford and Peacock, *Excavations at Carthage*, pp. 73 & 109.

[45] *Ibid.*, p. 71.

[46] *Ibid.*, p. 69.

[47] *Ibid.*, pp. 63-5.

[48] *Ibid.*, p. 87.

Ireland and western Britain did not use coin anyway[49]. We can also emphasise the consistency of the evolving model for the contacts which are demonstrated by the ceramic evidence, with the British finds being a clear extension of a larger ceramic assemblage in Portugal, which is itself again an extension of a larger western Mediterranean assemblage.

Having established the chronological basis of the ceramic finds, we will look at how this evidence relates to the historical context of the sixth century, before proceeding to reconstruct the voyages and cargoes involved. The eastern Mediterranean element in the western Mediterranean is a quantifiable intrusion, running parallel with, and slightly preceding, the increasing eastern presence of the era of Justinian[50].

Turning to the textual sources, we may note that too much has been made of the *Life of St John the Almsgiver*, a seventh-century (post 641) hagiography of St John of Alexandria (d. 614)[51]. The story concerns a sea-captain 'fallen upon evil days' to whom St John gave a ship of the church and a cargo of twenty thousand bushels of grain[52]. The ship, a δρομον ('runner')[53], was then blown by a violent tempest and after twenty days reached Britain, where there was a great famine. The προτως της πολεως ('chief man of the city') then offered the captain one nomisma for each bushel, or a return cargo of

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[49] The possible finds of Byzantine coins in Ireland should be discounted as their context does not prove contemporary importation: J. D. Bateson, 'Further Finds of Roman Material in Ireland', *PRIA* 76C (1976), pp. 177-8.

[50] Pentz, 'Changing Patterns', pp. 1-7.

[51] Leontius, *Life of St. John the Almsgiver*, text of episode ed. H. Delahaye in *Analecta Bollandiana* 45, pp. 30-33; trans. E. Dawes and N. Baynes, *Three Byzantine Saints*, London, 1948, pp. 216-18. This translation takes account of variant texts not used in Delahaye's edition.

[52] Leontius, p. 31.

[53] *Ibid.*, p. 31.

tin[54]. Some tin was accepted and when the sea captain returned to the Mediterranean he found that the tin had miraculously become silver[55]. This story is obviously literary in tone and frequent selective use of its detail at face value has been unjustified. In a text of this type it is not unreasonable to have a ship being driven to a far off place by storm, with minimal reference to actual geography, so this motif certainly has no power to suggest how Britain and the eastern Mediterranean actually came into contact again in this period. The idea that British people would have coin to exchange is anachronistic. The text is also frequently misquoted: it does not suggest trade with Galicia (as Lewis claims[56]) and does not describe how 'the fleets of the patriarchs of Alexandria sailed to Cornwall in the early seventh century'![57]. Frere would accord some weight to the text's detail on account of a similarity of the title $\pi\rho o\tau\omega\varsigma\ \tau\eta\varsigma$ $\pi o\lambda\varepsilon\omega\varsigma$ to the *regionis illius primu*s encountered by Germanus[58]. What should be appreciated is the generic quality of many such titles in hagiography (we may compare, for example, the debate over the term *caput regionis* in the *Vita Columbae*[59]). Whether this indicates lack of knowledge of persons' names in actual episodes in the saint's life; or the assembling of formulaic incidents for which no real specified name is needed, it is dangerous to take it out of its hagiographical context and see it as some emerging title. $\Pi o\lambda\varepsilon\omega\varsigma$, in any event, is not *regionis* and Frere makes too little of the distinction.

The story may, however, reflect some familiarity with the fact that Byzantine regions were receiving tin from Cornwall at the time of St John (or

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54 '$K\alpha\sigma\sigma i\tau\varepsilon\rho o\nu$', *ibid.*, p. 32.

55 *Ibid.*, p. 32

56 Lewis, 'Byzantine Lightweight Solidi', p. 146.

57 P. Brown, *The World of Late Antiquity*, London, 1971, p. 156.

58 S. Frere, 'The End of Towns in Roman Britain', in J. S. Wacher, ed., *The Civitas Capitals of Roman Britain*, Leicester, 1966, p. 414.

59 See p. 97.

shortly before). Stephanos of Alexandria (floruit 610-640) talks of $\acute{\eta}$ $\beta\rho\epsilon\tau\tau\alpha\nu\acute{\iota}\kappa\eta$ $\mu\epsilon\tau\tau\alpha\lambda o\varsigma$, which must have been a commonplace for tin[60], though whether from classical or more recent knowledge is not clear. It is worth remembering that Leontius and Stephanos would have been men of book learning. Taken in conjunction, however, the two sources do indicate a discourse in which tin was seen as a British product, around a century after real Byzantine ventures may have been reaching Cornwall. It is possible that if 'British metal' was a literary commonplace for tin in the Byzantine world as a legacy of classical knowledge, it may even have inspired the initial idea of Byzantine voyages to Britain.

Another set of references can be partly explained as derivative, and in other respects as imaginative, but they still raise more significant questions of Byzantine interest in Britain. One statement in the *Anekdota* of Procopius is plain enough at first sight:

> He (Justinian) never ceased pouring out great gifts of money to all the barbarians, both those of the East and those of the West, and those of the North and to the South, as far as the inhabitants of Britain[61].

Britain here is clearly cited in a superlative sense: to emphasise an outstanding folly of Justinian. The fact that it is the only location explicitly cited in this passage is important. In the context of his writings, the information Procopius gives regarding Britain is small in quantity, and at best confused - however its context indicates that it occupied a greater degree of his attention than did other locations. As Thompson[62] observes, Procopius' discussion of Britain in *Gothic Wars* VIII.20 takes the form of a lengthy digression in a discussion primarily concerning eastern affairs. We may not go so far as

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60 R. D. Penhallurick, *Tin in Antiquity*, London, 1986, p. 10.

61 Procopius, *Gothic War* XIX.13 (ed. Dewing, Vol. 6, pp. 232-3).

62 E. A. Thompson, 'Procopius on Brittia and Britannia', *Classical Quarterly*, New Series XXX, 1980, pp. 504-5. Also J. O. Ward, 'Procopius *Bell. Goth.* II.6.28. The Problem of Contacts Between Justinian I and Britain', *Byzantion* 38 (1968), pp. 460-71.

Thompson does in imagining Procopius stopping in mid-penstroke, as it were to include some 'hot news' from the north[63]. The fact that the interest is disproportionate, however, should be noted.

Procopius twice makes reference to actual persons who had been to northwestern Europe. In a much discussed, fantastic, passage he recounts how the souls of the dead are ferried from the Continent to Britain. Analysis of this legend does not shed any light upon our subject and may only distract our attention from the subsequent comment that the story was common knowledge in Constantinople because of the presence there of people who had actually taken part in this activity[64]. He himself derides the story as a myth, but includes it because it was well-known and his audience will expect him to be conversant with it[65]. The latter may be a rhetorical comment, but the detail of the presence of actual eyewitnesses is further raised in the *Anekdota* reference to the aforementioned barbarians 'streaming from all the Earth into Byzantium'[66]. These comments, though rather unspecific, do not support the argument for reducing the contact with northwestern Europe solely to a known Frankish embassy of the mid-sixth century[67].

From archaeological analysis we can now *(contra* Thompson in 1980[68]) be much surer that voyages to Britain could have been taking place, at least only a few decades prior to Procopius' account. There are, however, various problems with equating the episodes in his texts with the actual voyages. Some obvious points of detail may be noted: the *Anekdota* specifies the sending of money offshore and the contact which brought in the pottery was evidently

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63 Thompson, 'Procopius on Brittia', p. 504.

64 Procopius, *Gothic War* VIII.20 (Vol. 5, pp. 252-3).

65 *Ibid.*, VIII.20 (5, pp. 252-3).

66 Procopius, *Anekdota* XIX.14 (ed. Dewing, Vol.VI, p. 232).

67 Thompson, 'Procopius on', p. 505.

68 *Ibid.*, p. 505, n. 32.

anumismatic. While Procopius may be generalising here, we must set this detail in the context of the real concern in eastern Europe and Asia regarding inflation through the flow of currency offshore. The detail of 'money' may suggest the sending of tribute to England, where money was valued, rather than Celtic Britain.

Procopius's contemporary evidence on Britain does not appeal as likely to relate to the western sealanes. The most likely explanation of the confusion between *Brittia* and *Britannia* would be a confusion between two separate sources of information. Procopius's description of Britain being opposite Spain is the Classical error and he adds nothing of any note to this picture. His *Brittia* is opposite the Rhine mouth and clearly represents the views of eastern Franks or Anglo-Saxons who encountered Britain across the narrow seas. Procopius divides this information into references to two locations because of the geographically incompatible character of the picture.

Whatever the value of the accounts, the testimony to a Byzantine interest in British affairs is perhaps the crucial detail in this text. The accuracy of records of traveller's tales is often a red herring for the historian in that it distracts attention from the importance of reception. Genuine travels find popular reception more often than otherwise through the telling of tales of wonders[69].

Evidence for eastern Mediterranean maritime links with Atlantic Spain are found in two episodes. Of particular interest is the *Vitas Sanctorum Patrum Emeretensium,* written near Mérida around the 630s, and supposedly concerning events c.560-600. In this text eastern Mediterranean merchants were wont to visit Mérida in eastern ships. *Negotiatores graecos in navibus de orientibus* are described as coming to the coast of Spain (*advenisse atque*

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[69] An analogy may be fruitful here: in the later middle ages Marco Polo recorded accurate details of eastern parts; but explorers such as Cadamosto and Usodimare, the audience of the 'best-selling' work of plagiarism by John Mandeville and the interest of cartographers such as Abraham Cresques, all indicate that the response of his audience was to believe the most miraculous details.

Hispaniae litora contigisse) and thence to Mérida[70]. Whether the merchants came by land or by water from the coast is not specified. It is probable that they sailed up the Guadiana, however, Mérida having been a river port in the Roman period and doubtless continuing to be so[71]. Considering the geographical obstacles to an overland journey from the Mediterranean, there can be no question that these merchants had travelled from the Atlantic coast, having first negotiated the Straits of Gibraltar. It is pleasing to note that 'merchants' rather than simply seafarers are specified and that they are said unequivocally to be eastern Mediterranean in origin. The text may also be accepted as likely to describe a state of affairs remembered in the region, being written locally and so soon after the events described. The fact that 'Greek merchants' are described as having entered the western sealanes must have implications for our interpretation of eastern Mediterranean artefacts on Atlantic sites in Spain, Portugal and Britain and might allow us further to assume that the voyages which brought them there were often mercantile in character and involved, not middlemen, but actual Greek *negotiatores*. The British finds might be of course secondary distributions from Spain or Portugal. The archaeological evidence suggests otherwise, as will be explored below.

Another text describes links between Atlantic Spain and the eastern Mediterranean, though its lack of detail and difficult chronology may render its testimony unreliable. In *De Viris Illustribus*, Isidore describes St Martin of Braga's journey to Galicia:

> Martin, saintly priest of the monastery of Dumium, sailed out of eastern parts, and came to Galicia[72].

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[70] *Vitas Sanctorum Patrum Emeretensium* IV, 3.2 (ed. J. N. Garvin, Catholic University of America, Studies in Medieval History, N. S. 19, Washington DC, 1946, p. 168.

[71] This point is discussed in R. Collins, 'Mérida and Toledo: 500-585, in E. James, ed., *Visigothic Spain: New Approaches*, Oxford, 1980, pp. 203-4.

[72] 'Martinus, Dumiensis monasterii sanctissimus pontifex, ex Orientis partibus navigans, in Gallaeciam venit', Isidore, *De Viris Illustribus*, XXXV (ed. J.P.Migne, PL, LXXXIII, p. 1100).

We know from Gregory of Tours that Martin was a Pannonian by birth and that he left Pannonia to visit the sacred places of the East[73]. This might imply that these were the 'eastern parts' from which he came to Galicia, rather than Pannonia itself. It seems, however, that Isidore is ignorant of Martin's exact origins so 'out of the east' (which might include Pannonia) is perhaps all the phrase can be taken to indicate. Gregory of Tours also states unequivocally that Martin travelled by sea to Galicia[74]. Gregory wrote after 573, so we may presume the events of Martin's voyage from the East are as early as the 560s (Isidore would suggest sometime in the reign of 'Theodemir': c.551-565)[75]. The two writers, then, are in agreement that Martin voyaged out of the Mediterranean to Galicia and that this event occured, in Gregory's case only a decade or so before he wrote, and in Isidore's a little over half a century. This combined testimony, so close to the event, must carry some weight as evidence. The fact that the two writers do not name the same king at the time or tell quite the same story might be seen as reason to treat this episode as of doubtful reliability. On the other hand, the fact that they do not agree on every detail assures us of the independence of the two accounts, to which we might add the considerable evidence of Gregory's knowledge of Gaulish travels to Galicia and the fact that he definitely met one traveller from Galicia[76].

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73 'Nam hic Pannoniae ortus fuit, et exinde ad visitanda loca sancta in Oriente properans, in tantum se litteris inbuit, et nulli secundus suis temporibus haberetur. Exinde Gallitiam venit, ubi, cum beati Martini reliquiae portarentur, episcopus ordinatur', Gregory of Tours, *Historia Francorum*, V.37 (ed. Krusch, p. 243).

74 Gregory of Tours, *De Virtutibus Sancti Martini* I.12 (ed. B. Krusch, Hannover, 1885, pp. 144-6).

75 The difficulties of dating this episode are discussed at length by E. A. Thompson, 'The Conversion of the Spanish Suevi to Catholicism', in E. James, ed., *Visigothic Spain: New Approaches*, Oxford, 1980, pp. 83ff.

76 See p. 209.

We have now outlined the historical evidence and explored the limits of chronology of the eastern Mediterranean links with the western sealanes. It remains to consider the specific mechanics of the voyages themselves and the vessels and locations involved. Can we consider that these wares all were imported as part of definable cargoes and can we safely assume that their context on the Atlantic sealanes is as a regular extension of Mediterranean distributions? A great deal of debate has surrounded our ability to quantify the activity involved and adapt it to shipping and cargo models.

Alcock, Thomas, Campbell and the author have all discussed the amphora finds in comparison with the shipwreck at Yassi Ada in Turkey. This ship was a Byzantine cargo ship, with a cargo of some 900 amphorae of mostly classes 43 and 44 - though these are later types than those found on British sites and the shipwreck's date of around 625 AD is at least a century later than the *floruit* of the British finds. The usefulness of this shipload of similar amphorae in providing a model for the interpretation of the British finds was appreciated two decades ago[77], but detailed discussion of the shipwreck waited upon full publication of the finds. It has been further hampered by the fact that Bass researched the comparative forms seemingly without reference to the work being done by Peacock, Fulford and Williams. Alcock, Thomas and Campbell all accept a lower level of compatibility between the Yassi Ada model than will be accepted here, their doubts based on what they see as the greater variety of forms seen among the British finds than in the Yassi Ada assemblage. This leads Alcock and Campbell to conclude that the amphorae arriving in Britain are part of diverse cargoes, rather than a small number of concentrated shiploads of amphorae, while it leads Thomas to assert that a small number of very mixed shiploads of amphorae were arriving. It will be suggested here that the diversity at Yassi Ada is probably underestimated. It is likely that the individual scholars misinterpret each other on the point at which the British assemblage is

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[77] L. Olson, *pers. comm.*

more diverse than the Yassi Ada: whether the diversity is between the types (i.e. class 43, 44, etc.) or the sub-types present (i.e. different decoration forms, sizes, etc.).

Alcock has expressed the strongest doubt that the imports are part of regular Mediterranean cargoes[78]. His interpretation is based, in part, upon comparisons with the cargo composition of the shipwreck from Yassi Ada. The predominance of the Classes 43 and 44 at Yassi Ada argues for a basically comparable cargo to those which went to Britain - where Classes 43 and 44 make up 90% of identifiable amphora finds[79]. Alcock, however, considers the wide range of forms *within* these two classes displayed by the combined British and Irish assemblage to differ from the model provided by Yassi Ada. The Yassi Ada assemblage contains a limited range of variants of Classes 43 and 44[80]. Bass's analysis of the Yassi Ada amphorae identifies different forms of each class. Most of his analysis is conducted by sample, rather than quantification. In the sample which he has published, there are certainly variations to be observed. The class 44 types vary between 50.5 and 41.1 cm. in height, with considerable range in mouth and shoulder size, and varying proportion in the spacing of the ribbing[81]. Six published illustrations in Bass' report show principal variant forms. Class 43 amphorae exhibit a similar range of variation in height[82]. Decoration of the latter is much more standardised, with the majority (fifty out of a sample of eighty) having a single band of decoration around the shoulder (as do the British types). Still, some vessels

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78 Alcock, *Economy*, pp. 90-3.

79 In Britain, however, Class 43 makes up around 35% of total finds: and Class 44, 54%. At Yassi Ada the ratio is 12%:71%.

80 See illustrated selection, *Yassi Ada*, pp. 156-9.

81 Bass and Van Doorninck, *Yassi Ada*, p. 157. There has been little attention paid to this decoration. One wonders if it may be some form of label to indicate contents. Hence variations may indicate certain varieties in the contents type.

82 Bass and Van Doorninck, *Yassi Ada*, p. 159.

have marked variation in shape and decoration (Bass' sub-type 2*b*)[83]. The question is, then, whether this variety in form is of the order of that which Alcock has noted amongst the British finds. Firstly, it should be noted that Alcock's histogram for the British finds matches Bass' figures for class 43 quite closely, where the majority are of one form: Bass' sub-type 2*a* (the band of decoration around the collar). This is the ubiquitous form on British and Irish sites. The class 44 comparison is the crucial one. The principal basis for determining variant forms, that the present writer can discern, amongst the British finds is decoration[84], but the decorative range at Yassi Ada seems as great as that in Britain. The class 44 finds at Yassi Ada are far more varied than the class 43. Again the evidence of Yassi Ada and the British/Irish assemblage is superficially consistent. Alcock *(pers.comm.)* explains his concern as being that, while the variety in the British assemblage is no greater than in Bass's series, the same range is seen in a very much smaller number of finds in Britain. If this is so, only a very full publication of the Tintagel material is likely to clarify this problem to the point where comparisons can be made with Yassi Ada. The obvious difference in period between Yassi Ada and the British finds must be noted, perhaps standardisation increased across time. But more likely the context of the Yassi Ada find would explain greater standardisation: with the amphorae on board coming from a probable Black Sea kiln, where the variety of forms was more limited.

Thomas is inclined toward the opposite of Alcock's view: that the forms of Classes 43 and 44 in the British assemblage demonstrate that the wares formed the cargo of at most one or two ships, though he endorses Alcock's argument concerning the variety present[85] It seems, however, that he appreciates Alcock's argument as stressing the variety of types present and not

[83] *Ibid.*, pp. 156-7.

[84] E.g. the distribution of bands and other markings on the body of vessels.

[85] Thomas, 'The Context', p. 12.

the variety *within* types, so this agreement may be based on a misapprehension[86].

> The close similarity in the vessels, notably among the B amphorae,
> found at all these sites suggest that they may have formed a single cargo.
> If so, it was a mixed bag, put together for potential customers to whom
> the absence of a homogeneous batch or order was not a point of any
> relevance[87].

Thomas thus seems to see the basic classes as fairly uniform in their British occurrence (with which I would concur), but the substantial presence of Class 45, 49, 34 and miscellaneous types as the point of departure from the Yassi Ada model - which is certainly true: though there are types other than Class 43 and 44 at Yassi Ada, they are in much lower proportion than in Britain. In the light of the Carthage assemblage and its evidence, we may see the Atlantic voyages as occurring at a time when earlier amphora types were giving way to classes 43 and 44 in international exchange. Hence the half-dozen or more classes present may be accounted to this overlap - the transition having ceased at the time of Yassi Ada (where, anyway, we would not expect the African additions to the cargo). We must not overlook the chronological and regional difference of Yassi Ada in its use as a model for comparison.

Some further features of the diversity of the Yassi Ada assemblage should be appreciated. Other parts of the ship, especially the 'galley area' also contained a range of minor tablewares and miscellaneous amphora finds[88]. One of these (P79), interestingly enough, was a class 43 of the standard sixth-century type found in Britain. Another is a class 45 (P74)[89]. Clearly such amphorae, not carried as a principal cargo, could remain in use for a century or more beyond their general *floruit*. Another area of interest is the discovery of

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[86] It is noticeable that Thomas does not cite Bass directly.

[87] Thomas, 'The Context', p. 12.

[88] Bass and Van Doorninck, *Yassi Ada*, p. 184.

[89] *Ibid.*, p. 184.

reworked amphora sherds at Yassi Ada which were found to constitute stoppers for the standard cargo amphorae[90]. Generally these were of the same fabrics as the amphorae themselves and were sealed in with pitch or resin. The writer can recall having seen such pieces among the British assemblages in the past (without realising their significance). At least one is published, a Class 44 disc from Congresbury in Somerset[91]. This roughly worked piece, some 7 cm. in diameter compares very closely with the Yassi Ada pieces, which average between 5 and 7 cms in diameter. This evidence, it should be noted, again reinforces the idea that the insular amphorae assemblages are consistent with normal Mediterranean cargoes. An amphora at Congresbury clearly arrived with its stopper in place (hence with its contents, likewise), the stopper not being of an easily reinsertable type. In a few cases such residual use of old amphorae, and amphora sherds as stoppers, might partly explain variety amongst the decorative forms on British finds.

Campbell, also, does not accept that the Yassi Ada model is appropriate to the British evidence. He cites the existence of other Mediterranean shipwrecks where such pottery is found as a much more minor element of cargoes[92], while Thomas's citation of the 'tramp steamer' model has already been discussed[93]. If we are to follow these views we might be looking at dozens of voyages. One can only say that the narrowness of date range of the tablewares must be appreciated here and that the the amphora types do not range so widely in form as to suggest a long period of activity. If a dozen or more voyages were involved, they span no more than a few decades. Such maximal

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[90] *Ibid.*, pp. 160-1.

[91] P. Rahtz, 'Pottery in Somerset, AD 400-1066', in V. Evison *et al.*, eds, *Medieval Pottery from Excavations*, London, 1974, p. 110, fig. 3 no. 20.

[92] Campbell, 'The Archaeological Evidence', forthcoming; A. J. Parker, 'Shipwrecks and Trade in the Mediterranean', *Archaeological Review from Cambridge* 3 (1984), pp. 99-114.

[93] See pp. 109-10.

views must also be considered in their broader context. It is more natural in archaeological terms to err on the side of assuming plurality - which may be contrasted with the reductionist tendency of historians[94] - but the archaeological views do not exist in a vacuum. Campbell, after all, cites the likelihood that cultural contacts were facilitated by regular voyages from the east - echoing Haseloff's groundless assertions on this point[95] - and this hints at some unease with the notion that the voyages could have no significant cultural impact. This will be discussed further below.

Alcock strongly questions our ability to quantify the cargoes: especially to minimalise the activity on quantitative grounds. Calculating from on-site experience, he estimates that the recovery rate of vessels might be less than 0.2%[96]. We should concur with Alcock[97] that on-site experience inclines to the view that most Bi vessels are represented archaeologically by one or two sherds only - though he observes that at odd sites, such as Dinas Powys (to which we may add Derrynaflan[98]) most of the sherds come from one vessel. This, as he himself observes, makes a contrast with attempts to estimate site frequency from sherd numbers through application of statistical methods at selected British sites[99].

The question is obviously a matter which requires that we measure the number of vessels recovered (regardless of the number of sherds) and compare this to the relative quality and quantity of excavation area - but such things can

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[94] See p. 329.

[95] G. Haseloff, 'Insular Animal Styles with Special Reference to Irish Art in the Early Medieval Period', in M. Ryan, ed., *Ireland and Insular Art AD 500-1200*, Dublin, 1987, p. 45.

[96] Alcock and Alcock, 'Excavations at *Alt Clut*', pp. 138-9.

[97] *Ibid.*, pp. 138-9.

[98] Where the sherds were concentrated in a ditch. I would like to thank Raghnall O'Floinn for showing me the Derrynaflan material.

[99] *Ibid.*, pp. 138-9.

only be measured in impressionistic terms, as we will see. We might start by taking the Yassi Ada total as a model to estimate quantities from: 900 amphorae. The current British total of classes 43 and 44 is, at a rough estimate, around 160 vessels[100]. This is around 18% of a ship's cargo, using Yassi Ada as a model. If we remove from these figures the large totals from Tintagel and Congresbury the total for the remaining sites is around 65, or 7.2 % of a cargo divided among some 30 sites. Postulating then that we might have found as much as 60%, say, of the total material at Congresbury and Tintagel, we will postulate a figure of 70-80 vessels for these two sites combined, or around 8% of a cargo. Superficially, then, the evidence does not yet preclude the single-ship model. On the other hand, however, Thomas estimates that the scale of excavation at Tintagel may be as low as 10% of the potential area, which would justify the conservatism of Alcock's estimate. Whether all areas will produce the scale of material so far found is debateable: the area excavated by Radford on the island is outside of the fortress area now recognised under the castle. It may be a likely rubbish dump for refuse from the castle. On the other hand, amphora sherds seem to have been found in every recent excavation on the site. The fact that these have become increasingly focussed on more likely sites (e.g. the harbour[101] and the churchyard[102]) only slightly diminishes the ubiquity of the material.

No evidence as to quantity so far gives reason to imagine that any site in the north of the Irish Sea basin will produce the same scale of finds as those in the south. Many of the Cornish finds have been only been surface finds of stray vessels. The unexcavated sites which produced these may produce large

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[100] Revised totals in Thomas, 'The Context', p. 12; *A Provisional List*, pp. 10-13, and recent finds from Derrynaflan and Whithorn.

[101] A. Bowman, 'Underwater Survey at Tintagel Haven', in C. Morris *et al.*, *Tintagel Castle Excavations*, 1990, Interim Report, English Heritage, 1991, p. 23.

[102] C. Thomas and J. Novakowski, *Excavations at Tintagel Parish Churchyard*, Spring 1990, Interim Report, Truro, 1990, pp. 1-4, 14-15.

Imported Mediterranean Ceramics
in
Western Britain and Ireland

150+
10-30
2-9
1

PRS Form C: Mediterranean and
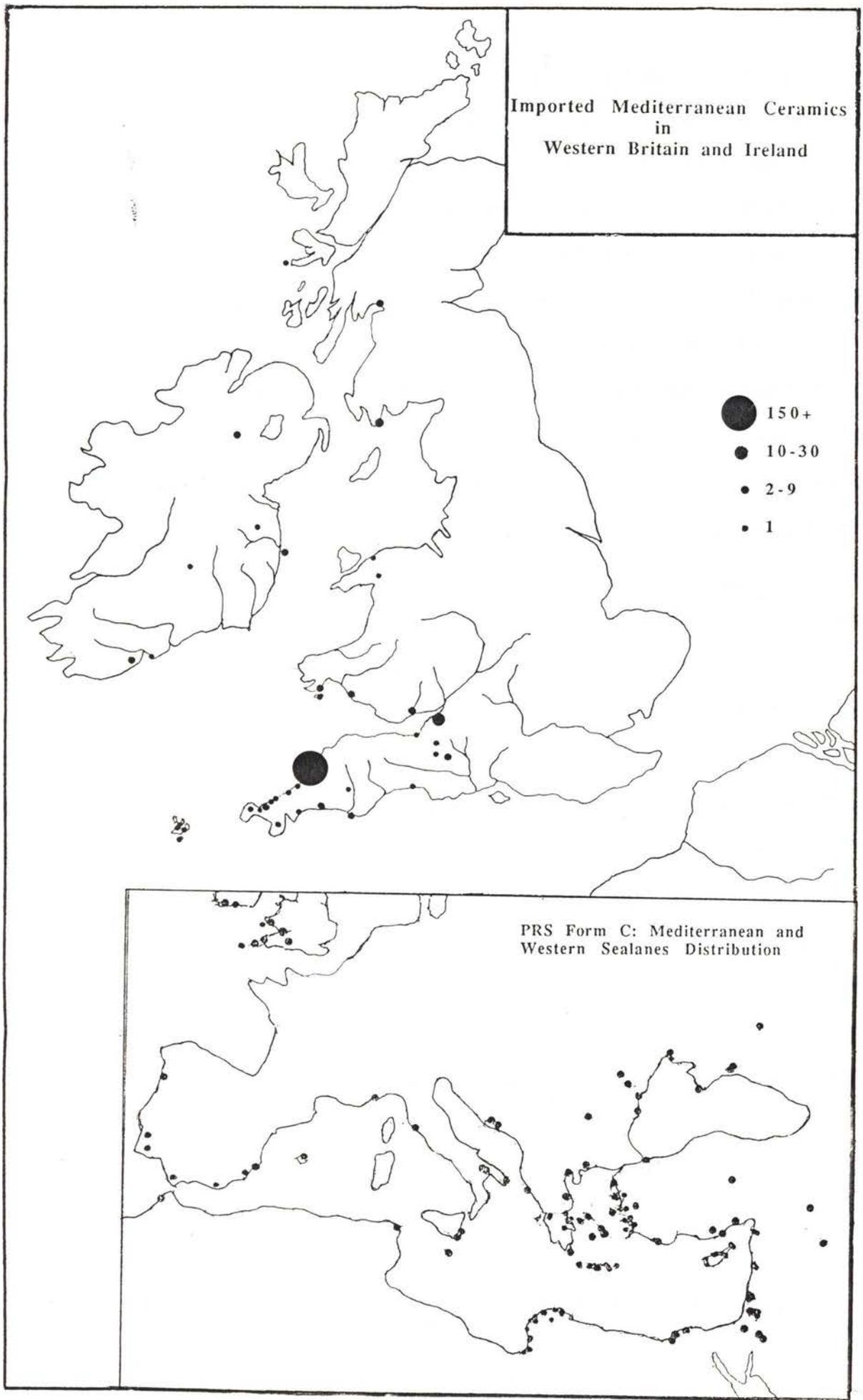Western Sealanes Distribution

Fig. 5

totals. But we should also note the increasingly broad range of its distribution (the accompanying distribution map shows the sites and proportions of wares so far excavated - a distinction is not made between individual types in view of the fact, as explained above, that the wares are likely to be contemporary and different cargoes are probably not distinguishable from different selections of types).[102A] Finds from Clogher (Co. Tyrone), Derrynaflan (Co. Tipperary) Inishcealtra (Co. Clare), Dumbarton (Dumbartonshire) and the recent find of several vessels at Whithorn (Wigtownshire), have extended the distribution markedly in the last decade. The distribution still seems to be focussed on the Irish Sea, however, with only relatively small quantities coming from inland sites such as Inishcealtra and Derrynaflan, but larger totals from waterside or near-coastal sites such as Dalkey Island and Whithorn (though the latter two sites, it must be noted, were larger scale excavations than the former). The northern end of the Irish Sea also has clearly fewer than the south. This might be good grounds for not following Thomas in considering the more northerly finds as part of the voyage of a Mediterranean ship[103]. It seems as likely that they are more local redistribution from the southwest, upon which the distirbution clearly the centres. Brittany is another question. A definite piece of Class 44 amphorae has been found at Île Lavret, Bréhat[104] and this must give pause. The idea of a voyage into the Channel mouth is supportable by finds as far west as High Peak and Bantham in Devon - the latter clearly a coastal trading site to which the finds did not travel overland[105]. The early medieval archaeology of Brittany is so poorly known that major find sites must not be ruled out.

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103 Thomas, 'The Context', p. 20.

104 P. Giot and G. Querre, 'Le Tesson d'Amphorae B2 de l'Île Lavret (Bréhat, Côtes-du-Nord) et le Problème des Importations', *Revue Archéologique Ouest* 2, 1985, pp. 95-7.

105 A. Fox, 'Some Evidence for a Dark Age Trading Site at Bantham, near Thurlestone, South Devon', *Antiquaries Journal* 35 (1955), pp. 55-67; S. Pollard, 'Neolithic and Dark Age Settlements at High Peak, Sidmouth, Devon', *Procedings of the Devon Archaeological Exploration Society* 23 (1966), pp. 35-59.

102A A map showing distribution of PRS Form C, the most clearly datable Mediterranean element in the cargo, is appended.

What cargoes were involved? Two models of commerce must first be considered. If *negotiatores* were pushing into the Atlantic as a regular activity, the idea that a few ships might proceed on a speculative voyage to Britain is plausible. Campbell's suggestion that the western Mediterranean finds are not in greater bulk than the British would bely an escalating model such as this - but, as stated above, this is probably an erroneous view on Campbell's part. Such a trip might have brought back any suitable cargo. The second model, usually taken for granted in discussions of this topic, is the idea that Britain was singled out as a destination: the core of the return cargo being alluvial tin, melted into ingots. This heavyweight cargo would be a logical replacement for the full amphorae. Evidence for early medieval tin-working in Cornwall has been mustered by Penhallurick in his recent, comprehensive, survey. Collation of this data does not bring immediate rewards for those seeking to tie the Mediterranean imports to tin-working areas. But if we follow Thomas in extending analysis to take in all areas worked in antiquity, rather than the one or two definite early-medieval sites out of a potentially much larger number, we may conclude that more than one potential landing place of the Mediterranean wares was close to tin working sites[106]. Ingots of worked tin are attested in early medieval contexts, at Prah Sands giving radiocarbon dates to the seventh century[107].

Are there other likely export goods? Campbell suggests other metals, citing in particular traces of British lead from Carthage[108] - but presumably these could be recycled from the Roman period. We should accept his point, however, that tin is not the only possible element, and any supplementary goods may be carried once a major cargo has rendered the voyage profitable, even if they are goods that are available more close to home. Goods such as

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[106] Thomas, 'The Context', p. 14.

[107] Penhallurick, *Tin*, p. 234.

[108] Campbell, 'The Archaeological Evidence', forthcoming.

honey or leather are also possible and quite able to survive intact a voyage of a couple of months. Anyway some goods might be sold on the return journey, not carried all the way back to the eastern Mediterranean - the ships may indeed have 'tramped' their way back.

Of the outward cargoes we should note the Yassi Ada example, where the cargo space is dominated by the amphorae and their contents - which contrasts with the small proportion of the cargo space which the Gaulish ceramics of the seventh century would have occupied in any ship. Even so, heavy goods might not have been the most valuable element in the cargo. The amphorae may have been a ballast for a valuable cargo of spices, or other valuable goods of light weight. What was in the amphorae? The usual conclusions are wine (classes 43 and 45) and oil (class 44). Residue analyses on Mediterranean examples are only at an early stages[109], however, and nuts, fish sauce, even nails, are all possible. Gregory of Tours records wine of Gaza being brought to the west[110] - the amphorae of class 45 often being linked with this traffic. One presumes a market for wine could be found. Oil, however, is not even listed as a likely ship's cargo in the commentaries on the *Muirbretha*[111], so we may need to consider it less likely.

The economic basis of the activity is another vexed question. The presence of Greek merchants at Mérida might make entrepreneurial trade likely, though we may doubt that Mediterranean entrepreneurs had any advance understanding of the sorts of surplus that potentates in western Britain and Ireland might use to pay for imported luxuries. Perhaps the initial motivation was not trade at all, but attempts to secure allegiance from the northern

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[109] J. Condamin, 'Recherche de Traces d'Huile d'Olive et de Vin dans le Amphoraes Antiques, *Figlina* 1 (1976), pp. 143-58; Hartgroves and Walker, 'Excavations in the Lower Ward', pp. 26-7.

[110] See p. 106.

[111] See p. 255.

neighbours of the Franks. We must remain completely open-minded on this point. We cannot be sure that the ships were manned by Greeks, only that they had been loaded in the eastern Mediterranean. The various excavations around the Mediterranean are bringing to light possible parallels to the graffiti and dipinti on the western sealanes amphora finds. These may in time tell us something of the ethnicity of the traders[112]. It is fair to say that the presence of both Latin and Greek in these might be seen to detract from the homogeneity model suggested above. On the other hand, we have little or no knowledge of the mixture of races which might be in a Byzantine ship's crew, let alone among stevedores. Modern ships crews are frequently international in mix and we should note the evidence of eastern Mediterranean graffiti on the Gaulish ship from Fos-sur-Mer[113]. Thomas concludes that the medium of communication between the merchants and their customers must have been Vulgar Latin - the Latin graffiti may be seen as adding weight to this, though we perhaps should not follow Thomas in highlighting the incidence of sites with Latin memorials and other christian remains as being more likely landing points[114].

There seems no doubt that the ship/s which reached the Atlantic had travelled from a base in the eastern Mediterranean, with only a stop in Africa where it/they took on more goods, without unloading the principal cargo. If the goods had been transhipped to other vessels, we would expect a greater admixture of types, including African amphorae (though a few of these may be present[115]). A voyage from the Aegean or Alexandria represents a voyage in

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112 Bass and Van Doorninck, *Yassi Ada*, pp.161-2; Thomas, *A Provisional List*, pp. 13-14; Fulford and Peacock, *Excavations at Carthage*, pp. 141-54.

113 *World Atlas of Archaeology*, Cambridge, 1985, p. 110. I would like to thank my student Bernard Forster for drawing this reference to my attention.

114 Thomas, 'The Context', pp. 19-21.

115 Hartgroves and Walker, 'Excavations', pp. 24-5.

the vicinity of some 5,000 kilometres (10,000 for a return trip). The voyage may have been accomplished in more than one sailing season, though we may make a case for a voyage over a single season being more than possible. At 2.5-3 knots average speed the return journey would take not much less than 3 months sailing time, allowing for short stops, but not for a longish stay in Britain to change cargoes. As has been discussed above, the high proportion of eastern Mediterranean ceramic vessels in the insular assemblage gives us no reason to suppose that the major cargoes of the ships were exchanged *en route,* though clearly more goods were taken on in North Africa, or some other place in receipt of African wares.

Reynolds has commented on the small quantity of eastern Mediterranean wares in Valencia, including an absence of PRS[116] during its sixth century *floruit* - while noting the regularity of imports of African amphorae[117] from the third through sixth centuries[118]. This may provide some clues as to routes of voyages. Southern Spain naturally enough looks to Africa, which is part of the same trading province. A ship coming east from Constantinople, however, and perhaps looking for a market away from the main catchment of African products, need not be expected to have travelled as far north as Valencia, whereas PRS is found at Alicante[119], which would tally with a voyage taking a direct route to the south of the Balearics (the direct route to Valencia is obstructed by the latter islands). Currents of around 1-3 knots along the southern shore of the Mediterranean favour only an eastern voyage, so on its outward leg a vessel would more likely follow the northern shore westward from Alicante. African coarsewares from Tintagel suggest that a landfall in

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116 P. Reynolds, 'African Red Slip and Late Roman Imports in Valencia', in T. Blagg *et al.,* eds, *Papers in Iberian Archaeology* (BAR Supplementary Series 193 1 & ii) Oxford, 1984, vol. 2, pp. 474-5.

117 *Ibid.,* p. 475.

118 Simon Loseby, *pers. comm.,* has noted a similar pattern at Marseilles.

119 Reynolds, 'African Red Slip', p. 475.

Tunisia was almost certain *en route*. Some delay would be likely here, however, as the possibility of a favourable exit wind from Tunisia in May-September is less than 10% for a vessel travelling westward. The frequent easterly winds *(Levanter)* from Spring through to Autumn, however, would favour the voyage westward into the straits.

The boundary between the Mediterranean world and the western sealanes is no arbitrary historical construct. To exit the Mediterranean by way of this route a vessel faces a difficult voyage against an incoming surface current of around six knots. This current is the consequence of the small number of watercourses flowing into the Mediterranean, which replace less than 30% of the amount of water lost through evaporation. On the return voyage, both the current in the straits and along the southern shore of the Mediterranean would assist a quick passage homeward.

Once in the Atlantic, the prevailing winds from April onward are northwesterly until one is north of Galicia. As in the Mediterranean, these tend to be consistent through summer months, with the frequency of gales after April becoming very low indeed. Visibility is good in summer months, with cloud cover over Iberia being virtually non-existent. The coast is low-lying from north of Granada through to Galicia, however, which would make recognition of landfalls difficult. On the other hand, a vessel making a long tack away from land stands little danger of disorientation through losing sight of celestial marks.

Imported Mediterranean pottery in Portugal and western Spain suggests landfalls in the vicinity of the Tagus and Mondega - more specific landfalls are not yet known. Gregory of Tours and Isidore of Seville also suggest a voyage by Martin of Braga from the Mediterranean to Galicia, which in this era might indicate either the north or west coasts of Iberia, even perhaps the Duoro estuary.

No evidence exists that the vessels put in to shore anywhere between Iberia and Cornwall. We have already looked at potential political reasons for

this - with Byzantine interests excluding the Franks. Some maritime support for this exclusion may also exist in the fact that an exit wind from the Bay of Biscay is below 30% likelihood for a vessel travelling north - and the bay is notorious for storms. Local knowledge in Galicia presumably included an understanding of the route required to cross the Bay of Biscay and of the Ushant landfall as a landmark *en route*. It is difficult to imagine mariners undertaking a voyage direct to Britain all the way out of sight of land and it is doubtful that intellectual knowledge of the orientation of the landmasses was accurate enough to make this possible[120]. The Admiralty Pilot warns that 'The NW coast of Brittany...is encumbered by dangers'[121]. These lie between 10 and 14 miles offshore and comprise reefs and islands. There is a particular danger of being set by the flood tide onto the shoals SE of Île d' Ouessant (Ushant). 'The area between Île d' Ouessant and the mainland SE is encumbered by islands, reefs and shoals, which it is imprudent to approach without local knowledge'[122]. North of Galicia the chances of a fair wind in summer are around 60%, though this will tend to be southwesterly and may present problems for entering the Celtic Sea. For the return journey, the chances of a fair wind are only around 30%, increasing as one proceeds south of Cape Cornwall, but this, also, is inclined to be westerly.

A primary landfall in the Tintagel region seems certain. Others in Munster, Dyfed and Somerset are also possible. Whether these voyages went further north than the Celtic Sea is uncertain. Finds north of this point are scattered and may be attributable to secondary distribution. The Isles of Scilly are a likely first landfall, however - apart from the archaeological evidence, the relatively weak tidal streams around the islands and consistent, if shallow, ground around

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[120] See pp. 115-6.

[121] Hydrographer, *Channel Pilot*, p. 26.

[122] *Ibid.*, p. 215.

them contrasts with the dangerous shoals and groundswell off Cape Cornwall. For a vessel proceeding from the southwest into the Celtic Sea, proximity to Cape Cornwall brings the danger of being driven into the Channel mouth, again Scilly is a preferable landfall. Miller has suggested, however, that Munster was a landfall for ships from the south and this, too, has some of the same advantages[123]. If we allow for the presence of more than one ship we need not consider that the same first landfall was made each time.

We may distinguish the maritime circumstances of the western part of the Bristol Channel from the east, which may explain the prominence of Tintagel in the distribution. West of Padstow, Lundy and St Govans the tidal streams are influenced by the set of the tide into the St Georges Channel. The Admiralty Pilot also warns that between Cape Cornwall and Hartland Point:

> A groundswell is usually present and this renders the coast unsuitable for anchoring and makes access to the small inlets and harbours difficult and, at times, impracticable[124].

The Pilot advises that 'Land can safely be made between Hartland and Trevose'[125], though we should note that this is partly on account of the presence of modern lighthouses. The Pilot also recommends that Trevose Head (71 metres) is a good landfall, however, on account of its distinctive *profile*[126]. In good weather this is visible from around 15-18 nautical miles. The surrounding country is lower, causing it to stand out. The headlands of the Rumps and Tintagel are also distinctive. The Pilot further highlights Tintagel church as a landmark[127]. While the present church is only high medieval in

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123 Miller, 'Hiberni', p. 315.

124 Hydrographer, *West Coasts of England and Wales Pilot*, p. 27.

125 *Ibid.*, p. 31.

126 *Ibid.*, pp. 27 & 31.

127 *Ibid.*, p. 33.

date, we should note the evidence for earlier activity on the same site, especially the seeming burial ground from the 1990 excavations[128]. Along this stretch of coast the swell sets vessels SW toward the land, but the influence of groundswell seems to be less threatening. All of this does tally interestingly with the seeming selection of Tintagel as a major landfall. We should also take note of Sir Richard Grenville's positive assessment of the anchorage, to set against Dark's negative comments[129]:

> this baye is all fayer sandy grounde good to ancor in and thear is neuer lesse then five fathoms of water at the loeste ebbe, shepes may ryed here all wyndes exsept the northewest[130].

The shoals 12 miles NW. of Cape Cornwall would require a wide berth. On leaving Scilly, soon after high water, a vessel would face a tidal stream setting E. at first (+0130 —+0530 Dover) and then NE. (+0600 — -0500). Working the tides would thus be necessary along this stretch. At turn of tide a vessel heading east may face a SW tide (-0430 — -0030)[131]. At 2.5 knots Scilly to Padstow would take around 24 hours. We cannot discern whether voyages along this route would have travelled in stages, stopping in at land overnight, or would have taken the NE. set of the tide to achieve an offing and not put in again until east of Padstow. The presence of Mediterranean pottery in the bays of Padstow and St Ives might imply landfalls at these points, these only stray vessels so far may be secondary redistributions, perhaps from Tintagel itself. The imported Mediterranean wares are, anyway, so ubiquitous along this coast that there are many sites which may or may not be primary stopping places. On the other hand, it would be naive to assume that all such sites were primary

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[128] Thomas and Novakowski, *Excavations at Tintagel*, pp. 4 & 13.

[129] See p. 85.

[130] C. Thomas, 'Minor Sites at Tintagel Island', in *idem, ed., Tintagel Papers (Cornish Studies* 16), 1988, p. 46

[131] Hydrographer, *Admiralty Tidal Stream Atlas: Irish Sea and the Channel*, Taunton, 1974.

stopping points for mariners without local knowledge. Further finds will hopefully clarify the picture. We should note, however, that both the major harbours on this coast are encumbered by shoals and groundswell which, while their size renders them valuable as harbours today, may not have made them attractive to early medieval vessels, apart from local traffic. The eminence to the north of St Ives has a Medieval chapel, probably of the 'beacon' type[132], but it is not established whether there was earlier activity on this hill.

There is a danger of attributing a determinist role to a simple maritime factors, without knowledge of the mariners' actual respect for such factors. Their influence in a case such as this, however, where the mariners are probably foreign to the region, is, accordingly, likely to be very high. We must suppose that a vessel from abroad making for Tintagel probably did not do so accidentally, hence a local pilot (obtained in Scilly?) or some local knowledge may have been involved. At this point we must ask: did the ship come to Tintagel because it was accessible, or because it was a distribution point for the desired product? If the desired product was tin, one presumes it could have been obtained elsewhere on the coast. The scatter of finds of Mediterranean imports along both coasts also suggests that the ships' cargoes could have found a receptive market elsewhere. A combination of factors is likely to be responsible, in which the maritime convenience of the site, almost entirely discounted by scholarship, is likely to have been a major factor.

Thomas' map of distributions from putative centres in the Bristol Channel is mostly very convincing[133]. Scilly and Tintagel seem inescapable choices. There must also be little question that all the Somerset finds are distributions from the north coast - with the quantities from Congresbury making a landfall in the Yeo estuary. The proximity of this point to Glamorgan,

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[132] See p. 76.

[133] Thomas, 'The Context', p. 17.

however, makes questionable whether there would need to be a separate progress to take in Dinas Powys.

At this point we may note that a primary voyage to the southwest is all that may be taken for granted. The contrast between the northern and southern occurrences within the Irish Sea basin is considerable. North of a Dublin/Gwynedd line, the wares occur exclusively upon sites which are politically in the highest category: Whithorn, Iona, Dumbarton and Clogher. In Cornwall, the context can be more humble: the very small enclosed site of Trethurgy and casual finds such as at St Michael Carhayes, St Ives and Padstow are not uncommon. This perhaps diminishes the likelihood of a voyage north of Dublin, and likely enough of a voyage north of Cornwall. Where goods are ubiquitous finds this suggests a ready availability. Where only very high status sites are in possession of such goods, the cargoes in question may be smaller scale. More will be said about these sites and their context in Irish Sea traffic in Chapter 5.3 where comparisons with E ware and glass distributions may be brought to bear.

There is a great deal more to be learnt about this episode in sixth-century maritime exchange. We should note the following likely conclusions: that the voyages (we are safest in assuming more than one) were a short-lived episode of direct contact between the eastern Mediterranean and western Britain, exclusive of western Gaul. The causes remain a mystery, but the voyages *do* extend known distributions of eastern goods in the western Mediterranean and contemporary discourse shows why Britain, rather than Gaul, may have preoccupied Byzantine interests.

It has been argued above that the historical importance of the traffic (especially in establishing archaeological chronology) does not lie in it having any interventionist role in cultural development. Such cases as associations with the spread of monasticism[134], bubonic plague[135] (British and Irish

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[134] Campbell, 'The Archaeological Evidence', forthcoming; Haseloff, 'Insular Animal Styles', p. 45.

outbreaks recorded only in chronicles which are likely to be derivative of foreign sources[136]) and even leprous human bones from Tean, in Scilly[137] - which Thomas may be wrong in asserting must be those of a Mediterranean visitor[138] - and Thomas's case for foreign ideas of commemoration at Tintagel[139] are scrapings which hint at a desire to show a stronger physical impact at the British end than is really possible or necessary. We should recall Mytum's and Griffiths's strictures on the over-emphasis on intervention through long-distance trading links[140], certainly Campbell's suggestion that the political status of southwestern hillforts declined with the removal of the supply of prestige goods brought in by the sixth-century voyages, seems to be quite worthy of such criticism[141].

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[135] J. Morris, 'Dark Age Dates', in M. Jarrett and B. Dobson, eds, *Britain and Ireland,* Kendal, 1965, pp. 145-85. Bubonic plague, being dependent upon rodent agency (rats) to convey the insect/vector (fleas), which in turn carries the bacillus, is much more easily spread by direct maritime links, in that ships convey rodents. This would make the link with the direct voyages plausible if there were any case to be made from the insular sources. There is not. Morris's case depends on the assumption that negative evidence for the plague in Anglo-Saxon England shows that it was only present in western Britain. There are no sources for Anglo-Saxon England and only unreliable ones for the west. For the chronology of the Mediterranean outbreak see J. C. Russell, 'That Earlier Plague', *Demography* 5 (1968), pp. 174-183.

[136] 'Mortalitas Magna in qua pausat Mailcun rex Genetodae', *Annales Cambriae* s.a. 549 (ed. J.Morris, *Nennius: British History and the Welsh Annals,* London, 1980, p. 85); 'Mortalitas magna in qua isti pausant...', *Annals of Ulster,* s.a. 549 (ed. MacNiocaill and Mac Airt, pp. 76-7).

[137] Thomas, *Exploration,* p. 198. Also see J. Hart, 'Leprosy in Devon and Cornwall, Problems and Perspectives', in M. Bowden, ed., *From Cornwall to Caithness* (BAR British Series 209), Oxford, 1989, pp. 261-9.

[138] Leprosy was not necessarily a disease confined to the Mediterranean in the sixth century. See: *Annals of Ulster,* s.a. 571 (ed. Mac Airt and MacNiocaill, p. 86-7); also I. C. Peate, 'The Antiquity of Leprosy in Wales', BBCS 26 (1974-6), pp. 361-3; Gregory of Tours, *De Virtutibus Sancti Martini,* I.11 (ed. Krusch, p. 146); the Fifth Council at Orleans in 549 and the third at Lyons in 583: *Concilia Galliae* A. 511-A695 (ed. C. de Clercq, *Corpus Christianorum Series Latina,* vol. 148A, Typographi Brepols Turnholti, 1963, pp. 156 & 233).

[139] Novakowski and Thomas, *Exacavations at Tintagel Churchyard,* p. 16.

[140] See pp. 90ff.

[141] Campbell, 'The Archaeological Evidence', forthcoming.

Thomas's idea that the cross-inscribed dishes played a role in spreading cross-forms is more supportable, as the known use of imported dishes over a period of time is what would be required, not the hypothetical presence of cultural practitioners. *Contra* Haseloff, however, we should not place too much emphasis on the contacts as having potential to date the spread of less tangible artistic influences[142], however satisfying the chronological comparisons may seem (the same is even more true in the case of the seventh century traveller Arculf[143]).

Chapter 4.2 The Atlantic Shores Look Westward

The Atlantic Orientation of Western Gaul in the Sixth Century

The insecurity of the western coasts of Gaul in the fifth century, in the face of piracy and migration, probably made the coastal ports and islands something of an economic backwater: though, as we have seen, there are reports of naval activity there is no mention of maritime trade. In the sixth century however, with western Gaul under Frankish domination, we see commerce in the coastal towns and travel from the coastal ports to offshore islands and foreign lands.

The offshore islands may have been pirate bases in the fifth century: this is certainly true of those around Angers where the Saxons had colonies[144]. These Saxon settlements may have persisted in a distinct form in the sixth century, as Gregory of Tours seems to have been patron to a group on the Loire in 584[145]. In some cases islands were centres of production. Leudast, the

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[142] Haseloff, 'Insular Animal Styles', p. 45.

[143] See pp. 251-4.

[144] See p. 132.

[145] *Historia Francorum* VIII.18 (ed. Krusch, p. 402).

rebel count of Tours, was born on an unidentified island in Poitou called Gracina, where vineyards were tended. In the seventh century some of the islands were to house monasteries, Noirmoutier for example, which was also a commercial or production centre[146].

Around 570 Waroch, the count of Brittany, is described as setting sail from Vannes, to escape to the offshore islands around the coast of Morbihan:

> The rumour went out that Waroch was trying to reach the islands, and that he had put out to sea in ships which were heavily laden with gold and silver, and with all his other possessions[147].

The ships sank and he escaped only with loss of cargo.   This episode makes clear the easy availability of ships in ports in and around Brittany. We cannot assume these were all 'Gaulish'. The proximity of Saxons and Bretons to Nantes and Saintes could have made ships of these peoples available to carry cargoes - especially if the maritime Saxons had relied on maritime activity for basic communication.

The classes of ceramics known as *sigillées paléochrétiennes* are a potential key to the geographical pattern of the seaborne and river traffic in and out of the ports of sixth- and seventh-century Gaul. These are fine orange wares and black-washed grey wares found in France in fifth-to-seventh-century contexts. They are also found in western Britain, where finds of the ware are generally labelled 'D ware'[148], and in increasing numbers in Spain. On French sites the range of forms includes bowls, shallow dishes, mortaria and pitchers (bowls, dishes and mortaria are found in Insular contexts). Decoration ranges from elaborate stamped flowers and hatchings, to very simple scored lines.

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[146] See p. 244.

[147] 'Quod Warocus in insulis fugire cupiens cum navibus oneratis auro argentoque vel reliquis rebus eius, cum alta maris coepissent commoto vento, dimersis navibus, res quos imposuerat perdidissent', *Historia Francorum* X.9 (ed. Krusch, p. 492).

[148] Thomas, *A Provisional*, pp. 19-20.

Several major groups of the ware are isolated, though the ware does not yet have a fully refined chronology. Three basic Gaulish groups are defined by the Rigoirs: 'Languedoc', 'Provençal' and 'Atlantic'[149]. The Languedoc group has a very much higher proportion of orange vessels (about 50%) than the other two and these, in conjunction with the presence of palm stamps and other motifs from Africa, have led Hayes to suggest that this group is the earliest and a direct derivative of ARS[150]. Less than 10% of the Provençal and Atlantic groups are orange wares and this, along with the spread of stamped decoration to the sides of the pot, and a generally fifth-century and later horizon, has led Hayes to put these at the end of a line of descent from the Languedoc group[151]. On this basis, the Atlantic group may be the latest in development and this is consistent with the chronology of western Gaulish sites as currently known[152]. The Atlantic group is of primary interest to the present study. It is unresolved which centres actually produced the Atlantic group. The Rigoirs favour Bordeaux[153], but this is questioned by French scholars[154]. There are also local variants, for example in the Touraine[155].

The distinction between the Atlantic and the other *paléochrétienne* ceramic groups argues for a lack of easy exchange over the Aude-Garonne watershed: though the industry spreads at some point, the actual wares are not carried across the watershed. The Atlantic group is appositely named, as it is found in a clearly coastal distribution and up the rivers of western Gaul. It

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[149] Rigoirs & Meffre, 'Les Derivées', pp. 207-264.

[150] Hayes, *Late Roman Pottery*, pp. 402-4.

[151] *Ibid.*, p. 402ff.

[152] Randoin, 'Essai', pp. 103-112.

[153] Rigoirs & Meffre, 'Les Derivées', p. 207ff.

[154] J. Lapart, *pers. comm.*

[155] B. Randoin, *pers. comm.*

spreads into the Channel, where it is found at Rouen - and to Britain, where all known the finds are of the Atlantic group[156].

James[157] has mustered the strongest arguments for the decline in overland traffic through western Gaul to the Atlantic, which he tentatively would date to around 507 (the Battle of Vouille). In particular he concentrates upon the spread of stone sarcophagi[158], which certainly represent the sorts of bulk objects which are unlikely to be carried by private, lightweight traffic. The dating of these objects is still equivocal (it not being certain whether they are fifth or sixth century in date) however, and James' arguments, though convincing, depend heavily upon typological criteria. The southwest Gaulish sarcophagi, whatever their date, certainly indicate a developing distribution province focussed on the seas. Examples went both through Bordeaux and Narbonne, but the distributions are clearly inland along the river valleys from the sea and not overland[159]. The same pattern is seen in the distribution of the capitals of Pyrenean marble which, like the sarcophagi, only have a limited distribution outside the Aquitaine and Narbonne, but spread by sea to Nantes and to the Seine[160].

James would conclude that *paléochrétienne grise* finds support this pattern. Recent research by Jacques Lapart and the Rigoirs, however, has indicated that finds in the Gers départment, roughly equidistant along this route from the Mediterranean and the Atlantic, include examples from both groups[161]. While, as they observe[162], this must modify James' conclusions, it

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156 *Ibid.*, p. 211. Campbell would hint at the presence of regional variants from western Gaul, but this is as a *caveat*, not on the basis of actual identifications - Campbell, 'The Archaeological Evidence', forthcoming; *idem*, 'The Post-Roman Pottery', p. 125.

157 James, 'Septimania', p. 237-8.

158 James, *The Merovingian*, pp. 234ff.

159 James, 'Septimania', pp. 229ff.

160 James, *The Merovingian*, map p. 236.

does not demonstrate overland communication between the two seas. A total exclusion of traffic along this route is not likely: a lack of *through* traffic is demonstrated. A territory midway between both seas will receive goods from both. But the occupants of the shores do not receive goods from each other.

All of the above still does not explain the absence of down-the-line commerce, but there is not much indication that through traffic existed. Through traffic was occurring in east Francia. Why not here then? If ceramics could reach the Départment du Gers from both directions, it was physically possible for down-the-line exchange to occur. The sorts of political boundaries postulated by James might more restrict the movement of large objects such as sarcophagi than the exchange of lightweight ceramics - though, as observed above, the bronze bowls and other lightweight eastern Mediterranean objects moving northward along the Rhine corridor[163] do not make their way over the watershed to western Gaul[164]. Werner's study of the values of coins in eastern and western Francia may be significant in this regard[165]. Werner has proposed a model for the use of currency in south and west Francia which supposes a face value for the exchange of currency, as opposed to east Francia, where coin was used primarily as bullion. The argument rests upon a distributional study of mints, with the additional indicator of the presence of balances as grave finds. The presence of balances alone is commonest in Germany, England and the Pyrenees. In the area east of the Seine and in the Alps the proportion of balances is still high.   West of the Seine, however, the

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161 J. Lapart and J. & Y. Rigoir, 'Les Derivées-des-Sigilées Paléochrétiennes Decorées du Gers', *Societié Francaise d'Etude de la Céramique Antique en Gaule: Actes du Congrès de Toulouse*, 1986, p. 111-24.

162 *Ibid.*, p.123.

163 J. Werner, 'Fernhandel und Naturalwirtschaft im Östlichen Merowingerreich', *Bericht Römischen Germanischen Kommission* 42 (1961), pp.307-46.

164 James, 'Septimania', p. 239.

165 Werner, 'Fernhandel' pp. 307-46. See recent commentary in James, *The Franks*, p. 200ff.

number of mints increases, but only one balance has been found. At the very least this evidence indicates some economic, as well as political, difference between western and eastern Gaul. If, for example, exchange in currency was more restricted in western Gaul this would be a considerable reason for the establishment of local ceramic industries, rather than direct exchange for ceramics manufactured elsewhere. If exchange systems in east Francia depended on weight value of currency it might be natural that western Gaulish commerce looked inward. Western Gaul also exchanged with western Britain and Ireland, but those regions did not use coin.

We will conclude that the western zone was a province the connections of which were with the Atlantic sealanes. Even there, however, our evidence is scanty and while there is a temptation to make a little go a long way, a lot depends on how much isolated events are indicative of broader patterns and how they can be related to patterns which are much more clearly visible in the seventh century - Ian Wood's study of the North Sea in the same period tackles precisely the same problems. We will now examine the routes for which we have evidence.

Relations Between Gaul and Galicia

Maritime contact between Gaul and Spain in the latter part of the sixth century is recorded in the context of the conversion and conquest of Suevic Galicia. In *De Virtutibus Sancti Martini* a ship carries some relics of St Martin of Tours to a harbour in Galicia, arriving, Gregory says, on the same day as Martin of Braga from the Mediterranean[166]. It is alleged that, even though the relics travelled from Tours *'navigio prospero...velociter',* they and Martin of Braga had set out

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[166] Gregory of Tours, *De Virtutibus,* 1.12 (ed. Krusch. p. pp. 144-6). See discussion in E. A. Thompson, 'The Conversion of the Spanish Suevi to Catholicism', in E. James, ed., *Visigothic Spain,* Oxford, 1980, p. 83.

to travel to Galicia on the very same day. The idea that a traveller from anywhere in the Mediterranean could journey to Galicia in the same space of time that it takes to travel from Tours to Galicia is preposterous (even allowing for contrary winds!). The coincidence is no doubt a hagiographical embellishment making a link between the contemporary Martin and the missionary and spiritual ethos of his earlier namesake. At the very least the story might be taken to indicate that a sea voyage from Tours to Galicia occured at sometime around 550-565.

The missions to the Suevi, their subsequent conquest by Leuvigild and Visigothic princesses marrying Frankish royalty all occasioned much coming and going of noteworthy people between Gaul and Spain. The death of Chilperic and his rivalry with Guntram also seem to have been of interest to the Spanish kings. Whether these people went by sea in any or all cases, and whether they would have travelled on regular voyages of commerce which in the normal way went unrecorded, is unclear.

King Mir of Galicia sent ambassadors to Guntram just after 580. They were arrested, however, in 'the neighbourhood of Poitiers' at the orders of Chilperic and imprisoned for a year[167]. Just prior to this we hear of the death of the Frankish bishop Elafius while on a mission in Spain[168]. Leuvigild sent an ambassador to Chilperic (hence prior to 584[169]) called Agilan, who had occasion to dispute with Gregory as 'Tours lay on his route'[170]. We also hear of ambassadors to Guntram from Spain in 586.

A more specific maritime reference is in 585 when the conquest of Galicia by Leuvigild saw the subsequent looting of ships travelling between

[167] 'Cumque per Pectavum terminum praeterirent, quod tunc Chilpericus rex tenebat, nuntiata sunt ei.At ille sub custodia sibi eos exhibere praecepit et Parisius custodire', Gregory of Tours, *Historia Francorum* V.41 (ed. Krusch, p. 248).

[168] *Ibid.*, V.40 (p. 247).

[169] The death date of Chilperic.

[170] 'Leuvichildus vero rex Agilanum legatum ad Chilpericum mittit. Quem cum via Toronus detulisset..', *Historia Francorum* V.43 (ed. Krusch, p. 249).

Gaul and Galicia[171]. Had these ships been making the same voyage unmolested for a long time? Or is it more likely that their presence was accountable to the same political/ religious exchange highlighted above - perhaps traffic with Gaul escalating as relations became more strained with Visigothic Spain? If the latter, Leuvigild's actions might seem more easily explicable. A conquering king may do as he pleases, but such actions directed by a king smack of politically motivated intervention. On the other hand the episode refers to the 'possessions' *(res)* being taken. This certainly might suggest commercial voyages, though the word *res* is not specific to commercial cargoes. The looting is unambiguously of ships.

The routes taken by the ambassadors are hinted at, but it is not specified whether they travelled any of the way by sea. A voyage to Nantes would seem to be implied by the route taken by Agilan and thence via the Loire valley to Paris or Soissons. A journey by sea to Bordeaux and thence via Poitiers would also be on a straight line, however, so neither can be said to be a certain candidate. Galswinth, however, making the same journey from Toledo to Neustria, seems to have gone from Poiters to the north by *sea*. Venantius, an eyewitness[172], writes of her progress from Poitiers:

> The cold Loire suddenly accepted her...she arrived where the Seine flows into the sea, the fishy flood which joins with Rouen[173].

It is clear in this case that the voyage is not up the Loire to Nevers and overland, but *down* the Loire to Nantes and by sea to the Seine mouth. The route taken by the ambassadors of King Mir is less easy to disentangle. Presumably they

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171 *Ibid.*, VIII.35 (p. 404). For text and translation, see p. 85.

172 J. W. George, *Venantius Fortunatus*, Oxford, 1992, pp. 97-8.

173 'Excipit inde repens...Liger algidus...pervenit qua se piscoso Sequana fluctu in mare fert, iuncto in Rotomagiense sinu'. Venantius, *Opera* VI.5 [ll. 233-4] (ed. Leo and Krusch, p. 142).

were headed to Guntram's court at Orleans, not Burgundy, so a land-based route was probably used all the way. We should accept that the embassies between the Visigoths and the Franks went by land from Spain to Gaul: the Visigothic capital and heartland were in the central Meseta, to journey north to a Galician port to take ship for Bordeaux or Saintes would be unlikely as it was not safe terrain, lying too near to the Suevic kingdom, nor were the geographical obstacles much less than for the fully overland route to Gaul. Embassies between the Sueves and the Franks, however, doubtless went by sea from Gaul to Spain, to avoid travelling through the Visigothic territory and because it was the more convenient route. As we cannot imagine the latter political exchange to be on a very large scale, we would assume that the reference to the ships sacked by Leuvigild is almost certainly to ships whose primary purpose was commerce, not politics.

An archaeological dimension to traffic along this route is largely lacking. A southwest Gaulish sarcophagus found at Villaneuva de Lorenzana in Galicia might be evidence of exchange with this route[174], but Galicia is yet to produce definite finds of Atlantic group *paléochrétienne grise*. A few finds have been reported from Conimbriga and other Portuguese sites[175], which may indicate that increasing Portuguese investigation will reveal more. These do not seem to be of the Atlantic group, however, though published literature is not clear on this point and it is worth observing that familiarity with the various fabrics is the only real guide with fragmentary examples. Excavation in Spain has been patchy by comparison with France, though Spanish archaeologists have been conscious of the likely occurrence of *sigillata paleocristiana*. A look at the distribution as recorded in 1979 demonstrates that the *gris* form, where it is so far found, occurs so far as a distribution related to Mediterranean-oriented traffic[176]. Examples of *paleocristiana gris* in the very north, without

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[174] James, *The Merovingian*, p. 235.

[175] Hayes, *Supplement*, lxvii.
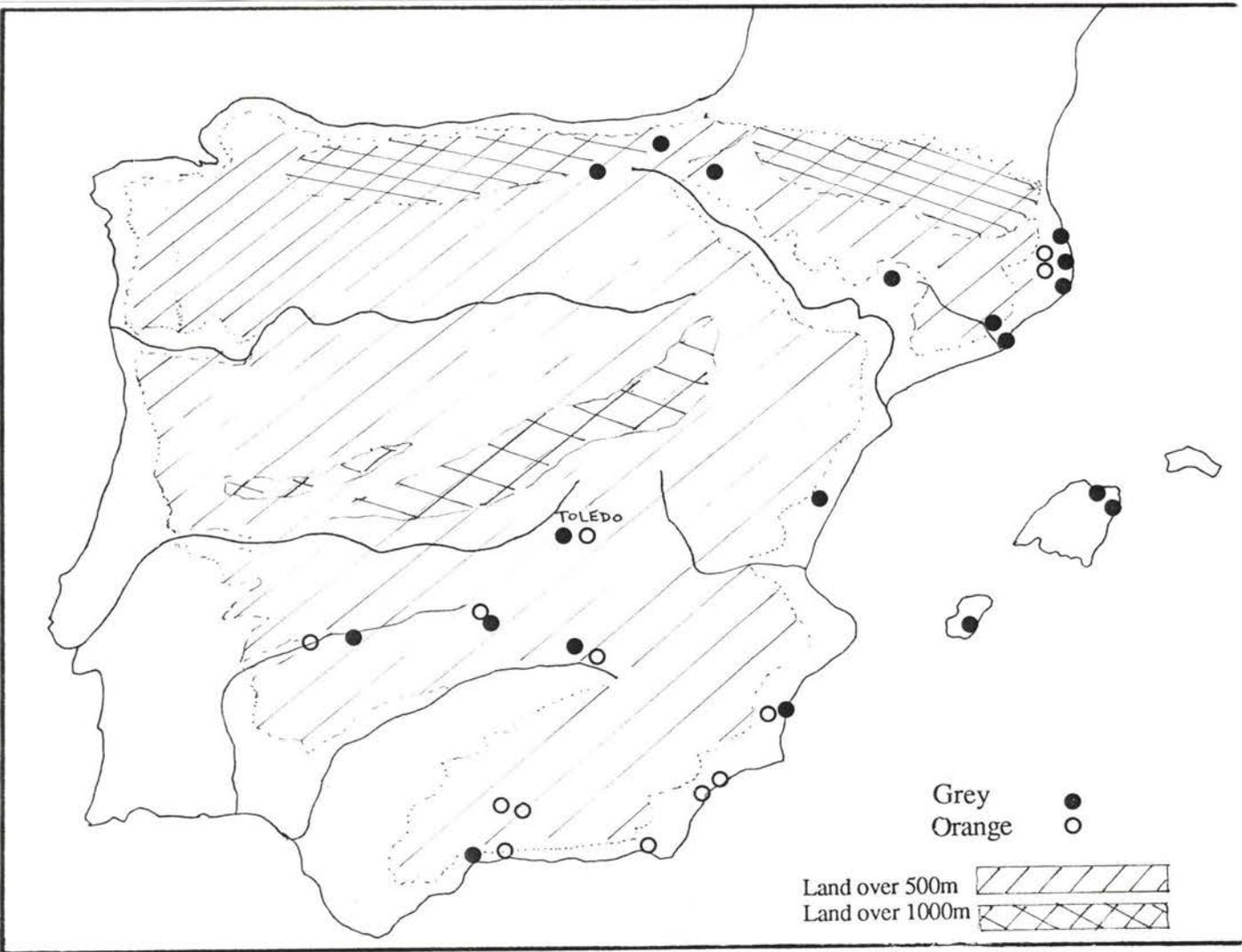
Iberian Distribution of Paleocristiana Pottery
(after Molina, p. 241)

Fig. 6

accompanying orange wares, may suggest distribution across the Pyrenees, but may also be from the Mediterranean, along the Ebro. From the map we may also note the importance of the Guadiana is again highlighted. Here the valley may be being used to disperse material which could have been brought overland from the Mediterranean. On the other hand, Galicia may have encouraged contact with western Gaul, on account of its hostility to the Visigothic kingdom, which itself enjoyed more frequent exchange with southern Gaul. Hence we may find that exchange in the Atlantic was limited to a western Gaul-Galicia model, rather than between western Gaul and Spain in general. Leuvigild's hostility to the Frankish ships in Galicia would be hard to explain if they were ships that also called at his own ports.

Connections Between Spain and Britain

Evidence for links between Galicia and Britain can be seen in the late sixth century focus upon church affairs in the Suevic kingdom. A sixth-century *parochiale* has survived, in more than one version, listing thirteen sees of the kingdom. The final entry of the list refers to the 'see of the Britons' *(Ad sedem Britonorum)* comprising churches 'which are among the Britons' and a monastery[177]. This is in all probability the town of Bretoña and its hinterland, in the vicinity of Lugo. Corroborative evidence is found in the notes on the second council of Braga, in 572[178]. In the lists of signatures of the various bishops the bishop of *Britonensis ecclesia* is one Mailoc. Kenneth Jackson has

176 J. Blasquez and F. Molina, 'La Villa Urbana del Olivar' in J. Blasquez, ed., *Castulo II* (= *Excavaciones Archaeologica Espana* 105 (1979), pp. 240-2.

177 'Ad sedem Britonorum ecclesias que sunt intro Britones una cum monasterio Maximi et que in Asturiis sunt - To the see of the Britons: the churches which are among the Britons together with the monastery of Maximus and [the churches] which are in the Asturias'. Text in David, *Études Historiques,* p. 44 - with discussion at length.

178 E. A. Thompson, 'Britonia', in M. W. Barley and R. P. C. Hanson, ed., *Christianity in Britain* 300-700, Leicester, 1965, pp. 201-205, discusses many of the basic questions. I would like to thank Lynette Olson for allowing me the benefit of her work on this topic in advance of publication and for the use of her translation of this portion of the *parochiale.*

declared this to be an undeniably British Celtic name[179]. Neither the see nor its bishop are appended to the first Council of Braga of 561: a Maliosus signed that document, but this is philologically far from being identifiable with Mailoc. No other name among the signatories could conceivably have been Celtic. The bishoprics are not listed at all at the first council. The *parochiale* documents the parishes of all the sees except Bretoña, for which it simply makes a sweeping inclusion *(ecclesias que sunt intro Britones)*. The implication of this might be of a community apart, about which the writer of the *parochiale* knew little. This would be logical if Bretoña had been a Catholic pocket in the Arian Suevic kingdom. This might have encouraged, also, the persistence of a British identity and, doubtless, the continuation of their dialect.

Clearly what is described is a British community which migrated down the western sealanes sometime in the fifth or sixth century. The other alternative, Bretons, is hardly likely. The idea that a community from the Brittany settlements (themselves only recent) would be in Galicia in 572 (and most probably earlier) seems unnecessarily complex. If so, it might be disputed that they should be termed 'Bretons', anyway. The Britons of Galicia are best explained as a comparable migration as that of the Britons to Brittany. The idea that the church was established as a missionary centre, however, should also not be ruled out: in such a case the interest of the church at Tours in Martin of Braga's mission may be suggestive[180] that these colonists are Bretons relocated from Gaul by Frankish authorities. The episode is certainly evidence for western sealanes use in the post-Roman period. Whether any continuing contact with Britain was maintained is not recorded.

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[179] Jackson, *Language and History* p. 464.

[180] See p. 182.

For the sixth century we possess no unquestionable textual evidence for travel between Gaul and the Irish Sea basin. The *Vita Ciarani,* a Latin life of the founder of Clonmacnois, talks of how 'merchants with wine of Gaul' visit the monastery and provide the monks with wine to fill a large vessel[181]. The problems of this text and its evidence have been discussed by a range of authors. At face value it would represent evidence that a ship from Gaul sailed to the Shannon around 550 AD. The manuscript from which it comes, however, is probably of no earlier than fifteenth-century date[182]. In this case it becomes highly likely that the incident as described represents a familiar medieval scene. By as early as the twelfth-century wine trading with France was a widespread activity. A possibly earlier Irish version of the life contains the same story, with the exception that the merchants are there specifically described as Franks[183]. This second fact is probably of little importance, the word in an Irish context is the common counterpart to Latin 'Gaul'. The agreement between the two recensions is more significant as it argues for at least a slightly earlier prototype of the *vita* containing the same incident. Even so, no amount of argument can support the use of this text as evidence for sixth-century activity. Where the date of the earliest textual tradition is medieval, the evidence must be suspected of referring to a medieval view of trading activity. What sixth-century evidence of overseas contacts that we have would suggest traders would bring in goods from Spain or the Mediterranean rather than Gaul - and we may note that the Shannon was not necessarily used

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181 'Mercatores cum vino Gallorum venerunt ad sanctum Kiaranum, et impleuerunt ingentum vas...', *Vita Kyarani* XXXVI (ed. Plummer, I, p. 214).

182 *Ibid.,* p. xlviii.

183 R. A. S. Macalister, *The Latin and Irish Lives of St Ciaran of Clonmacnois,* London, 1921, p. 92; discussion at p. 154.

by seventh-century overseas traffic[184]. There seems, then, no good reason to accord this reference any value as evidence for the early medieval period at all, though it is quoted still as the cornerstone of the idea that wine traders from Gaul visited Ireland in the early medieval period[185].

The reference to British ships in the harbour of Bordeaux in the *Vita et Virtutes Eparchii* is in a similar position as evidence to the *Vita Ciarani*, being from a late text with no obvious early text-tradition[186]. Reliable references to links between the Irish Sea basin and western Gaul are not found before the seventh century. This obviously raises the question whether the appearance of reliable references in the historical record must be taken to give any real guide to the beginnings of contact between the two regions. The archaeological evidence of E ware increasingly suggests, however, that the *seventh* century was at the centre of contacts between Gaul and the Irish Sea basin.

One, generally reliable, text does purport to depict 'Gaulish sailors, from the provinces of Gaul' visiting Dalriada in the period 563-597 (the time of Columba). The episode relates to Columba's prophesy of a disaster abroad to Lugbe saying: 'before the year is out...Gallic sailors arriving from the provinces of Gaul will tell you the same'[187]. That there might be evidence for the seasonal character of voyages here may be noted. The identification of this disaster, in which an Italian city was consumed in sulphurous fire, is not possible, though volcanic eruptions in Italy are not uncommon[188]. The *caput*

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[184] See p. 318.

[185] O'Neill, *Merchants and Mariners*, p. 44 is a typical recent example: 'In the Life of St Ciaran of Clonmacnoise, there is mention of wine from Gaul being brought up the Shannon to the monastery'.

[186] *Vita et Virtutes Eparchii* (ed. Krusch, *MGH SS. rer. Merov.*, III, p. 562).

[187] Adomnan, *Vita Columbae* I.28 (ed. Anderson & Anderson, p. 262) for text and translation see p.95. Perhaps the redundancy in this statement is a gloss to distinguish the generic Gaelic *Gall* ('foreigner' from 'Gaul' i.e. an actual Gaul; if the word had aquired this generic use by Adomnan's time. Though the text is Latin, the Iona monks would have been native Gaelic speakers. In the context it is useful, as there is no doubt as to whom Adomnan is describing.

[188] See Thomas, 'Gallic Nautae', p. 2.

regionis to which Lugbe travelled was probably Dunadd[189]. From Dunadd come finds of D and E ware pottery which are sixth or early seventh-century imports from Gaul. The lack of a specific location for the *caput regionis* might indicate a fictional basis, or a lack of memory of where the event took place. Most likely, however, is that such ships would be seen by a seventh-century writer to be common visitors to Dalriada, not to Iona but to a secular site some distance away which was controlling exchange[190]. There is no certainty, however, that the episode is accurate for the *sixth* century, as it is written late in the seventh.

In Britain, the classification D ware was first set up by Radford[191] to cover a series of mortaria and grey-slipped bowls among the Tintagel material. Fragments from the early twentieth-century excavations at Dunadd and the Mote of Mark were soon identified as being of the same type. The discovery of a considerable quantity of the ware at Dinas Powys in Glamorgan[192] in the late 'fifties, exhibiting a range of forms, allowed most D ware to be soon after be identified as belonging to the Atlantic group. The agreement between the Rigoirs' choice of Bordeaux for an origin point and the accepted historical wisdom of a wine trade emanating from Bordeaux was, of course, immediately observed[193]. The matter has largely rested at this point. New finds were added to the British corpus by excavations at Cadbury Congresbury and South Cadbury, both in Somerset, and Clogher in Tyrone[194]. Since the publication of the 1981 catalogue new finds have come from Whithorn[195] and from the

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[189] See p. 95.

[190] I.e. Dunadd.

[191] Radford, 'Imported', p. 67.

[192] Alcock, *Economy*, pp. 120-1.

[193] *Ibid.*, pp. 120-1.

[194] The Clogher find is no longer accepted as D ware.

resorting of find bags from an old excavation at May's Hill, Isles of Scilly[196].
The finds from Somerset have been held to suggest that the ware is largely
sixth-century in date and that its range is different to that of E ware[197].

Some confusion and doubt has subsequently sprung up regarding D
ware. No petrological study has been made of the known finds. However
many of the finds correspond clearly to the Gaulish typology, while a few
clearly do not. Others are so uncertain in fabric that they can be excluded from
consideration. There was a tendency to include any mortaria found in this class,
as well a belief that the class only contained mortaria[198]. Both of these ideas
have led to confusion. The listed find from Clogher has, on examination by
Charles Thomas (R.Warner, *pers.comm.*) and subsequently by the present
writer (1987-8), been found to be unlike D ware in form and fabric. The finds
from Tintagel, ironically the origin of the designation, have also been found not
to be *paléochrétienne grise*. Professor Thomas and the author re-examined
these pieces in 1988 and found no definite correspondences with the
paléochrétienne grise corpus. The fabric of a few plain pieces was not
sufficiently preserved to allow any judgement to be made. The only piece to
bear a strong (though not exact) resemblance to a *paléochrétienne grise* form
was darker and harder in the fabric than normal vessels of the class[199]. The
only piece largely similar in fabric to *paléochrétienne grise* was a beaded
mortarium more like a late-Roman vessel in form. An identical fragment in the

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[195] Hill, *Whithorn II*, p. 9.

[196] C. Thomas, note in F. Turk, 'A Study of the Vertebrate Remains from May's Hill, St
Martins', *Cornish Studies* 11 (1983), pp. 78-80.

[197] Somerset finds are from South Cadbury and Congresbury. I wish to thank Profs. Alcock
and Rahtz, respectively, for showing me these finds. For different reasons neither can be
directly matched with the *paléochrétienne grise* corpus. The South Cadbury fragment has a
very similar fabric to French examples, but is too small for easy typological comparison.

[198] R.Warner, P.Hill *pers.comm.*

[199] Cornish Archaeological Unit Excavation, 1988, stratified with Bi and Bii: C. Thomas,
'The 1988 CAU Excavations at Tintagel Island and their Implications', in C. Thomas, ed.,
Tintagel Papers (Cornish Studies 16), Redruth, 1988, p. 59.

British Museum (also from Tintagel) was examined there by a Roman specialist and seen to be unlikely to be anything other than Roman[200]. This is perfectly consistent with the character of the Tintagel assemblage, which contains late-Roman pieces[201]. It need hardly be said that this information does not invalidate the notion of D ware as a class, even though the label was coined with Tintagel assemblage in mind. The label is a post-Roman classification and remains attached to the post-Roman pieces within the corpus from other sites.

Because *paléochrétienne grise* remains the least numerous of imported types in western Britain it seems to have been given the least attention in studies of British trade and communication. Its evidence has seemed to offer little opportunity for expansion - even the finding of a kiln site would not add significantly to what is already known, unless to refine the dating. Some possibilities are opened up, however, to refine the evidence on the strength of work both in Britain and in France. A few general observations might first be made. Evidence from French sites has been coloured by varying scales and standards of excavation in different parts of the country. The strongest links of the British material have so far been seen to be with pieces from the Garonne basin. There are several ways in which this conclusion might be premature. The Rigoir's report is not much use in this regard as it publishes mostly only pieces from the Aquitaine for comparison. An examination, for example, of the collection of the ware in Nantes shows that only a limited series of stamped pieces are preserved[202]. These come from nineteenth-century excavations in the Centre de Ville. Almost certainly other, less ornate, pieces were discarded[203].

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[200] S.Youngs, *pers.comm.*: acc no. 1949 5-1 4

[201] See Thomas, *A Provisional*, p. 16.

[202] I would like to thank Jacques Santrot for his assistance in showing me this material and discussing it with me.

[203] I note that J. Knight, 'Glamorgan AD 400-1100, Archaeology and History', in H. N. Savory, ed., *Glamorgan County History*, Vol.2, Cardiff, 1984, p. 359, reaches the same conclusion.

If there were good parallels for the British finds in Nantes they could have been in the discarded group.

All of this has a strong bearing upon the subject of western sealanes traffic. The evidence of *paléochrétienne grise* has been increasingly held up as the one definite example of a direct Irish Sea link with Bordeaux[204]. New evidence from Tours must cast some doubt upon this point. Excavations of the Chateau and Monastery of St Martin sites in Tours have unearthed a wide range of *paléochrétienne grise* forms[205]. Included amongst these are several of the forms found at Dinas Powys[206]. What is important is that, considering the quantities in the Loire basin, the vessels to be taken to Britain need not have been obtained in Bordeaux. The textual evidence for the seventh century favours contacts with the Loire basin over the Aquitaine, as far as it goes[207].

The excavations in Tours have refined the dating of the Atlantic group to a broadly sixth and seventh-century horizon[208]. The site at Whithorn in Scotland, in a well preserved sequence south of the priory, produced a piece of *paléochrétienne grise* in hill wash with E ware and Merovingian glass[209]: both broadly of seventh-century date. The ware has only once been found at a British site which did not produce Mediterranean wares, namely Dunadd. There the absence of Mediterranean wares is not likely to suggest an absence of sixth-century occupation[210]. *Paléochrétienne grise* is found at sites which do not produce E ware, namely Cadbury Congresbury and South Cadbury. This is

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204 E.g. Alcock, *Economy*, p. 89.

205 Randoin, 'Essai, p. 107-110 and *pers.comm.*

206 A decorated beaker from the Chateau site is almost identical to the vessel illustrated in Alcock, *Economy*, p.120: fig.6.4, no.8. context no. 3.1091-14. Cf. Rigoirs and Meffre, 'Les Derivées', p. 240.

207 See pp. 233ff.

208 Randoin, 'Essai', pp. 107-110.

209 Observed by the author in 1987.

210 Lane, 'Some Pictish Problems', p. 45.

seen (along with other hints) as precluding seventh-century occupation at these sites and by implication putting the start of *paléochrétienne grise* importation slightly earlier than that of E ware. This is probably true, though it should be noted that the fact that E ware is uncommon in south-west Britain (and not found at all on the north coast, east of the Kelsies) may mean that the ware simply never reached Somerset[211].

In general, however, the evidence suggests a ware imported at a slightly earlier date than E ware, its importation continuing perhaps into the period of E ware: say, c.550-630 AD. The fact that the two wares could have been imported from the same region (which will be explored further below), might suggest that the activity which brought in E ware existed before E ware began to be imported. Again, as with the questions surrounding the Mediterranean wares, the archaeological discontinuities might not represent discontinuity of the related activities. Other possibilities should also be entertained, however. The total absence of *paléochrétienne grise* from Ireland to date (indeed it is almost totally confined to British-speaking areas - Dunadd and maybe Longbury Bank[212] being exceptions) may indicate importation by way of some British agency.

Paléochrétienne grise is a puzzling artefact. The distribution of the Atlantic group outside of western Gaul is extremely limited so far: only a handful of finds coming from northern Gaul, Brittany and Britain. No site has produced more than the 9 vessels from Dinas Powys: no more than three at any other site; at Whithorn, South Cadbury and May's Hill the number is one vessel only.

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211 On the other hand, the fact that it is found in Glamorgan, almost on the same longitude of the Bristol Channel as Congresbury should suggest that it at least could have travelled the short distance further to Somerset if required and there is other evidence to show that Somerset finds are probably sixth century.

212 Which would be within Dyfed, though this does not necessitate Irish-oriented trading contacts.

Some doubt may also attach to other identifications apart from Tintagel. The South Cadbury piece is very small, but is convincing as D ware. The Congresbury pieces are badly discoloured and not easily matched - and the Somerset pieces are fairly crucial in assigning a sixth century date and separating E ware from D ware.

A British Network?

On an economic level the differences between D ware and E ware are fundamental. Whereas E ware is clearly evidence of a regular commercial contact between Gaul and the Irish Sea, nothing about the D ware finds necessitates a definite commercial context. How did these pieces travel to the sites where they are found? The May's Hill piece draws Scilly into the picture and makes a direct maritime link between Britain and Gaul likely. Western Gaul is the obvious launching point as Atlantic group pottery is certainly from western France. A focus on the Severn estuary is indicated, as the Scottish finds are numerically likely to be secondary. Along with the glass finds, also very limited in Ireland, we seem to be looking at objects which are more 'British' in distribution than E ware, which is overwhelmingly associated with Ireland and Scotland. That little evidence of such a British province exists may be accountable to the lack of a durable import good such as E ware. On the other hand there is the possibility that these goods are not part of a trading province in the way that E ware undoubtedly is. The small quantities involved in the movement of D ware might reinforce this idea. The glass finds present other problems, which will be discussed in the following chapter. We may conclude that very little may be regarded as proven in the case of D ware. The context is probably separate from E ware, however, and oriented more toward the British shore of the Irish Sea. The fact that the distribution excludes Ireland for the moment seems suggestive of this, although a find of D ware in eastern Ireland

would not be incompatible with the picture of redistributive routes indicated by the Mediterranean wares, which is different from that of E ware.

In the Irish Sea basin we should note the appearance of centres of maritime trade in the sixth century, some of which have been discussed in chapter 2.4 and will be discussed further in chapter 5. Any conclusions on these must be tentative in the light of our poor knowledge of function of crucial sites, but two at least allow some potential for identifying the focusses of exchange. Dalkey Island, Co. Dublin, a small island with an enclosed settlement at the northern end, has figured in most discussions of trade in the early medieval Irish Sea[213]. Both Hodges and Mytum have seen this site as a likely 'gateway community'[214], the island location and the enclosure of the settlement during the seventh century being taken as indications of commercial neutrality (a 'gateway community') and political regulation, respectively[215]. The former seems a better indication of commercial significance than the latter - we would have to look to anachronistic comparisons with enclosed ninth century *emporia* to find parallels. Thomas would doubt the importance of Dalkey Island in the distribution pattern which he proposes for E ware: seeing the more politically important centres as central to the distribution of E ware[216]. This may be a reasonable argument for E ware, which we will see is imported by voyages from the Continent as far north as Scotland. The sixth-century role of Dalkey might be quite another question. Dalkey Island is the only site near the coast between Co. Cork and Co. Tyrone to produce finds of Mediterranean pottery in any quantity, which as we have seen is likely to be brought north by

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[213] Mytum, *The Origins*, pp. 262-3; Griffiths, The Coastal', p. 63, Thomas, 'Gallic *Nautae*', p. 21.

[214] Hodges, *Dark Age*, p. 51; Mytum, *The Origins*, p. 262.

[215] Hodges, *Dark Age*, p. 51.

[216] Thomas, 'Gallic *Nautae*', p. 21.

secondary voyages out of the south-west British peninsula[217]. It is also the only site in the same region to produce more than one sherd of imported glassware, which we will see may also be a sixth century import. Both these sets of imports are rarer in Ireland than in Britain, unlike E ware. Is Dalkey a stopping point, a neutral port outside of Irish society, in a 'British' oriented trading network linking the north and the south of the Irish Sea? In the sixth century the settlement seems to have been unenclosed and this may represent a change in function from the sixth to seventh century. Does this reflect a change in function as new networks emerge, which seem to involve landfalls in Meath, unlike those of the sixth century?[218]

Other sixth century British sites clearly enjoy long-distance links. The most interesting of these is Whithorn, where an unenclosed settlement 5 kilometres from the nearest harbour shows occupation over several hectares: an authentically urban settlement with a wide range of local and imported goods, including 17+ glass vessels and amphorae of three different Mediterranean classes (unusual outside of Cornwall and Somerset). It remains unclear whether the site is primarily religious in function.

In both these cases (as well as with Tintagel) we have sites with assemblages of unusual size and some clues to strategic or historical importance - which we may set against the rich assemblages at Dinas Powys and the Mote of Mark, where the focal status of the site is not obvious in maritime terms, or historically recorded.

The context of D ware in Wales, southwest Scotland and Somerset takes in the areas in which Latin memorial stones are found - and not in Ireland, where Latin inscriptions in early formulae are rare. The evidence of stones along the shores of the Irish Sea with Latin lapidary inscriptions in Continental

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[217] See pp. 190ff.

[218] See p. 318.

formulae has been seen to imply contact with Gaul in the fifth century and continuing into the sixth. The evidence should be treated critically as it is in need of substantial revision. The Llantrisant stone, on Anglesey, for example, used to be thought to commemorate a bishop from Andecavi on the Loire[219], but this is now held to be a misreading[220].

At Penmachno, in Gwynedd, a stone is very precisely self-ascribed to the reign of Justinus *(In Tempore Iustini)*, the consul of 540[221]. Knight's argument that this is a dating formula imported from Gaul, where it is limited in use to Lugdunensis I, is more convincing than Johnstone's attempt to tie it to supposed broader uses of consular dating (such as in the *Historia Brittonum*[222]). This formula, which would probably only be used by an individual who had been resident in Gaul (whether British or Gaulish of birth we cannot tell), is good chronological evidence for a continuation of the sort of dialogue between the British and Gaulish churches which the *Hic Iacet* formula[223] and the travels of Riochatus and Faustus indicate in the previous century[224]. D ware may well enter Britain in this sort of context: it is an urban pottery of limited cultural affinity in Gaul, not connected with typically Frankish

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219 Nash Williams, *Early Christian*, no. 33, p. 63 (illus. p. 64).

220 L. Olson, *pers.comm.*, notes that the possible reading 'ANDOCO NATIONE', upon which the identification with the Andecavi is suggested, is incorrect. Particularly of note is the missed letter, (Nash Williams suggests G or S, but clearly it is G) which precedes NATIONE and renders the reading:'AU (ligature: U or N) DOCO GNATIONE', probably *audo cognatione*. It is sufficient to say that the reading into this inscription of a connection with the Loire, or any part of Gaul is not worthy of the credence which frequent citation has lent it.

221 *ECMW*, p. 93, no. 104; Knight, '*In Tempore*', p. 62; Miller, 'Hiberni', p. 316.

222 P. K. Johnstone, ' A Consular Chronology of Dark Age Britain', *Antiquity* 36 (1962), pp. 102-9.

223 We should note that a date no earlier than the fifth century should be accepted for these as the early to mid-fifth century is the *floruit* of this formula in Gaul, *contra* McManus, *A Guide to Ogam*, p. 62 who follows Nash-Williams as accepting the Italian *floruit* of the fourth century as a *terminus post quem*.

224 See p. 145.

groups and might well be a symptom of a phase of British church activity which the seventh century links of the Irish Sea basin have obscured.

A traveller who voyaged within the 'British province' in the sixth century is St Samson of Dol. The evidence of the *Vita Samsonis* is controversial and may or may not be reliable witness to the sixth or seventh century (the former the era of the saint, the latter the postulated earliest date for the *vita*). The author's reference to having traced the path of the saint through Cornwall and Wales adds weight to his testimony as to routes of travel used in the early middle ages[225].

The *vita* describes several incidents of voyaging. St Samson sailed to Ireland from *Ynys Pyr* (almost certainly Caldey Island, Dyfed[226]) and back. On his return journey he was forced to wait for a northerly wind at a port nearby *Arce*[227]. Several manuscripts read this as *Arce Etri*, read by Loth as 'Dun Etair' (Howth)[228]. In a characteristically exemplary episode the sailors leave without him, but are forced to bend to the saint's will. We should observe that the maritime detail is at least consistent. The need for a northerly wind would certainly indicate somewhere northward of Rosslare on the Irish east coast. The chance of a north or northeasterly wind (a northwesterly would make rounding South Wales very difficult) in summer from Dublin is only around 25-30%, so this delay fits the evidence quite well. The fact that the sailors would depart without the saint might indicate that the voyage from Dublin(?) to south Wales was a normal commercial route, not a special commission - but it is too much a stock incident to be reliable.

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[225] *Vita Samsonis* XLVIII (ed. Fawtier, p. 144). On Samson as a source L. Olson, *Early Monasteries in Cornwall*, Woodbridge, 1989, p. 9ff; K. Hughes, 'The Celtic Church: is it a Valid Concept? *CMCS* 1 (1981), p. 4ff.

[226] See p. 94.

[227] *Vita Samsonis* XXXVIII (ed. Fawtier, p. 134).

[228] *Ibid.*, XXXIII (ed. Fawtier, p. 134) - also *ibid.*, p. 134, note A; Taylor, *The Life of St Samson*, p. 40, n. 1.

All such hagiographical epsiodes must be read with care. How much might this story be based on genuine detail? The story of Samson's voyage to and from Ireland might be considered more doubtful than the detail of his journey between Wales and Brittany: in the light of the importance of the ethos of St Columbanus in Gaul in the seventh century we cannot be sure that a journey to Ireland didn't become a necessary embellishment to the saint's story. Archaeological evidence, however, does suggest strong links between South Wales and Ireland in the sixth/seventh century[229].

The episode where St Samson of Dol travelled from Wales to Brittany has already been discussed[230]. He took ship to Cornwall, walked across the peninsula by way of St Kew[231] and then took ship on the other side to Brittany[232]. Crawford's explanation of the choice of this route as being due to a desire to avoid a voyage around Land's End is tenable only to the degree that, for a journey from South Wales to Brittany, the latter would be a very round-about route.

Other problems confront us when considering Brittany. Very little is known of the typology of early medieval sites in Brittany. We may make some obvious observations about the existence of links between Brittany and other regions. The south-west peninsula of Britain was certainly in contact and Samson of Dol's is surely only one of thousands of such voyages made between the two peninsulas. Likewise, local traffic must have frequently been in contact with western Gaul - in the seventh century setting of the *Vita Filiberti naves Brittanici* are seen at Noirmoutier[233], though the rarity of *paléochrétienne*

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[229] See pp. 315-6.

[230] See pp. 94-5.

[231] *Vita Samsonis*, XILV (ed. Fawtier, p. 142).

[232] *Ibid.*, LII (p. 147)

[233] See p. 265.

grise from Brittany should be noted[234]. Whether contacts with Ireland existed is uncertain, but there is probably no reason to see these any earlier than the seventh century. In the ninth century *Vita Winwaloei* ships sail between Bréhat (North Brittany) and Ireland[235]. Breton glosses of the eighth century and later testify to contacts with Ireland, Wales and Cornwall[236]. With the example of St Samson's travels to all these lands, but reaching Brittany overland through Cornwall, we cannot be absolutely certain any of the glossators came directly by sea from Ireland[237]. Likewise, followers of Columbanus were residing in Brittany and are the addressees of his 610 letter from Nantes[238]. Most probably they had come with him to Nantes, before making their way into Brittany from the south[239].

An Historical Model for Sixth-Century Western Sealanes Traffic

The picture of events in the sixth century is very uneven and there is little doubt that our evidence is very unrepresentative of the whole picture. We have seen that there is reason to doubt that our evidence indicates the use of the same routes over the entire century: the Visigothic conquest of Suevic Galicia probably saw an end to maritime links between Gaul and Spain; a fifth-century link between Gaul and the Irish Sea is unlikely and the evidence of *paléochrétienne grise* does not indicate any regular use of this route in the sixth.

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[234] See p. 323.

[235] *Vita Winwaloei* I.18-19

[236] L. Fleuriot, 'The Old Breton Glosses and the Cultural Importance of Brittany in the Early Middle Ages', in P. Ní Chatháin and M. Richter, eds, *Irland und Europa, Die Kirche im Frühmittelalter*, Stuttgart, 1984, pp. 218-225.

[237] *Ibid.*, p. 223, where he notes the disharmony with Thomas's theories.

[238] See p. 234.

[239] See pp. 233ff.

The Mediterranean wares at most indicate a few decades of contact. Archaeological clues do not give anything more than a very patchy picture. This contrasts sharply with the evidence of the use of the western sealanes in the seventh century, which will be shown to give a much more regular picture of activity.

Archaeological and historical sources give odd clues which we might be tempted to draw into a more harmonious picture. Ian Wood asserts that Frankish politics intruded into the affairs of most of their neighbours. We should follow him in appreciating the Byzantine interest in these matters[240] and should be considered in terms of the western sealanes evidence. Byzantine interests in the west may be seen approaching Britain from different directions - in both cases largely avoiding Gaul. There may have been maritime reasons why the voyages which came to Britain via the Straits of Gibraltar avoided a landing in western and, probably, southern Gaul, but the voyages do markedly go 'everywhere but' Gaul. That Byzantine authorities were interested in what lay beyond Frankish Gaul is not unlikely - an interest that they might not have liked the Franks to be aware of. In the following century, Ebroin's suspicion that Theodore of Tarsus was an agent of the emperor may show the continuity of a suspicion of such interest[241] in Frankish Gaul.

We should not be carried away by other influences. Zimmer was inclined to highlight the importance of the cult of Martin in the spread of monasticism to Ireland, on account of the seemingly early manuscript traditions of Sulpicius's *vita* in Ireland[242], but James has rightly stressed the incompatibility of the organisation of the Irish church with Martin's model[243].

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[240] Wood, *The Merovingian North Sea*, esp. pp. 10ff.

[242] Zimmer, 'Galliens Anteil', esp. pp. 593-610.

[243] James, 'Ireland', pp. 367-8.

Nonetheless, we are tempted to observe that early dedications to St Martin at Whithorn and Canterbury coincide with finds of sixth/seventh century north-western Gaulish artefacts: at Whithorn, pottery and glass; at Canterbury, coins of western Gaulish origin[244]. The name of Martin of Tours also crops up in connection with the establishment of Martin of Braga in Galicia. Knight is correct to stress the priority of the connection of the British churches with Auxerre in the fifth century[245]: fifth century links between Gaul and Britain in the fifth century operating, as we have seen, via the overland routes through western Britain[246]. The Saxon conquest of the west country in the sixth century, however, may have forced such connections between the Gaulish and British churches to use the maritime routes through western Gaulish ports. The situation in Galicia seems to have stimulated activity through the western ports also. Does this bring the Loire connection and the cult of St Martin into greater prominence? In 680 John the Archcantor, abbot of the monastery of Martin at Rome, travelled via Tours to Britain[247], stopping at the shrine *en route* before making a crossing of the 'Ocean' *(Oceanum transitum)*, which would seem to indicate an Atlantic voyage, rather than simply a Channel crossing. St Columbanus followed the same route down the Loire to the sea in 610. Networking through the *familia* of Columbanus will be shown to be important in the western sealanes activity of the seventh century: we cannot afford to overlook potentially important links of a similar nature in the sixth. The Loire

[244] S. E. Rigold, 'The Sutton Hoo Coins in the Light of the Contemporary Background of Coinage in England', in R. Bruce-Mitford, ed., *The Sutton Hoo Ship Burial*, Vol. 1, London, 1975, pp. 655. Also pp.

[245] Knight, *'In Tempore'*, pp. 56-7.

[246] See pp. 67, 145ff.

[247] Bede, *Historia Ecclesiastica* IV.18 (ed. Colgrave and Mynors, pp. 390-1).

begins to emerge as a focal point for much maritime activity in the sixth century and this connection may repay more investigation.

Chapter 5: The Seventh and Eighth Centuries

5.1 The Documentary Evidence for Communication and Commerce

The episode in the *Vita Columbani* in which St Columbanus is taken to Nantes to be put on board a vessel 'engaged in Irish commerce'[1] might be seen as characterising the model of western sealanes traffic proposed by Zimmer: a scholarly churchman preparing to travel, seemingly as a matter of course, on a trading vessel between western Gaul and Ireland. This episode, in 610 AD, is probably the *earliest* definite example of contact conforming to Zimmer's model, however, though there are many sources suggestive of earlier links. We have seen in previous chapters that earlier links between Gaul and the Irish Sea basin are unclear as to route, mostly do not involve Ireland, and are only doubtfully labelled 'commercial'. In the seventh century and after, the use of such terms as *Scotorum commercia*[2], or *cenaigib Gall*[3] and clear references to ships, all leave no doubt as to the presence of direct contact of a commercial nature. But this pattern cannot be shown to exist much prior to 600 AD and at no time does Zimmer's model of single-element cargoes - the 'wine trade' thesis which has been so widely accepted - receive any support at all. The seventh and eighth century sources all indicate that a diversity of goods was involved in western sealanes commerce, indeed quite a similar range to that which typified Frankish commerce of the seventh and eighth centuries.

Turning again to the cultural dimension of the work of Zimmer and his successors, there is substantial evidence for exchange of texts and art motifs

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[1] Jonas, *Vita Columbani* I.23 (ed. Krusch, p. 97).

[2] *Ibid.*, p. 97.

[3] 'Gaulish merchants', *Cormac's Glossary* (ed. W. Stokes, *Three Old-Irish Glossaries*, p. 19).

between Ireland and the Continent in the seventh and eighth centuries and this evidence has inevitably been brought into debates concerning western sealanes commerce. However we must observe that the relationship between exchange and maritime traffic, on the one hand, and the movement of people and ideas, on the other, is a very complex matter in the seventh and eighth centuries and debate on this point has been overly simplistic and rarely comprehensive. One or two cases of cultural contact are especially convincing, most notably the evidence that Isidore of Seville's writings reached Ireland only a few decades after their composition[4]. In this and other cases there is good evidence to suggest transmission along the sealanes for at least part of the way - for example the fact that the material is better known in Ireland than in Anglo-Saxon England. It is quite another matter, however, to suggest that there was *direct* contact between the shores of Spain and Ireland, for which there is no evidence whatsoever.

Irish Relations with Gaul and Germany

In Zimmer's thesis it was assumed that contacts between western Gaul and Ireland had existed at least since the Roman period[5]: when Irish *peregrini* sought to go abroad, they accordingly took ships to Gaul because such already operated. This naturally took them to western Gaul. James, in reassessing this thesis, does not make an issue of the question of pre-existing commerce, except to make admirably clear the evidence of Jonas on this point[6]. He also notes that the predominant

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[4] M. Herren, 'The Earliest Irish Acquaintance with Isidore of Seville', in E. James, ed., *Visigothic Spain: New Approaches*, Oxford, 1980, pp. 243-50.

[5] Zimmer, 'Zeugnisse für Westgallisch-Irischen', pp. 363-400.

[6] James, 'Ireland', pp. 375-7.

theatre of Irish mission on the Continent was east Francia, not western Gaul[7] and therefore stresses the likelihood that, as Anglo-Saxon England was christianised in the seventh century, the communication route between Ireland and Gaul may have gradually shifted to by way of England - thus downplaying the ubiquity of the western Gaulish connection. We need then to establish how early this connection existed and how regularly it was used.

If no certain evidence for sixth-century links is forthcoming, attention must focus upon the reliability of the testimony of Jonas (c.639) that Irish commerce was found in Nantes as early as 610 (it should be noted that Columbanus himself simply describes a ship being 'prepared' for his journey[8]). The significance of Jonas' text is that it is the cornerstone of the thesis that the presence of churchmen from Ireland in Gaul is the consequence of pre-existing trading contacts.

The evidence as to how St Columbanus reached Gaul, around 590, is less exact than the later episode in Nantes. Jonas writes of how he went to the Irish shore with his companions, 'embarked on a ship, went hesitantly along their path with a calm sea and favourable winds for the dangerous voyage bringing him to *brittanicis sinus*[9]. From there they proceeded into Gaul. This has been taken to suggest that he crossed Cornwall, though Zimmer, more logically, assumed a direct sea voyage[10]. Most likely *brittanicis sinus* is off the western or southern coast of Brittany. When Columbanus is ordered to return to Ireland, Bertechar tells him to

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[7] *Ibid.*, p. 380.

[8] 'Navem parari', *Epistulae* IV (ed. Walker, SLH II, p. 34).

[9] 'Carinamque ingressi, dubias per freta ingrediunter vias mitemque salum, prosperantibus zepherorum flabris, pernici cursa ad Brittanicos perveniunt sinus', Jonas, *Vita Columbani* I.4 (ed. Krusch, p. 71). This passage, like many in Jonas, is difficult to render into English. D. C. Munro (*The Life of St Columban*, Philadelphia, 1895, p. 6) reads 'channel' for *vias*, though 'path' or 'way' is a less prejudicial reading.

[10] Zimmer, 'Zeugnisse für Westgallisch-Irischen', pp. 395ff.

go to Nantes to 'return by the route along which you first came to this place'[11] and he then took a boat on the Loire so that he might come to the *britannicoque sinui*[12]. It is clear that Jonas is suggesting that Columbanus's exit point from Gaul was intended to be the same as his entry point (unless we read Bertechar's words as simply 'return whence you came', in which case the phrase might be held to be needlessly elaborate). Columbanus' own letter from Nantes in 610 observes that his companions are 'here in the region of the Britons' *(hic in vicinia Brittonum sunt)*[13]. James has, further, observed that Venantius Fortunatus describes the seas off Poitou as *oceanus britannicus*[14]. There is no obstacle to this terminology implying an initial arrival of Columbanus in the vicinity of the Loire estuary. It is thus likely that Nantes was always Columbanus' destination. Walker, among others, confuses this by implying that Nantes was only chosen after the party was diverted onto the Loire by a desire to avoid travelling through Neustria[15], which is not a course of events explicitly stated in the text. Implicit in Walker's approach to this issue is evidently a belief that anyone wishing to travel from Gaul to Ireland would by preference travel to the Channel coast rather than the Atlantic. This is only the instinct of the modern land-based scholar. Walker's general preoccupation

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[11] 'Pergas eo itinere quo primum his aduentasti in locis', *Vita Columbani* I.20 (ed. Krusch, p. 91).

[12] Jonas, *Vita Columbani* I.21 (ed. Krusch, p. 93).

[13] *Epistulae* IV (ed. Walker, p. 36).

[14] James, 'Ireland and Western Gaul', p. 376; Venantius Fortunatus, *Opera* (ed. Leo and Krusch, p. 29).

[15] Walker, *Sancti Columbani Opera*, p. xxvii.

with overland routes becomes clear with his suggestion that the St Columb dedications[16] in western Cornwall indicate a transit of Cornwall *en route* to Gaul.

At Nantes a ship involved with commerce with Ireland *(quae Scottorum commercia vexerit)*[17] was found. Jonas was writing some decades after the event and from Italy, which obviously does not make him a first hand observer, but he certainly knew men who had travelled with the saint. The corroborative value of the *Epistulae* of the saint himself may further render the core of the episode certain. In his letter of 610 Columbanus writes that 'a messenger has reached me, saying that the ship is ready for me, in which I shall be borne unwilling to my country'. He goes on to say, however, 'but if I should escape, there is no guard to prevent it; for they seem to desire this, that I should escape. If I am cast into the sea like Jonah....pray that someone may take the place of the whale to bring me back in safe concealment by a happy voyage'[18]. In a later epistle he talks of 'Jonah, whose shipwreck I have also almost undergone'[19]. This seeming foreshadowing of subsequent events in the first of these references to Jonah must raise some interesting questions. Columbanus' comments make rhetorical use of the fact that his name means 'dove', just as does *jonah* in Hebrew. Hence the hagiographical episode of the boat being stranded until he is cast ashore parallels the legend of

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[16] E.g. Walker suggested that the dedications St Columb Major and Minor in Cornwall preserve some record of his route. Dedication evidence, as late as this (earliest reference c.1240), however, can only be seen as evidence of the later spread of the cult of the saint, not of the travel of the saint himself, or herself, as the Cornish Columba seems traditionally to have been a woman, O. J. Padel, *Cornish Place-Names*, Penzance, 1988, p. 71; Walker, *Sancti Columbani Opera*, p. xix.

[17] *Vita Columbani* I.23 (ed. Krusch, p. 97).

[18] 'Sed si fugiero, nullus vetat custos; nam hoc videntur velle, utego fugiam. Si in mare proiciar more Ionae... orate, ut vice ceti sit quidam felici revocans remigio tutus celator', *Epistulae* IV (ed. Walker, pp. 34-5).

[19] 'Ionae...cuius et pene subivi naufragium', *Epistulae* V (ed. Walker, p. 55). The fact that the first reference is to being 'cast into the sea' and the second, to 'almost' being shipwrecked is at least different enough in reference for the earlier to be coincidental.

Jonah. Several possibilities are raised. One is that Jonas based the incident of Columbanus' release on the reference in the letter. Alternatively the letter may be a forgery (though it is not one of the works listed by Walker as of doubtful authorship), though if so an elaborate one. Columbanus elsewhere talks of being a 'fearful sailor'[20] and frequently uses maritime metaphors such as tides, ocean swell and pilotage[21] - indicating perhaps earlier experiences at sea. One can only comment that the idea of his expecting to take ship at Nantes is not in doubt, nor is there any reason to especially doubt the commercial context of such ships.

Jonas does not conclusively prove that direct, independent, contacts pre-existed Columbanus. Nieke and Duncan have observed that the distribution of E ware in Ulster seems to reflect the Northern Irish connection of Columbanus[22]. While this is only a passing observation, on the strength of what we will see is an uncertain distribution pattern, it raises possible causal relationships which are rarely considered. Gaulish monasteries were certainly involved in commerce and the personal links of Irish churchmen in Gaul could have facilitated exchange between Gaul and the dissimilar economy of Ireland[23]. Is it possible that direct contact was either initiated or escalated by monastic links, even between the time of Columbanus's arrival in Gaul and his aborted return?

As with Adomnan's reference to 'Gallic sailors', the *Scotorum commercia* of the *Vita Columbani* may be a detail of Jonas's time, c. 639. Columbanus describes

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[20] 'Ideo audeo timidus nauta clamare', *Epistulae* V.3, ll. 19-20 (p. 38).

[21] *Epistolae* V.3; V.8 (pp. 44-5); V.11 (pp. 48-9) V.15 (pp. 54-5).

[22] M. R. Nieke and H. B. Duncan, 'Dalriada: The Establishment and Maintenance of an Early Historic Kingdom in North Britain', in S. Driscoll and M. Nieke, eds, *Power and Politics in Early Medieval Britain and Ireland*, Edinburgh 1988, p. 15.

[23] We should note, with Harold Mytum, that the monastic role in Irish commerce is currently underrated on account of the very small amount of excavation work on very early Irish monasteries. *The Origins*, p. 266.

a ship prepared for him, which is not the same thing as commerce. Against this, however, must be set the point that trading ships would be likely to be chartered - this was normal even in commerce, as we will see below.

Evidence of early pilgrims to western Gaul is lacking. Kenney is correct to dismiss examples such as Fridolinus, an Irishmen who is said to have come to Poitiers in the time of Clovis and later preaches in Germany[24]. The story was 'reconstructed' in the tenth century by Balther of Säckingen (the monastery founded by Fridolinus) from memories of a 'lost' original. It is accordingly vague and fabulous, but Kenney convincingly shows that the core of the story is genuine, concerning the time of Clovis II, in the seventh century, not Clovis I[25]. The reference in it to relatives of Fridolin being involved in the mission to Northumbria seems to confirm this[26] and fits him firmly into the regular seventh-century pattern of links between Ireland, Northumbria, western Gaul and Germany.

There is some seventh-century evidence to suggest the presence of Irish churchmen in western Gaul. A will of Ansoald, Bishop of Poitiers, mentions a Romanus, described as 'an Irish pilgrim', whom he places in charge of the monastery at Mazerolles[27]. The same Romanus seems to appear earlier, as signatory of the *donatio* of Ansoald to Noirmoutier in 677, where he is described as a 'bishop'[28]. 'Thomeneus' is a fellow witness, perhaps the same Tomianus of Angoulème who appears in the Acts of the Council of Modogarnomo Castro[29].

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[24] *Vita Fridolini* (ed. B.Krusch, *MGH SS rer Merov.* III, Hannover, 1896, pp. 350-69).

[25] Kenney, *The Sources*, pp. 497-80.

[26] *Vita Fridolini* XV (ed. Krusch, p. 361)

[27] J. Tardif, 'Les Chartes Mérovingiennes de Noirmoutier', *Nouvelle Revue Historique de Droit Français et Étranger* 22 (1898), pp. 789-90.

[28] *Ibid.*, p. 786.

Tomianus is a name known in Ireland in this period. The Bishop of Armagh addressed in the letter of Pope John in 540[30], for example, bears this name. However this parallel alone should not be regarded as conclusive proof that the Bishop of Angoulême was Irish.

That we turn so quickly to these texts, of doubtful authenticity and transmission, in our search for Irish active in western Gaul is itself a statement on the weakness of the maritime culture models. In making voyages to western Gaul, the Irish *peregrini* were not necessarily more likely to be active in that region. Even Columbanus, presumably one of the earliest *peregrini*, does not stay in western Gaul - though a number of his followers were in Brittany (possibly the region around Nantes) at the time of his letter of 610. That some western Gaulish church centres maintained connections with Ireland is another matter. Poitiers and Noirmoutier are mentioned more than once in connection with Irish traffic. In the case of figures such as Dido of Poitiers and Filibert of Noirmoutier, however, we can be sure that the churchmen maintaining such connections were not Irish by birth. This indicates that there were western Gaulish churchmen who cultivated an Irish connection - perhaps on account of the prestige it conveyed in terms of power of the Irish monastic ethos in Gaul and the freedom that immigrants from Ireland could enjoy. That churchmen from Ireland arrived in Gaul through such connections is only logical. But they need not have remained where they landed.

The complexities of these relations may be seen in the story of the abduction of Dagobert II. The *Liber Historiae Francorum* (c.727) states that, following the demise of Sigibert III, Grimoald the *maior palatii* had the king's young son tonsured and sent into the care of Bishop Dido of Poitiers with instructions that he

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[29] Ed. F. Maasen, *MGH Concilia Aevi Merovingici* I, Hannover, 1893, p. 216; Kenney, *Sources*, pp. 498-9.

[30] Bede, *Historia Ecclesiastica* II.19 (ed. Colgrave and Mynors, p. 200).

be sent on to Ireland. Grimoald then put his own son on the throne[31]. The *Vita Wilfridi* (written between 711 and 731) also gives an account of the story:

> Dagobert had been banished in his youth by enemies who were then on the throne. He sailed away, his fortune ruined, and came by God's help, to Ireland[32].

The chronology and circumstances of this episode are probably the most controversial in Merovingian history, though the details relevant to to the present study are not especially doubtful. The episode is usually dated to 656 - although Gerberding argued for redating it to 651[33], this now questioned by Picard[34].

Ó Cróinín notes that Dido was at Nivelles at the time, not Poitiers, having arrived there in the 16th of January[35]. We might speculate that, to avoid suspicion from Dagobert's relatives and in the likelihood of Poitou being in regular maritime contact with Ireland, it was most likely that Dido returned with Dagobert to Poitiers and from there sent him by river and sea to Ireland. To send Dagobert directly to Ireland by sea was extremely convenient: there would always be the possibility that

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[31] *Liber Historiae Francorum* XLIII (ed. B.Krusch, *MGH: SS rer Merov.* II, Hannover, 1888, p. 43). Extensive recent discussion in J-M. Picard, 'Church and Politics in the Seventh Century: the Irish Exile of King Dagobert II', in *idem*, ed., *Ireland and Northern France AD 600-850*, Dublin, 1991, pp. 27-52; R. Gerberding, *The Rise of the Carolingians and the Liber Historiae Francorum*, Oxford, 1987, pp. 47-66, and 80ff; D. Ó Cróinín, 'Merovingian Politics and Insular Calligraphy: the Historical Background to the Book of Durrow and Related Manuscripts', in M. Ryan, ed., *Ireland and Insular Art AD 500-1200*, Dublin, 1987, pp. 40-43.

[32] 'Nam supradictus rex in iuventute sua ab inimicis regnantibus in exilium perditionis pulsus, navigando ad Hiberniam insulam, Deo adiuvante, pervenit', Eddius, *Vita Wilfridi* XXVIII (ed. W.Levison, *MGH SS rer. Merov.* VI, Hannover, 1913, p. 221; trans. J. F. Webb, *Lives of the Saints*, Harmondsworth, 1965, p. 159).

[33] Gerberding, *The Rise*, p. 66.

[34] Picard, 'Church and Politics', pp. 28-31; 37-8.

[35] *Additamentum Nivialense de Fuilano* (ed. B. Krusch, *MGH SS. rer. Merov.* IV, Hannover, 1902, p. 451).

in taking him by way of Anglo-Saxon England some power would interfere with a Frankish entourage and discover Dagobert's lineage. Indeed, it was the Northumbrians who, subsequently, arranged Dagobert's return to Gaul. Grimoald's entrusting of Dagobert's exile to Dido also presupposes established links with Ireland - or at least that Grimoald thought that the Bishop of Poitiers was well located to carry out such a task. We have already seen that Ansoald, Dido's successor as Bishop of Poitiers, had considerable Irish connections[36].

The *Vita Wilfridi* continues the story.

> Years later his friends and relatives learnt from travellers that he was alive, flourishing and in the prime of manhood, and sent to Wilfrid to ask him to invite Dagobert across from Scotland or Ireland and then to send him over to them as their king[37].

The was duly done, around April-June 676. The 'travellers' who informed Dagobert's relatives are described as *navigantibus,* which would imply that they were seafarers. Perhaps the news was acquired in western Gaul from seafarers who had contacts with Ireland, no locations are given, however. The return through North Britain might suggest that travel by sea from Ireland to Austrasia was not possible and that Dagobert would not risk travel through western Gaul. On the other hand, it is simply more likely that this was a matter of Wilfrid's own political connections.

That Dagobert used different routes to travel to and from Ireland should not be regarded as odd. In fact, this story serves to underline the point that between Ireland and the Continent neither the route through England, nor the direct route by

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[36] See p. 237.

[37] 'Post annorum circulum amici et propinqui eius, vivente in perfecta aetate florentum a navigantibus audientes, miserunt nuntios suos ad beatum Vilfridum episcopum, petentes, ut eum de Scottia et Hibernia ad se invitasset et sibi ad regum emisisset', *Vita Wilfridi* XXVIII, (ed. Levison, p. 221; trans. Webb, *Lives of the Saints*, p. 159).

sea ought to be regarded as more 'normal'. A lot might depend upon political/ religious connections. The same point may be seen with regard to where a person might move after landing on the Continent.

Another churchman who may have followed the western Gaul-Ireland connection from Gaul is Agilbert, who became the Bishop of Wessex around 640. Agilbert is said by Bede to have been 'a Gaul by birth, who had spent a long time in Ireland for the purpose of studying the Scriptures'[38]. It is quite probable that this meant that he had not previously been to England at all: thus suggesting a direct voyage to Ireland from Gaul. His lack of knowledge of English (*barbarae loquellae*) was certainly considered worthy of note[39]. Agilbert took the part of the 'Roman' party of Wilfrid at Whitby, which must suggest that he spent his time in the south of Ireland, Ó Cróinín would suggest among the Anglo-Saxon community there[40]. The significance of this figure in international relations of the seventh century is enormous. Surprisingly he has attracted little scholarly attention[41], despite his obvious significance as a figure who moved easily between Ireland, Gaul and Anglo-Saxon England. Or perhaps this is the very reason why: Agilbert's movements sit awkwardly with those who defend the 'isolation' model of western Insular culture. His family had links with St Columbanus and with the latter's monasteries in the Paris region. These were the sort of familial connections which characterised Irish activities abroad[42]. Agilbert later became Bishop of Paris

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[38] 'Natione quidem Gallus sed tunc legendarum gratia scripturarum in Hibernia non paruo tempore demoratus', Bede, *Historia Ecclesiastica* III.7 (ed. Colgrave and Mynors, pp. 234-5).

[39] *Historia Ecclesiastica* III.7 (ed. Colgrave and Mynors, p. 234).

[40] D. Ó Cróinín, 'The Irish Provenance of Bede's Computus', *Peritia* 2 (1983), p. 245.

[41] Since this chapter was first written this situation has now been redressed somewhat by Michael Richter, 'The English Link in Hiberno-Frankish Relations', in J-M. Picard, ed., *Ireland and Northern France 600-850 AD*, Dublin, 1991, pp. 109-113.

where, for example, Theodore of Tarsus stayed with him in 668. Despite the known antagonism of Wilfrid and Ebroin, he may have been an intimate of both. On his death, he was buried at Jouarre, where his sarcophagus still survives and is one of the only sarcophagi in Merovingian Gaul to have extensive figure sculpture, which it has been claimed to owe to both Irish and Northumbrian inspiration[43]. This unusual feature, like the Irish references in some Frankish saint's lives is a conscious underscoring of Agilbert's links with an Insular ethos and spirituality[44]. Agilbert may have played a causal role in the involvement of English and Irish churchmen in the Continental politics of kingmaking between Austrasia and Neustria. This in itself might not be seen as apposite in a study of overseas communication, except where we must consider the crucial role of personal contacts in the causation of overseas links, an important counter to the 'natural causation' and continuity models.

Western Gaulish churchmen are heavily involved in the conversion of Germany: Amandus, Remaclus, Eligius and Nicetius[45]. The movement of a series of missionaries from this one region is striking, particularly if we add the Irish missionaries arriving by way of western Gaul (whom we must then see as 'western Gaulish' recruits as much as 'Irish'). The Arnulfing leaders encouraged this link, but the ethos may be traced to Dagobert I. The policy pursued by Dagobert I and his son Clovis II involved the establishment of monasteries within Neustria, often by monks born outside of Neustria. A second field of activity involved sending

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[42] See for example, A. Angenendt, 'Die Irische Peregrinatio und ihre Auskwirkungen auf dem Kontinent vor dem Jahre 800', in H. Löwe, ed., *Der Iren und Europa im Früheren Mittelalter*, Stuttgart, 1982, pp. 52-79.

[43] Pictured in P. Lasko, *The Kingdom of the Franks*, London, 1971, p. 101.

[44] See p. 244.

[45] Wallace-Hadrill, *The Frankish*, pp. 143ff.

others on missionary activity abroad: certainly in Germany and Wood would also suggest East Anglia[46].

The crucial aspect of this activity for our purposes is that these movements established continuing relationships. Churchmen moved from the centre to the periphery, but they maintained links with their origin points. Some monasteries in Neustria were granted control of estates in western Gaul - perhaps these were claimed by the monks through family connections, or perhaps the Neustrian and Austrasian rulers were seeking to appropriate territory in western Gaul to increase their personal *dignitas*[47]. Whatever the pattern, much movement of people and goods seems to have been accomplished through these relations around the periphery of the Neustrian heartland of the Frankish kingdom in the seventh century.

One of the most interesting texts to discuss links between Ireland and Gaul is the *Vita Filiberti*, in a ninth-century text, from a probable eighth-century original[48]. The personal connections of St Filibert, whose espousal of a commercial ethos will be examined below, provide an example of the way the western-eastern Gaul interface interlocks with the western Gaul-Ireland connection. Born in Gascony, he became a follower of the cult of Columbanus[49], first founding a monastery at Jumièges, before moving to Noirmoutier, where he founded a monastery under the patronage of Ansoald of Poitiers, whose Irish connections have already been discussed. The *vita* suggests a conflict with St Ouen of Rouen forced his exile to

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[46] Wood, 'The Franks and Sutton Hoo', p. 9ff.

[47] This is the reason favoured by Picard, 'Church and Politics', pp. 32-3.

[48] Kenney, *The Sources*, p. 495.

[49] *Vita Filiberti* V (ed. Levison, p. 587); James, 'Ireland', p. 377.

the west, Filibert and Ansoald both following Dagobert II's party against Ebroin[50]: at this distance we have difficulty in assessing whether this was the actual reason, or a reflection of the conventions of hagiography in the time of the writing of the text (perhaps of contemporary politics). The fact that Filibert was active both in northern and western Gaul, however, is clear: such movement between northern and western Gaulish churches in the seventh century is common. .

The broader context of Filibert's Irish connection is less often cited than this epilogue to chapter 42 of the *Vita Filiberti:*

> not much later an Irish ship with a diversity of goods on board put into shore and supplied the brethren with an abundance of shoes and clothings[51].

The context of this episode is obviously to underscore Filibert's adherence to the ethos of Columbanus. This does not, however, invalidate the believable details of ships from Ireland putting in at a site in the Loire estuary, or the presence of shoes in its cargo - a product for which the Irish were well known. The detail of an Irish ship is a factor of interest to contrast with the predominant evidence for Gaulish vessels involved in such traffic - though in the context of the need to stress the Irish link it may have suited the hagiographer to alter the ethnicity of the ships involved in such traffic. The reliability of the text itself is another question, but the fact that Noirmoutier is the likely site of the composition of the *vita* increases the possibility of the text reflecting a circumstance likely in the locality (or the author having accurate sources for an incident in the island's past).

A charter of Sigibert III (but linked with Grimoald), granted the monastery of Stavelot-Malmédy, near Aachen, control of two monastic ports: *Sellis*

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[50] Kenney, *The Sources*, p. 497; James, 'Ireland', p. 377.

[51] 'Nec multum post Scothorum navis diversis mercimoniis plena ad litus adfuit, qui calciamenta ac vestamenta fratribus larga copia ministravit', *Vita Filiberti* XLII (ed. Levison, p. 603).

(Champtoceaux on the Loire) and *Vetraria* (Port-Saint-Père)[52]. Such arrangements would have been attractive to monasteries in the north-east, who would benefit from the produce of the south-west, in particular wine and oil. That a monastery was given control of the ports is significant in that it implies an involvement of the monastery in western maritime traffic. These are admittedly river ports, and traffic could have travelled up the Loire and overland - Jonas indicates that Nevers was a port for overland travellers to embark on the Loire[53] and we recall Gregory of Tours's testimony to its use to bring goods west from Orleans[54]. St Filibert ships olive oil direct by sea from Bordeaux to Jumièges, however, for the lighting of the church[55]. The abbey of Saint Wandrille also held estates in the Angoumois and Saintonge[56]. We cannot be certain whether this would have involved seaborne shipment of goods back to Saint Wandrille, though this would be a logical inference.

We will summarise the picture identified so far. The monasteries which grew up on the periphery of the Frankish heartland seem to have established economic networks which brought the western sealanes into contact with east Francia. Presumably economic freedoms were allowed as a reward for the participation of the monastic founders in the control of the new terrain acquired through expansion.

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[52] 'Teloneum igitur quod ad portum Vetraria super fluvis Taunuco Itaque et porto illo qui dicitur Sellis immoque super fluvio Ligeris, quod judices vel agentes nostri ad portus ipsos, tam quod navalis evicto conferebat, aut undique negotiantum commertia in teloneo', J. Halkin and C. G. Roland, *Recueil des Chatres de l'Abbaye de Stavelot-Malmédy*, Brussels, 1909, pp. 12-13.

[53] Jonas, *Vita Columbani* XXI (ed. Krusch, p. 93).

[54] See p. 132.

[55] 'Quod liquorum olei non haberet unde in ecclesia lumen consuetum arderat...Sed cum dies declinerat ad vesperum...nuntis de porto maris advenit, qui ei adesse navem cum oleo nuntiavit quae, a Burdegalinse urbe veniens, directa servo Domini', *Vita Filiberti* XXXVII (ed. Levison, p. 602).

[56] James, *The Merovingian*, p. 223.

Dagobert's diversion of Amandus to work on the frontier mission may be taken as characterising his approach to missionaries[57]. It is clear that the Frankish conquest and conversion of Germany was a focus of overseas contact in which Irish and English clerics were heavily involved, probably by virtue of a model of insular political involvement in Frankish affairs stretching back earlier into the seventh century and especially linked to the legacy of Columbanus[58].

The personal links of the mission of Willibrord to Germany also indicate an underrated western maritime link. The story begins with Egbert, a Northumbrian living in Ireland[59]. The miraculous events of the story may cause us to treat it with suspicion, though the actual events are plausible enough. While a ship is being prepared, Egbert disregards the message of a vision that he should sail to Iona and not Germany. Before it leaves harbour, the ship is driven aground by a storm, which leaves the ship 'lying on her beam ends in the waves'. The possessions of Egbert and his companions are saved, but the ship's stores lost[60]. This could be interpreted as contradicting the earlier impression that the brethren were the sole proprietors of the voyage, but it may simply imply that the punishment did not include the personal posessions of the brethren, but only those stores needed to make the voyage possible. It can only be assumed that the route taken by the voyage would have been intended to have been around Cornwall and up the

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[57] *Vita Amandi* (ed. B. Krusch, *MGH SS rer. Merov.* V, Hannover, 1910, p. 440). Now see Wood, 'The Franks and Sutton Hoo', p. 9.

[58] Angenendt, 'Die Irische', pp. 64ff; James, 'Ireland, p. 377-81; Wallace-Hadrill, *The Frankish*, pp. 68ff, 143.

[59] Bede, *Historia Ecclesiastica* V.9 (ed. Colgrave and Mynors, p. 478).

[60] Atque oportunos aliquot diebus uentos expectarent, facta est nocte quadam tam saeua tempestas, quae perditas nonnulla ex parte his quae in naui erant rebus, ipsam in latus iacetem inter undas relinqueret', Bede, *Historia Ecclesiastica* V.9 (ed. Colgrave and Mynors, p. 478).

Channel. If Egbert was still at this time living at Rath Melsigi[61], which is thought to have been just east of the River Barrow, near Carlow[62], the port at which these events occurred would have been probably somewhere in southeast Ireland, perhaps Waterford or Wexford. As the predominant gales are southerly and westerly, Waterford would be most likely. While it might be unwise to read too much into Bede's detail, as he was writing so far away, it is worth pointing out that the maritime details of the story are plausible. A southerly gale and floodtide in the Barrow estuary would disable a ship in just this way.

A series of Northumbrian exiles in Ireland took up the task which Egbert abandoned. Wictibert 'took ship and arrived in Frisia', but meeting no success, returned to Ireland[63]. In 692 Willibrord followed. His visit to see Pippin, *en route*, is specifically described as a detour[64]. The latter's intervention in their mission is suggestive: 'supporting them with his imperial authority so that none should interfere with their preaching, and granting many favours to those who wished to embrace the faith'[65]. In another, perhaps confused, episode, two more Northumbrian exiles in Ireland, both called Hewald, go to Saxony and are martyred[66].

These voyages seem to be constituted by the churchmen in question and presumably take them up the English Channel, from a starting-point somewhere in

[61] *Ibid.*, III.27 (p. 312).

[62] T. Fanning, 'Some Field Monuments in the Townland of Clonmelsh and Garryhundon, Co. Carlow', *Peritia* 3 (1984), p. 43.

[63] Bede, *Historia Ecclesiastica* V.9 (ed. Colgrave and Mynors, pp. 478-80).

[64] *Ibid.*, V.9 (p. 480).

[65] *Ibid.*, V.9 (p. 480).

[66] *Ibid.*, V.10 (p. 483).

Ireland's southeast. They might therefore be seen as exceptional to the normal pattern of commercial voyaging. Any implication that Northumbria lay on their route is lacking. As Bede was writing about events in his own lifetime it may be accepted that the routes described are correct at least on this point. This fact has formed a cornerstone of Dáibhí Ó Cróinín's study of the Echternach manuscripts[67].

This evidence raises important issues for the understanding of the basis of seventh century exchange between Gaul and Ireland. It emerges as most likely that Irish voyagers would still travel by way of the Atlantic sealanes (just as Willibrord did) even though their destination was Germany. We may set this against James's suggestion that the route via England would have been increasingly used after Ireland became involved in the German mission[68]. The personal links of the missions of Columbanus and Willibrord, their political associations and the ongoing relations between communities in Ireland and those abroad, may have been underestimated through their study not being tied closely enough to recurrent use of routes and locations. This topic has benefited from the prosopographical work of Angenendt[69] and Ó Cróinín (and by analogy Herbert's study of the *familia* of Columba[70]). These links would serve to explain commercial developments between Ireland and the Continent: perhaps with monastic correspondence conveying orders for goods and personal links guaranteeing cargoes a safe market. The documentary evidence for cargoes will be explored below.

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[67] See p. 250.

[68] James, 'Ireland', p. 380.

[69] Angenendt, 'Die Irische', pp. 52-79; Wallace-Hadrill, *The Frankish*, pp. 68-73.

[70] M. Herbert, *Iona, Kells and Derry*, Oxford, 1988.

A series of studies by Hillgarth have attempted to counter Zimmer's thesis, which he sees as having encouraged an overemphasis on western Gaul as a source for Irish cultural ideas[71], by stressing the importance of the cultural links between Ireland and Spain in the seventh century[72]. As Mayr-Harting rightly says, however: 'one may search the text and voluminous notes of the learned articles of...Hillgarth, who seeks to establish such links, without finding a single piece of evidence of travel or written correspondence or direct communication of any kind between Ireland and Spain'[73]. There is no evidence to support the existence of such contacts at *any* point in the early middle ages. We have seen in a previous chapter how Thompson would posit the existence of trading links between fifth century Galicia and Gaul on the evidence of extensive intellectual exchange[74]. But he at least supports his case with evidence that such maritime links did exist in the following century.

Hillgarth's thesis obviously highlights the importance of the evidence of direct travel favoured by Zimmer and Levison to identify regular contact between regions. Hillgarth has recently shifted the emphasis of his debate by observing that, in cultural terms, the route by which influences arrive may be 'secondary to the question of reception'[75]. But *both* are important in their own right. The

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[71] See most recently, 'Ireland and Spain', pp. 13-14.

[72] J. N. Hillgarth, 'The East, Visigothic Spain and the Irish', *Studia Patristica* 4 (1961), pp. 442-56; *idem*, 'Visigothic Spain and Early Christian Ireland', *PRIA* 62C (1962), pp. 167-94; *idem*, 'Old Ireland and Visigothic Spain', in R. McNally, ed., *Old Ireland*, Dublin, 1965, pp. 200-27.

[73] Mayr-Harting, *The Coming*, p. 127.

[74] See p. 111.

[75] Hillgarth, 'Ireland and Spain', p. 16.

transmission route may be important in establishing the priority of text tradition. This is seen in the case of Julian Brown's arguments for the origins of the Echternach Gospels, where he pinned theories concerning the evolution of Insular scripts to the assumption that St Willibrord's mission issued from Northumbria[76]. Daibhi Ó Cróinín has demonstrated the inaccuracy of this assumption, using Bede's clear statement that Willibrord travelled from Ireland direct to Gaul[77]. On the strength of this case, it is not necessary to adopt an 'Irish' stance in the Insular Art debate (Ó Cróinin after all highlights the work of Anglo-Saxons and Franks resident in Ireland[78]) to accept his point that the role of the seaborne route between Gaul and Ireland is still underrated in favour of the intermediacy of Northumbria.

Do we assume, then, following Zimmer, that commercial links have a determining role in the formation of cultural contacts? Can we, like Hillgarth, accept that definite cultural connections between two regions allow us to assume the existence of direct commerce for which there is no other substantive evidence? And does the fact that the majority of Irish churchmen travelling to Gaul worked in east Francia allow us, following James, to doubt the predominence of the western sealanes route? The answer is no to all of these questions. Hillgarth is correct to emphasise the importance of reception over routes of communication for cultural

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[76] T. J. Brown, 'Northumbria and the Book of Kells', *Anglo-Saxon England* 1 (1972), pp. 219-46.

[77] Ó Cróinín, 'Rath Melsigi, pp. 17-49, esp. p. 33: 'Thus the presumption of Northumbrian origin for most of these early Echternach codices rests in fact on little more than an ignorance of the true historical background to that monastery. Because Willibrord and his companions were Northumbrian by birth, [E.A.] Lowe (and others after him) tacitly assumed that their closest contacts would have been with Northumbria'. Response in R. Bruce-Mitford, 'The Durham-Echternach Calligrapher', in G. Bonner, D. Rollason and C. Stancliffe, eds, *St Cuthbert, his Cult and Community to AD 1200*, Woodbridge, 1989, pp. 175-88 - pp. 185ff expressing a more cautious view than Brown did. Also D. Ó Cróinín, 'The Augsburg Gospel Codex, a Northumbrian Manuscript', in *ibid.*, pp. 189-201; N. Netzer, 'Willibrord's Scriptorium at Echternach and its Relationship to Ireland and Lindisfarne', in *ibid.*, pp. 203-212.

[78] Ó Cróinín, 'Rath Melsigi', 22ff.

studies. Intellectuals, carrying texts, may have travelled on trading ships to western Gaul. Beyond this point, however, they enjoyed powers of movement beyond that of traders. The evidence for commerce suggests western Gaulish links were predominant. To seek the major influences on Ireland in western Gaul, however, is no more logical than looking for the sources of, say, contemporary English influences on Scottish culture in Kings Cross and Euston railway stations.

A Continuity of the the Mediterranean Connection?

In a discussion of western sealanes traffic in the seventh century, we are obliged to consider the story of Arculf, a bishop of 'Gaulish race' who visited the Near East, and who provided the details for Adomnan's book *De Locis Sanctis*. Adomnan only states that Arculf was a Gaulish bishop and that he dictated the account to him[79]. Bede furnishes us with the details as to how Adomnan came to meet Arculf:

> Coming home by sea [Arculf] was driven by a mighty tempest to the west coasts of Britain; and after suffering many things he reached the aforesaid servant of Christ, Adomnan, and was found to be learned in the Scriptures and acquainted with the holy places...all these Adomnan by and by procured to be put in writing[80].

A similar account precedes Bede's own *De Locis Sanctis* (largely based on Adomnan) with no additional detail[81].

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[79] 'Arculfus sanctus episcopus gente Gallus....peragrans mihi Adomnano haec universa quae infra craxada sunt experimenta diligentus percunctanti...fideli et indubitabili narratione dictauit', Adomnan, *De Locis Sanctis*, Prologue (ed. Meehan, pp. 36-7).

[80] 'patriamque navigio revertens, vi tempestatis in occidentalia Brittaniae littora delatus est: ac post multa, ad memoratum Christi famulum Adamnanum perveniens, ubi doctus in Scripturi sanctorumque locorum gnarus esse compertus est...cuncta mox iste litteris mandare curaverit', Bede, *Historia Ecclesiastica* V.15 (ed. Colgrave and Mynors, pp. 506-8).

[81] 'Sed cum patriam revisere vellet, navis, que vehebatur, post multos, anfractus venti contrario in nostrum, idest Brittannorum isulam perlata est, tandemque, iste post nonnulla pericula ad prefatum virum venerabilem Adamnanum perveniens....', Bede, *De Locis Sanctis* (ed. P. Geyer, *Corpus Scriptorum Ecclesiasticorum*, vol. 39, Vindobonae, 1878, p. 302).

Bede may have received these details from monks of Iona, though he also records a story whereby Adomnan presented Aldfrith with a copy of the book in Northumbria[82]. From whatever source Bede received that information may also have come these further details regarding Arculf. What are the logistics of this story? The questions which have concerned most commentators have been why a traveller returning to Gaul from the Near East would have travelled by sea at all and how, having done so, he would be wrecked off the western coast of Britain.

It is tempting to see the story as confused or conflated by Bede. Certainly Adomnan's silence on the point is important in this regard. A storm-driven churchman is a likely *topos* in Insular writing. Bede, or some intermediary between him and the events, may have felt this a more convenient explanation of Arculf's presence at Iona than a more lengthy, prosaic and less entertaining account of his presence there. Certainly the fact that he is implied to have travelled straight from the Mediterranean to Britain is suspiciously neat. On the other hand some details of the story are not implausible. Ships on the western sealanes may be driven by storm far off course by contrary winds (Bede's *venti contrario*[83]). They may be forced to sail long distances in the opposite direction to their course, where the alternatives would be a dangerous head sea or a reach, broadside on to the prevailing swell. *If* Arculf were travelling to western Gaul via the Straits of Gibraltar, for example, it would not be impossible for him to fetch up in western Britain. In summer the south westerly winds would be quite likely to drive a ship into the western channel of Britain. Another point is that Arculf might well have planned a voyage *via* Britain. There is no assurance that Arculf would have owned his own vessel or could have ordered a ship to change its route of travel to set him

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[82] Bede, *Historia Ecclesiastica* V 15 (ed. Colgrave and Mynors, pp. 504-6); Meehan, *De Locis Sanctis*, pp. 4-5.

[83] See n. 81.

ashore any more than a modern traveller can ask an express train to put them down at a rural halt. When we consider a case like that of John the Arch-Cantor, travelling to Britain via Tours, it is implicit that coastal voyages around Brittany and up the English Channel may have been contemplated as an alternative to overland travel through Neustria. If we were to speculate that Arculf was from the northeast of Gaul[84], the hostility between Neustria and Austrasia in this period (679-686) provides an adequate reason why sea travel might be considered as an alternative to crossing Neustria - which explanation might also suffice for the route of John Arch-Cantor (680). Finally, Arculf's ship may have been wrecked well to the south of Iona. Bede simply says *in occidentalia Brittaniae littora,* which may imply anywhere between Cornwall and the Hebrides. Conceivably Wales or Cornwall may not be unlikely. We should also note that there is the possibility that Adomnan did not meet Arculf at Iona, perhaps meeting him in Ireland before coming to Iona (this may make little practical difference, as Adomnan would still most likely have been in the *north* of Ireland).

The best explanation of this story is that it is a conflation, or simple fantasy. The detail of a churchman travelling by a roundabout route is believable enough in the context of the late seventh century, but the chances of the case for this being a direct voyage from the eastern Mediterranean must be regarded as unproven in the absence of any supporting evidence. The likelihood that Arculf was making a voyage off western Gaul is more likely.

In Britain, whether by accident or by design, Arculf may have found a return via Iona the most convenient route. This may seem illogical to the modern traveller. A lack of east-west contacts between Anglo-Saxon England and Celtic Britain south of Scotland in this period is implicit from a variety of sources. Iona

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[84] Meehan, *De Locis,* pp. 5-6.

had links with Northumbria which would assure Arculf a safe journey and Northumbria likewise with Gaul. It should be noted that Dagobert returned to Gaul from Ireland via the same route around the same time.[85]

All of the above is simply speculation. It raises questions, however, which are fundamental to study of historical assumptions regarding early medieval travel. Both mariners and churchmen were limited by political and economic considerations in respect of where they could safely put into shore and across whose land they could safely travel. The sea is more neutral ground. Likewise, early medieval commercial voyages may have been rare and roundabout routes explicable in the context. The details of Arculf's voyage, however, are difficult to reconcile with the other evidence for western sealanes usage in the seventh century. Likewise it must be held to be unlikely that Mediterranean ships were arriving in Britain along the same lines of commerce as in the mid-sixth. That Werner and Nordenfalk have seen this supposedly 'direct' traveller arriving conveniently laden with the many manuscript exemplars required to underpin their theories of Insular Art[86] must be regarded as quite unacceptable in terms of the quality of the evidence.

Cargoes and Commerce Between Gaul and the Irish Sea Basin

Both documentary and archaeological sources allow us to identify some of the elements which made up the cargoes of commercial shipping between Gaul and Ireland and some of those involved in local commerce. The archaeological evidence, which allows us to make firmer speculation on the routes and destinations of maritime commerce, will be discussed in the following section.

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[85] See p. 240.

[86] M. Werner, *'Crucifixi, Sepulti, Suscitati:* Remarks on the Decoration of the Book of Kells', in F. O'Mahoney, ed., *The Book of Kells,* forthcoming; C. Nordenfalk, *Celtic and Anglo-Saxon Painting,* London, 1977, p. 22.

The documentary evidence does not suggest a traffic dominated by a single, regular commodity is indicated: the 'wine trade' model needs to be firmly buried. A regular range of goods involved in commerce might be identified, of which wine was one element, but there is no evidence to suggest that it was the principal, or even a major, element.

Of the Irish sources, the *Muirbretha* ('Sea Judgements'), which has already figured in our discussion of maritime matters, is of particular interest. This text, at least part of which concerned the law of salvage, is unfortunately no longer extant, and we are dependent for an idea of its contents on commentaries in Trinity College MS. 1433 and in *Cormac's Glossary*. The latter provides a *terminus ante quem* of c.908 for its composition. Elements from the *Muirbretha* may also be incorporated into *Senchas Mar*[87] and *Uraicecht Becc*[88]. Valuable commentaries survive on a section concerned with the cargo of wrecked ships and their possible contents:

> The case in which a 'sed' of the value of six 'screpalls' is due from her, or a 'sed' which is worth an ounce of silver, is where she came consigned to a certain person, and it was not onto his land which they happened to be driven, but into the land of another person in his vicinity; and he (the other person) is entitled to a 'sed' of the value of six 'screpalls' for allowing her firewood and water, if it be hides and iron and salt that are in her; or to a 'sed' worth an ounce of silver, if it be foreign nuts and goblets; and to an 'escup'- vessel of wine or of honey, if wine or honey be in her[89].

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[87] Trans. in T. O'Mahony and A. G. Richey, *The Ancient Laws of Ireland*, Dublin, 1865, vol. 1, p. 129 Kelly, *A Guide*, pp. 276-7.

[88] Namely the sections on ships in *Uraicecht Becc* - see p. 49.

[89] 'IS ann ata .s. ui screpal uaithi no .s. foraici uingi: in tan tainic fo thomus duine airithi hi, ⁊ ni 'na lesc lama-sin fein dorala iat s a ferann duine aile 'na comocus, ⁊ .s. ui screpal do ar connad ⁊ uisci do lecad di masa seichida ⁊ iarann ⁊ saland ata indti, no .s. foraici uingi masa cno gnae ⁊ cuirnd, ⁊ escup fina no mela ma ta fin mil indti', Commentaries on the *Muirbretha* (ed. Binchy, *CIH*, p. 315, trans. in T. O'Mahony and A. G. Richey, *The Ancient Laws of Ireland*, III, Dublin, 1873, pp. 426-7).

Cormac's Glossary adds the following details:

> *Epscop Fína* [sic] in the *Muirbretha* i.e. vessels for the measurement of wine
> amongst the merchants of the Gauls or Franks[90].

The fact that the 'escup' vessel has here become purely a wine vessel *(epscop fína)* carries no implications that the vessels were principally for use with wine. Rather we may accept Zimmer's conclusion that the malapropism *epscop* is a play on words with the word for bishop[91] and the abbreviation of the *Muribretha*'s full reference is a convenience to this end.

The elements in the cargo of the wrecked ship/s deserve close analysis. In the *Muirbretha* wine is cited as a possible cargo, from the phrase 'if wine be in her', evidently not a ubiquitous cargo. Wine was probably imported in casks, though skins are another possibility. We may discount ceramic vessels as these would leave archaeological traces. There is no evidence of barrels or casks in any relevant context[92]. Thomas' reference to Adomnan's metaphor of 'wine oozing from a cask'[93], is actually to nothing more specific than 'cracks' *(rimulas)* in a 'large vessel' *(pleni vassis)*[94] which could just as easily be ceramic. His much quoted reference to remains of casks at the inland sites of Lagore and Lough Faughan[95] proves nothing as there is no evidence that the casks are Gaulish. These comments

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[90] EPSCOP FÍNA isna Muirbrethaib .i. escra tomais fina le cenaigib Gall 7 Frange', (ed. Stokes, p. 19).

[91] Zimmer, 'Der Weinhandel', p. 441.

[92] E.g. a coastal site or port.

[93] Thomas, 'Imported Late-Roman', pp. 252-3.

[94] Adomnan, *Vita Columbae*, epilogue to Book I (ed. Anderson and Anderson, p. 322).

[95] Thomas, 'Some Imported', p. 252; echoed most recently in Mytum, *The Origins*, p. 265.

by Thomas are in any event to be seen in the context of his argument for a link between E ware and wine, this approach is also particularly seen in the studies of Hodges. The only possible connection would be in terms of a common origin area: E ware can have no conceivable connection with wine - unless we take the far-fetched step of imagining E ware pitchers (E4) to be the *escup* vessels.

The *Muirbretha* reference to measuring vessels would tally best with the idea of the wine being imported in casks, which would *stay on board* the vessel, with the wine being sold in small quantities during the voyage from port to port. In reading the evidence in such a way, however, we might be relying on Cormac's reading, as the *Muirbretha* commentaries do not specify that the *escup* was a foreign measurement (though the word does not appear to be Irish[96]. Adomnan makes reference to a 'Gaulish pint'[97], which might presuppose that he was addressing an audience to whom Gaulish measurements were familiar - that he may be simply recording here the direct words of the Gaulish Bishop Arculf is unlikely from what we know of Adomnan's input into the rest of this text. Returning to the *escup,* it would be likely enough in Irish law for penalties for mishaps relating to shipping to be set in the measurements normally used in maritime trade. As honey cannot be taken for granted to be a foreign import good, it is unlikely that we can see the use of *escup* vessels as limited to Gaulish goods.

Let us consider the other cargoes mentioned in the *Muirbretha.* Honey was the only sweetener available in the early middle ages and the principal ingredient of mead, which was a valued drink for regular secular consumption in early medieval Celtic society[98]. Honey is mentioned as a spoil of raiding in the ninth-century

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[96] From Latin *scopa*. O'Rahilly (*The Two Patricks*, p. 43) notes Pr. Irish **scob* (Old Ir. *scuap*). *Escup* seems closer to Old Welsh **scup* (Mod. Welsh *ysgub*).

[97] Adomnan, *De Locis Sanctis* (ed. Meehan, p. 50). I would like to thank Ewan Campbell for drawing my attention to this reference.

[98] See K. H. Jackson, *The Gododdin*, Edinburgh, 1961, pp. 35-6.

Historia Brittonum[99]. That honey was marketed in Gaul is indicated from charter evidence of the tenth century[100]. Clearly it should be regarded as a good which would have a high exchange value, especially if the role of wine consumption is diminished. Ireland was a producer of honey[101], which may render its presence in the *Muirbretha* as being that of an object of local exchange, or an export good. Malt was doubtless also the object of exchange, for use in alcohol production - in which context it finds mention in the Irish laws[102].

The *Muirbretha* reference to hides is to a good of which Ireland was a major producer. If hides were one of Ireland's major exports, however, this is nowhere recorded - though export of leather goods is probably attested in the *Vita Filiberti*'s mention of shoes[103]. It should be noted for the unwary that the evidence of the latter reference has been somewhat inflated by repetition. Hodges (who rarely shows direct acquaintance with the primary sources) has Mediterraneans returning with leather to Byzantium, wine being exchanged for leather by 'Irish monks' (actually Irish sailors) in the 'Loire valley'[104] (actually Noirmoutier) and, on another occasion, carried there along with hunting dogs[105]. Despite his pluralistic use of this reference, we might take note of Hodges's point as to its singularity: that

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[99] Nennius, *Historia Brittonum* XXX (ed. J. Morris, Chichester, 1980, p. 66).

[100] See p. 264.

[101] See e.g. the Irish 'Bee Judgements', *Bechbretha* XXI (ed. T. Charles-Edwards and F. Kelly, Dublin, 1983, pp. 62-3).

[102] *Cáin Aicillne* (ed. Binchy, *CIH*, p. 481, ll. 9ff).

[103] See p. 244.

[104] Hodges, *Dark Age*, p. 127.

[105] *Ibid.*, p. 38.

the *Vita Filiberti* is a rare text in referring to leathergoods as an early medieval export good[106]. Early medieval Irish shoes were of a very high quality[107]. Sites such as Ballinderry II and Iona have produced debris from shoe making[108] and the finished products from the latter site are similar to pictorial evidence from insular manuscripts, for example the Book of Durrow[109]. It may be that only Ireland treated leathergoods as an object for export - or perhaps only those of Ireland were of a quality sufficient to command a market abroad. Hides were certainly a major element of Ireland's export trade in the high-medieval period[110]. The reference to 'clothing' as an export from Ireland in the *Vita Filiberti* also finds a parallel in later Irish trade[111].

Iron, carried as a raw material, is more likely to be a short distance cargo for a vessel in Irish waters. It would appear premature to draw very hypothetical links between sites with known natural sources of iron around the Irish Sea. Material for more intensive study of the extractive industry is being uncovered at Whithorn, where extensive evidence of on-site smelting exists, utilising ore brought from a source at some distance[112] - probably from coastal trade. Iron objects are another possible interpretation and will be discussed in the following section.

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[106] *Ibid.*, p. 127.

[107] Mytum, *The Origins*, p. 245.

[108] H. O'N. Hencken, 'Ballinderry Crannog No. 2', *PRIA* 47C (1942), pp. ; J. Barber, 'Observations on Early Irish Footwear', *Journal of the Cork Historical and Archaeological Society* 86 (1982), pp. 103-6; A. T. Lucas, 'Footwear in Ireland', *Co. Louth Archaeological Journal* 13 (1956), pp. 367ff; and, on other technical aspects of Irish leather-working: J. Waterer, 'Early Irish Book Satchels or Budgets', *Medieval Archaeology* 12 (1968), pp. 70-82.

[109] Henderson, *From Durrow*, p. 51.

[110] O'Neill, *Merchants and Mariners*, pp. 77-83.

[111] *Ibid.*, pp. 68-89.

[112] Hill, 'A Thousand Years', pp. 21-3.

'Foreign nuts'(*cno gnae*: 'exotic nuts' is probably a better translation as desirability is implied) would appear to be self-explanatory. A commentary on *Bretha im Fhuillema Gell* describes these as 'eastern' in origin[113]. Kelly would suggest these are West Indian nuts brought by the Gulf Stream[114], but the shipboard context is suggestive of an import trade - unless we see this reference as to coastal trade between the source beach and the consumption point.

We might also see the reference to salt as relating to a 'coastal' activity. However, a case can be made that it is here more likely a foreign import to Ireland. The evidence for a salt trade has not attracted much attention, probably because it is not a 'glamorous' cargo, such as wine (as Edward Hughes wrote some years ago of his book *Studies in Administration and Finance*: 'a candid friend told the writer that "salt must be kept off the title page...for people won't believe that it can have been important"'[115]). It has a clearer consumer context than wine, however - the early Irish Laws make reference to salt, salted meat and specifically to 'sea salt' (*múrluaith*)[116] - and no less strong a case than wine for having been traded. The western coasts of France and Brittany are major salt producers[117] and the Loire valley was central to salt trading by the eighth century[118].

It is probably also no coincidence that it is to Noirmoutier that the ships from Ireland put in in the *Vita Filiberti*, as the monastery of Noirmoutier was

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[113] Ed. Binchy, *CIH*, p. 472, l. 16.

[114] Kelly, *A Guide*, p. 249 n. 37.

[115] E Hughes, *Studies in Administration and Finance*, New York, 1938, p. 3. Now an unbelievable attitude in the light of events in India led by M. K. Gandhi!

[116] *Críth Gablach* XV (l. 190), (ed. Binchy, p. 8).

[117] See e.g. J. LeFond, *Handbook of World Salt Resources*, New York, 1969, p. 183.

[118]

involved in salt trading and Ireland is likely to have imported salt in this period. It might seem logical that any sea girt region would simply produce its own salt, but an historical sense is necessary here: Ireland may have been less likely to initiate subsistence extraction of salt if large quantities of salt only became necessary for the first time in the early christian period. It may be possible to trace changes in eating and cooking habits, with communal killing and immediate consumption of meat giving way to killing and storing of individually owned beasts, for which salt would be necessary[119]. The references to salt[120], and salted meat[121], in a text such as *Críth Gablach* (early-eighth century) might suggest this. Viking Age Ireland imported salt from Anglo-Saxon England *(Salann Saxanach*[122]*)*, however, and Irish placename elements associated with salt production (e.g. 'Saltpan, Saltworks') are all English, being completely absent from the Gaelic stratum[123]. This would suggest that salt production was a late-Medieval or later development: probably later. Salt production is not mentioned in the Irish Laws, even where there is reference to ownership of the strand. Whether salt was produced elsewhere around the Irish Sea is hard to determine. Certainly it was an Iron-Age activity in Wales[124] and Cornwall[125]. Nothing in the nature of early medieval *briquetage,*

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[119] Wooding, 'What Porridge', p. 15

[120] *Críth Gablach* XII (ed. Binchy, p. 6)

[121] *Ibid.,* XV, XIX, XX, XXIV, XXVI (pp. 8, 11, 12, 14, 15).

[122] *Aislinge Meic Conglinne* (ed. K. Meyer, London, 1892. p. 62).

[123] B. G. Scott, 'Some Conflicts and Correspondences of Evidence in the Study of Irish History and Language', in *idem,* ed., *Studies in Early Ireland,* Belfast, 1981, pp. 115-6.

[124] Where it is attested by Very Coarse Pottery.

[125] D. P. S. Peacock, 'A Romano-British Saltworking Site at Trebarvath, St Keverne', *Cornish Archaeology* 8 (1969), pp. 47-65.

however, has been discovered. The case is not as clear in the placename elements for Britain as for Ireland. Charles Thomas *(pers.comm.)* has observed that the Cornish for salt is *hile,* easily confused with *hely*[126] ('hunting'). Early names for saltworkings could well be hidden behind this sort of similarity of elements. If Ireland did not possess salt industries from prehistory, early mediaeval economic structures may not have accommodated the founding of them. Do the place-names suggest that this waited upon the much later arrival of an English bourgeoisie?

The reference to goblets is not clear as to the class of vessel involved. As we will see in the following chapter, there is a likelihood that long-distance cargoes carried both ceramic and glass vessels. We can only say that they confirm the evidence of the *Muirbretha* for the movement of small consumption vessels over a long distance.

These then are the goods described in the *Muirbretha*. Both this text and the *Vita Filiberti* stresses the variety of goods which might be on board a ship operating around Ireland[127]. Clearly these are goods for both local and long-distance traffic and they are probably not the only goods involved in such traffic. The making of quernstones[128] was certainly an activity for which suitable stones were brought from quite a distance[129]. Over short-distances we have references to the movement

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[126] *Viz* Goonhilly Downs which is definitely a hunting, not a saltworking, name.

[127] See p. 127.

[128] *Vita Brigitae* XXXI (trans. Connolly and Picard, pp. 24-5).

[129] Campbell, 'A Cross-marked Quern', pp. 105-17; *Archaeological Survey of Co. Down*, Belfast, 1966, p. 131; V. B. Proudfoot, 'The Economy of the Irish Rath', *Medieval Archaeology* 5 (1961), pp. 94-122; Hodges, *Dark Age Economics*, p. 124.

of timber[130] and reed-cutting[131] and fishing industries were doubtless involved in short-distance traffic. A traffic in very small fragments of Samian ware, which could be imports from the Continent or from local Roman period sites, also existed though its consumer context is unknown[132]. We should not push speculation on goods involved in such exchange beyond the limits of the evidence. Futher items involved in exchange will be identified as further sites with well-preserved sequences are excavated and little-known texts, such as the Irish laws, are translated and dated.

The idea that exotic pigments and decorative stone were long- and short-distance trade goods in the early middle ages has been indicated by recent excavations. Hill has suggested a traffic in lime from the eastern Solway, for decorative use, is evinced by datable finds from Whithorn[133]. Colouring matter is also very likely, though where it is known from western sealanes contexts, however, it is not absolutely clear whether it was a seaborne arrival. Colouring matter used in Insular gospel decoration includes orpiment (yellow), lapis (blue), kermes[134] (from the pregnant *kermoccus vermillo,* a Mediterranean insect [red])

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[130] See p. 105.

[131] *Vita Columbae* II.39 (pp. 434-5).

[132] J. Bradley, '" Medieval" Samian Ware: A Medicinal Suggestion', *Ulster Journal of Archaeology* 44 & 45 (1981-2), pp. 196-7; Warner, 'Some Observations', pp. 285-8; C. J. Lynn, 'Some Fragments of Exotic Porphyry found in Ireland', *Journal of Irish Archaeology* 2 (1984), p. 28.

[133] Hill, 'A Thousand Years', p. 22. Lime traffic has certainly followed this route in more recent times: see I. Donnachie, 'The Lime Industry in South-west Scotland', *TDGNHAS* 48 (1971), pp. 146-7, for a discussion of limestone resources in the region. The early medieval traffic along this route might be best dated to the Anglian period at Whithorn, which brings Cumbria and the eastern Solway into closer contact with the rest of the Irish Sea. See pp. 324-5.

[134] Available in Spain, for example: Strabo, *Geographica* III.2 (ed. Jones, vol. 1, p. 33).

and *crozophora tinctoria* (maroon)[135]. Where such colouring is used in such unprovenanced manuscripts as the Book of Durrow and the Book of Kells, obviously the question of by which routes the colouring matter was imported cannot be inferred with any precision. Alcuin, in a letter from Northumbria to his student Joseph in Gaul in 790, asks to be sent 'plenty of paints of fine sulphur and dyes for colouring'[136]. A piece of orpiment was discovered at Dunadd in 1981[137], however, showing perhaps that it was not confined to the ecclesiastical network only and this find has at least a strong likelihood of having arrived by the western route from the Continent. Ewan Campbell has made much of the case for Madder *(rubia tinctorum)* as a trade good, which will be discussed in the next section.

The commerce which was associated with Dagobert's monastic foundations in Gaul provides a context for the sale and purchase of the goods involved in the long-distance insular traffic. At St Denis in 634-5 Dagobert's foundation charter granted the monastery the right to hold a fair on October 9[138]. The Insular focus of the mart is highlighted in the forged foundation charter (probably tenth century) which describes a plurality of foreign nationalities at this mart in 629, exchanging wine, honey and madder[139]. This is not good evidence to support a connection

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[135] H. Roosen-Runge and A. F. A. Werner, 'The Pictorial Technique of the Lindisfarne Gospels', in T. J. Brown and R. Bruce-Mitford, eds, *Evangeliorum Quattuor Codex Lindisfarnensis*, Olten, 1960, Vol.2, pp. 262-7. Also see R. Fuchs and D. Oltrogge, 'Conclusions Drawn From Pigment Analysis of the Book of Kells and Book of Durrow', in F. O'Mahony, ed., *The Book of Kells*, Aldershot, forthcoming.

[136] See p. 103.

[137] Campbell, 'A Cross-Marked Quern', p. 113.

[138] *Gesta Dagoberti* 34 (ed. B. Krusch, *MGH SS. rer. Merov.*, II, p. 413). This passage takes information from a lost charter of 634.

[139] 'And may you our *missi* know from this market [St Denis] and at all the cities in our kingdom, especially at Rothomo port [Rouen] and Wicus port [Quentovic], those who come from beyond the sea to buy wines and honey or *garantia* [madder], (ed. G. W. Pertz, *MGH Diplomatum Imperii*, Hannover, 1874, no. 23, p. 140). Probably a tenth century forgery, translation, by J. Percival, from Campbell, 'The Archaeological Evidence', forthcoming.

with western sealanes traffic, but we may accept his point that it does suggest the value accorded to these particular commodities in the commercial networks of northern Gaul. The collection of charters from St Denis is exceptional[140], but we find clues in other sources that this type of traffic would have existed in earlier contexts, and in foundations on the Atlantic seaboard.

In the *Vita Filiberti* the monastery's committment to commerce, using surplus production from its estates, is made into a religious ethos where the saint pronounces on 'holy commerce'[141] and the need to 'give more than lay merchants give'[142]. The ninth-century *Miracula* of the saint describe the salt production of the monastery and the exchange of this with British mariners[143] (maybe Breton) who had brought wheat to La Furca. Wine is also sold at fairs at Noirmoutier[144] and the use of the Loire as a distribution route for salt and wine from various centres, with Noirmoutier and Orleans as focal points, is indicated in sources such as the ninth century *Miracula* of St Benedict[145]. Doehaerd would suggest that Dagobert offered incentives to encourage monastic groups to settle more marginal areas - citing examples such as the clearance of scrub to found the monastery of St Wandrille in 649[146], though he goes on to link this with the *desertum* ethos, also. That there

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[140] Hatcher (*English Tin Production and Trade before 1550*, Oxford, 1973, p. 16) would argue that the Abbé Raynal in his *Histoire Philosophique et Politique* of 1782 had access to a lost charter of Dagobert, establishing markets in seventh-century Gaul where Saxons brought lead and tin from Britain. This might well indicate contact involving Cornwall, but it is a doubtful reference indeed.

[141] *Vita Filiberti* XXIII (ed. Levison, p. 596).

[142] *Ibid.*, XXIII (p. 596).

[143] R. Doehaerd, *The Early Middle Ages in the West: Economy and Society*, trans. W. G. Deakin, Amsterdam, 1978, p. 156.

[144] *Ibid.*, p. 156.

[145] *Ibid.*, p. 156.

was a direct benefit to the crown to be gained from encouraging this economic development in monastic settlement is clear: comparable to that which the secular *emporia* were to confer. We should not discount the possibility that these networks played a part in the establishment of the late-sixth through eighth century networks which sent goods to and from Gaul and Ireland/ western Britain.

If monasteries in Gaul provided opportunities and markets for trade, we may see this neither as indicating that all trade was under monastic control, nor that all commerce at the British and Irish end reached monastic ports. Traders such as worked in-and-around Noirmoutier may have responded to orders conveyed via the monastic networks - or monastic figures with royal connections in Ireland may have sent goods to their families back home. That monasteries ultimately attain prominence in the growth of a market economy of Ireland after the eighth century may suggest that the commercial/ monastic ethos in Gaul could have been inspirational in this process, with Dagobert's model being adopted in Ireland.

As discussed in chapter 2.4, we should remain relatively open-minded as to the types of sites which were landfalls for ships from Gaul. Thomas favours the view that imported goods were channelled through secular centres at the British and Irish end, which would tally with the eighth-century text *Tecosca Cormaic* in which a king is defined as 'inviting barcs into port, with overseas treasures'[147]. Campbell, too, has discussed the means by which he sees local exchange mechanisms used to generate surplus for the purchase of the imports by local potentates. Even if the secular dominance of the landing places is shown to be definite, we do not know if all cargoes were destined for secular consumption: if

[146] *Ibid.*, pp. 33-4.

[147] See p. 50.

secular authorities dominated the landing places, monastic purchases might have to pass through them.

Let us summarise the important points regarding the changes that the seventh century brought to our historical picture of maritime traffic. Undoubtedly goods were now being carried directly by sea between Gaul and Ireland. Terms such as *commercia* and *cenaigib* indicate that the activity could be commercial, stepping aside for a moment from whatever causal links existed with political/ ecclesiastical activity. Two of the more specific references indicate the Loire estuary in particular, rather than the Bordeaux connection favoured by Zimmer. Adomnan confirms that Continental mariners went as far north as Dalriada.

The evidence of E ware pottery, a coarse Gaulish domestic pottery, the importation of which centres on the seventh century, seems to confirm most of these details, if not all. Its evidence can also be used to define more clearly the distribution networks and routes involved. E ware needs to be examined in its own right, however, and this will be dealt with in the following section, along with discussion of other imported Gaulish artefacts.

Chapter 5.2 Gaulish Artefacts in Ireland and Western Britain

The Gaulish/ Frankish link with the Irish Sea basin in the seventh century is confirmed by a range of archaeological indicators found on sites in western Britain, Ireland and Scotland: running through objects of foreign manufacture such as ceramic and glass vessels to objects which show strong Gaulish/ Frankish stylistic influences, such as decorative metalwork, sculpture, iron weapons and horse trappings. These will now be discussed at length and their evidence fully integrated into the historical picture. Though the glass of 'Merovingian' type is possibly as relevant to the sixth century pattern as it is to the seventh it will be discussed here

on account of the comparative value of considering its research problems in conjunction with those of E ware.

The items of more definite foreign manufacture, the mostly homogeneous collection of tablewares known as 'E ware' and the collection of glass types putatively identified as 'Merovingian' have attracted the most research interest on account of their widely accepted diagnostic role in sixth, and especially seventh, century site chronology - though beyond this point there is much disagreement as to both the finer points of their chronology and the social context of their importation and use[148]. The distributions of these wares follow identifiable maritime paths and so offer great potential for indentifying the origins, routes and destination points of commerce. The metalwork and sculptural pieces showing Gaulish/ Frankish influence form a category of objects for which it is less clear whether the objects, or simply the ideas, are likely to have travelled. They are also less frequent archaeological finds - ironwork, for example needs very favourable conditions for its preservation[149]. They are not a useful guide to the maritime connections of the Irish Sea basin, in anything other than the most general fashion.

The above seem clear enough reasons for historical and archaeological interest in the ceramic and glass finds. There is a lack of agreement, however, on many basic points regarding the character and significance of the 'Gaulish' finds, especially E ware, and some scepticism as to the value of research undertaken into them[150]. It is, accordingly, important that we now make clear definitions of the

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[148] Thomas, 'Gallic *Nautae'*, pp. 1-26; Campbell, 'The Post-Roman Pottery', pp. 124-32; Alcock, *Economy*, pp. 88-90; 122; Wooding, 'Cargoes' forthcoming).

[149] Most finds are from crannog sites: such as Buston and Lagore.

[150] See Duncan, Review of Thomas, *Celtic Britain*, pp. 70-1; Laing, 'The Romanization', p. 169; Griffiths, 'The Coastal', p. 63; *idem.* 'Territories and Exchange', pp. 9-10; Campbell, 'E ware and Aquitaine', pp. 35-8.

following: the value of the research questions so far asked of these finds, of their probable date and geographical range, and their social and economic context.

E ware and Related Types

E ware is the most numerous of the imported ceramics: found on some 60 Insular sites. E ware is a much less preposessing ware than either the Mediterranean wares or *paléochrétienne grise* and this fact makes it a more complex problem in terms of locating its origins and identifying its social context. E ware is a coarseware pottery: unglazed, fired in a reducing atmosphere. Basic forms have been well documented, but will be briefly listed here[151] (some forms found in Britain and Ireland, not the full range, are illustrated in figs.7-8 & 12, to aid in comparative discussion of Continental finds):

Ei: the commonest form of E ware, a jar seemingly in two basic sizes, around 15 and 20 centimetres in height. The rim diameters are around 13 and 15 centimetres and the shoulder diameter between 15 and 18 centimetres. It is common, but not ubiquitous for there to be a simple horizontal scored shoulder mark, just above the widest point, running right around the vessel. The rim forms show the greatest variety: one type is sharply everted and flattened on top; others are flattened, but more horizontal than everted; others everted, but not at a sharp angle.

Eii: a distinctive style of carinated beaker around 8 centimetres at the shoulder. Virtually every example is slightly different to the others.

Eiii: a distinctive bowl, again with slight variety from piece to piece. Examples from Whithorn evince a light brown slip.

Eiv: a pitcher form which can have either a simple lip or a trefoil spout. The handle has two parallel grooves. Otherwise they resemble Ei jars. The lipped vessels seem to have the less everted rim forms, while the trefoil pieces have sharply everted rims.

Ev: lids for larger Ei jars in standard fabric.

Evi: a small 'unguent pot'. One example identifed by M. O'Donnell out of the collection of miscellaneous sherds from Ballycatteen[152].

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[151] An exhaustive treatment is anticipated from the work of Campbell, in the forthcoming publication of his 1991 doctoral thesis at University College, Cardiff.

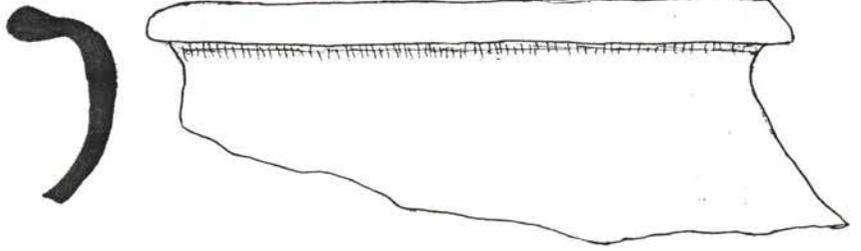[152] These are not listed as E ware in Thomas's 1981 catalogue.

Ew1

FRAGMENTS ALL FROM
SHADED PORTION

Ew2

Ew3

Ew4
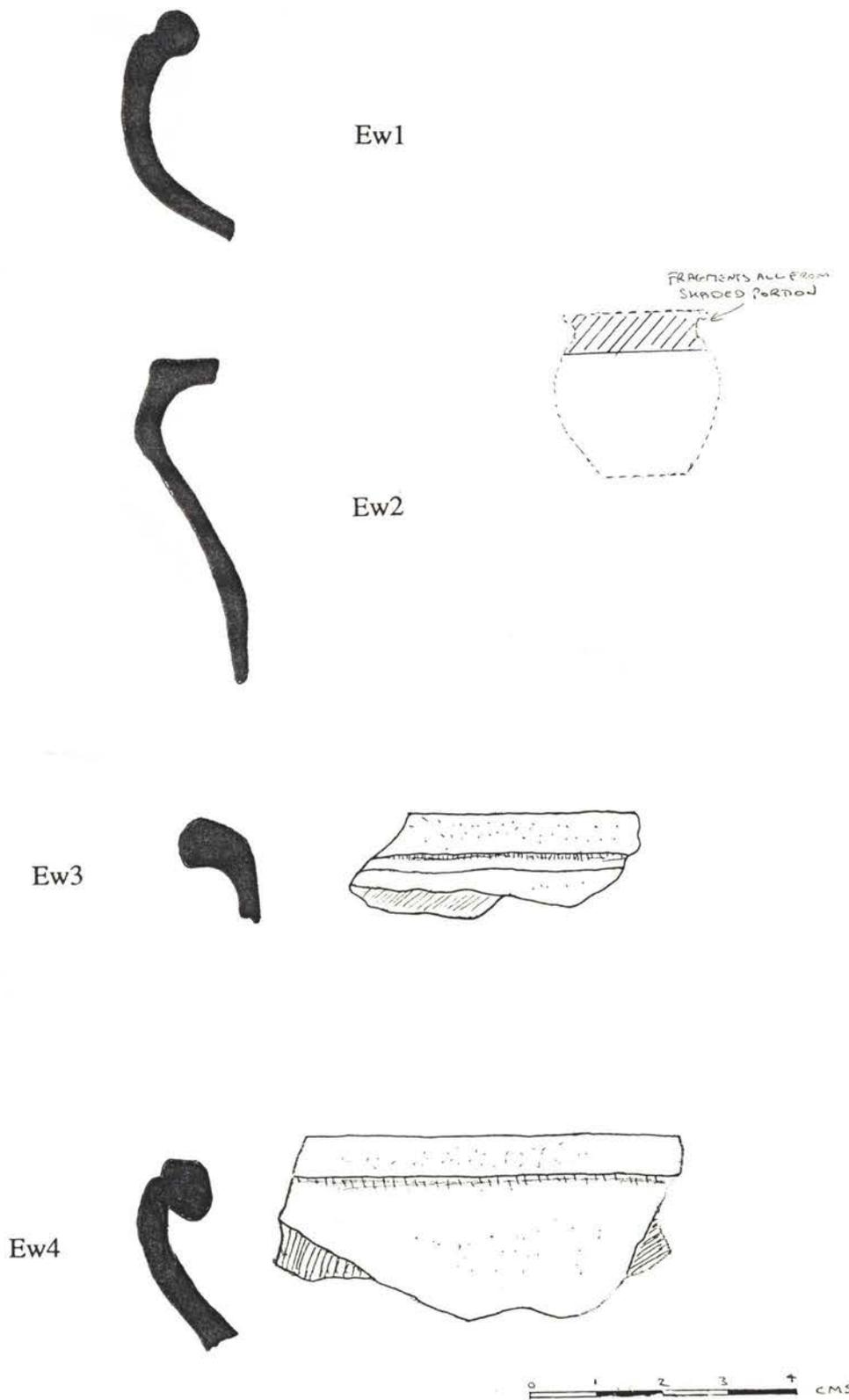
E1 Rim Forms:

Ew1) Large Ei: Garryduff 401
Ew2) Large E1: Garryduff 336 and 456
Ew3) Small E1: Whithorn +88/ 8420
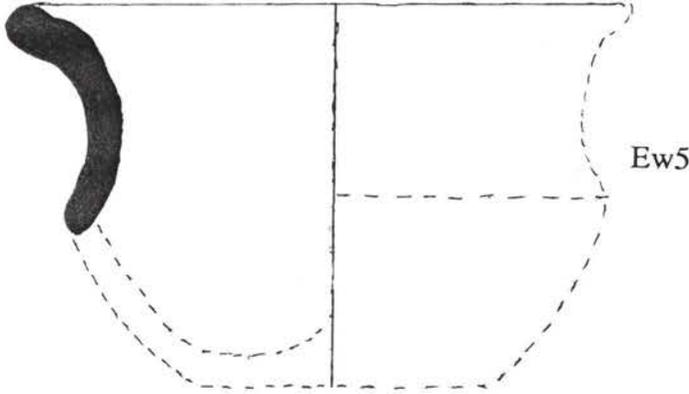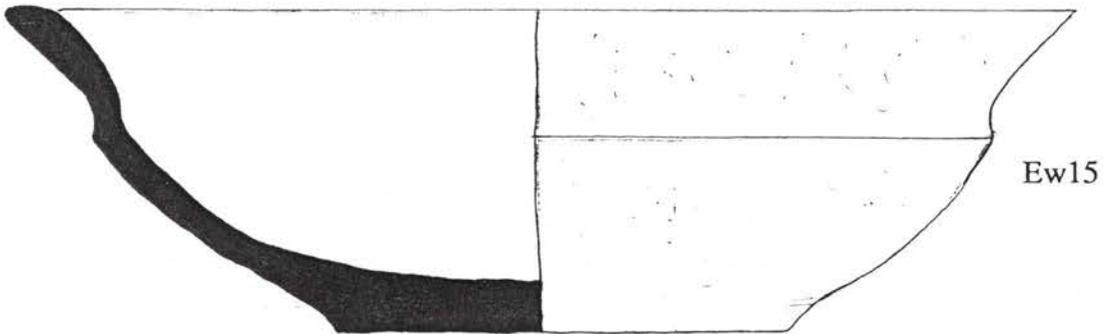Ew4) Large E1: Whithorn +88/ 8444

Fig. 7

Ew6

E1 Rim Forms:

Ew6) Small E1: Whithorn +88/ 8440
Ew7) Small E1: May's Hill.

Ew7

Ew5

Ew15

E Ware Forms:

Ew5) E2 Beaker from Whithorn +88/7439
Ew15) E3 Bowl from Whithorn +87/4545-1/2 & +87/4541

Fig. 9

Despite the minor variations of form from pot to pot, E ware is a very homogeneous class. Fabric colour varies considerably, but fairly consistently, between light grey, pink and brick red. Pink is clearly the original colour, the other colours being the result of heating and post-depositional discolouration. All pieces have large sub-angular quartz inclusions and a red grog with a high iron content. Suggestions by O'Kelly[153] that this grog is absent from some pieces were erroneous and based on exaggerated expectations (arising from the literature) of the amount visible. Suggestions that the fabric is close in character to a later Scottish ceramic, known as 'East Coast Gritty Ware' (ECG) are not correct and largely stem from comparison with erroneously identified E ware pieces (i.e. which *are* ECG[154]), the *forms* of which were mistaken for E ware. Laing has argued that ECG forms may be copied from E ware pieces[155], but this must remain an open question.

E ware pieces are often not finely finished - some from Garryduff are so poor in form as to inspire O'Kelly to the view that they were wasters, or crude copies made on site[156]. Most E ware bases have string marks indicating that they were cut from a fast-moving wheel, a piece from Derrynaflan lacking this mark may simply be the last of a batch, cut off after the wheel had become stationary. These differences do not indicate a lack of homogeneity in class E. The fabric of E ware

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[153] M. J. O'Kelly, 'Two Ring-Forts at Garryduff, Co. Cork', *PRIA* 63C (1963), p. 105.

[154] A number of these are still listed in Thomas's 1981 catalogue, and his 1990 map ('Gallic Nautae', p. 15), e.g. Craig's Quarry in east Lothian: Thomas, *A Provisional*, p. 21 - now in the National Museum of Antiquities, Edinburgh.

[155] L. Laing, 'Cooking Pots and the Origins of the Medieval Scottish Pottery Industry', *Archaeological Journal* 26 (1973), pp. 185-92.

[156] O'Kelly, 'Two Ring-Forts', p. 107. The pieces in question are numbers 33, 271 & 276.

is almost identical from piece to piece and a tendency not to fully update the corpus has perhaps obscured this. Williams's 1982 petrological comparison, for example, between pieces from Saint Christoly (a site within the *urbs* of Bordeaux[157]), and British finds of E ware, seems to have used the Abercorn finds for comparative purposes: the identification of which as E ware Thomas has doubted for some time[158]. In time it may be possible to identify individual batches of E ware, but as we have seen in the case of the Mediterranean wares there is no reason to accept any slight variety of this sort as indicating change across time (any more than variety between broadly contemporary batches).

Identifying a Source for E ware

That E ware has attracted a great deal of scholarly attention may be seen to reflect an appreciation of its potential in solving chronological and cultural problems of the early middle ages in the Celtic West (too often, however, with sharp echoes of the 'wine trade' fixation and its attendant *sapientes*[159]). The seeming intractability of its problems has also proved a lure to researchers - Hodges for example has seen a definite solution to the problem of its exact origins as tantalisingly just over the horizon[160]. It is important then that we re-examine the process of research into E

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[157] D. Williams, 'Petrological Examination of a Gallo-Roman Sherd from Saint-Christoly, Bordeaux. A Comparison with Class E ware Fabric', Unpublished Report, Southampton, c. 1982.

[158] *Pers. comm.* 1988. On examination (1988) they are clearly not E ware.

[159] E.g. Hillgarth, 'Ireland', p. 15; Thomas, *Christianity,* p. 271 ; Hodges, 'Some Early Medieval', p. 241.

[160] Hodges, 'Some Early Medieval', p. 240 and *idem,* 'The Date and Source of E ware', *Scottish Archaeological Review* 2 (1984), p. 40, where he cites Giot's forthcoming petrological analyses. Professor Giot *(pers. comm.)* and Ewan Campbell ('E Ware and Aquitaine, pp. 35-41) have convincingly questioned the ability of such analysis to answer these questions in the way they have been used to date. See pp.

ware, to establish what questions have been asked and why the answers have not been more precise. This is an important process to pursue in the case of the glass finds, also.

E ware was a later addition to the alphabetically-labelled typology of imported wares, not being present in the Tintagel assemblage which formed the core of Radford's study - hence it is somewhat grotesque to occasionally see it referred to as 'Tintagel ware E'. It had been known in considerable quantity from sites such as Lagore, Dunadd and Garranes for some decades before Thomas proposed it as a homogeneous class of early christian imports under the label 'E' ware in 1957, after further finds at Gwithian and Dinas Powys[161].

The reasonable assumption has been that the British and Irish finds of E ware are a tiny subset of a mass of such undecorated coarsewares in France - begging the question of why such a plain domestic pottery would be imported to a zone where pottery use was previously almost non-existent[162]. Research initially proceeded on the assumption that E ware belonged to the well-known sub-Roman Rhenish groups and had arrived overland via Anglo-Saxon England. The expertise of scholars such as Wheeler and Dunning, who had done very early work on the Rhenish wares, was enlisted[163]. In historical terms, we may thus view the early models as a consequence of the better publication of the Rhenish material and of the fact that a number of British researchers had worked on them, mostly as a byproduct of Roman and high medieval period interests. The same pattern is also

[161] Thomas, 'Some Post-Roman Imported Sherds', p. 15.

[162] Thomas, 'Gallic *Nautae*', p. 8; Wooding, 'What Porridge', p. 14-16.

[163] Hencken, 'Lagore', p. 124; Hencken, 'Ballinderry Crannog No. 2', pp. 49-50.

true of the study of early medieval glassware, where the Rhenish products are still better known[164].

The researches of Wailes[165] established that comparable, and largely closer, parallels for E ware existed in Northern French assemblages, while macroscopically similar fabrics existed in western France, usually from later wares. For the most part these latter parallels were collected unsystematically[166]. Through the work of Hodges[167], Brown and Timby[168] the Northern French wares have become better known, while the western finds have not seen such extensive reanalysis.

The forms of the Ei-iii, and some E iv, vessels are indeed best paralleled among northern and western Merovingian assemblages. Exact parallels have been hard to locate in France, however, leading to doubts in the minds of many scholars regarding this identification. It is arguable, however, whether any short term identification of the exact origins of E ware can be expected - the problem on the Continental side is of the needle-in-the-haystack variety. Comparatively little excavation has been done. Random searches amongst known western French collections have turned up a bare minimum of parallels outside of Brittany - from early excavations such as Herpes and Chadenac[169] and the more recent Château excavations at Tours[170].

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[164] See below pp. 294ff.

[165] Wailes, 'Some Imported', pp. 142: fig. 102-58; Peacock and Thomas, 'Class E Pottery', p. 36.

[166] C. Thomas, P-R.Giot, R. Warner, R. Bruce-Mitford *pers.comms*. Examples are the pieces from Camp-du-Chaillot and Pépiron.

[167] Hodges, *The Hamwih Pottery*.

[168] Timby, 'The Middle Saxon Wares', pp. 73-174; D. Gaimster, *pers. comm.*

[169] Giot and Querre, 'Le Tesson', p. 99.

[170] Randoin, 'Essai', pp. 106-7.

The problem may not be solved by the simple adoption of a waiting brief. Such a policy has been effective in the case of the sixth century Mediterranean imported wares, but there the research interest abroad has been fuelled by the western Insular debates. This is clearly evinced in the use of the narrow Insular terminology Bi, Bii, etc. in the Mediterranean context[171]. And there are obstacles to easy identification of E ware. Munsell colours, for example, are of little use in identifying wares with the wide range of discolouration of E ware. That some of this is caused by weathering on site is clear from the variation of colour from sherd to sherd on pieces from the same vessel[172]. Discolouration is also caused by the heating of the pots for cooking, often again varying from sherd to sherd depending on the closeness of portions of the vessel to the heat source. The colour may vary from dull grey to the original pinkish-orange - both colours being seen, for example on a beaker from Herpes (acc. no. British Museum 1905 5-20 176).

Only certain rim forms, emergent grains, striations and basal string marks studied in combination allow exact identification. As coarsewares have not generally been crucial to archaeological chronology, fabric based research methods accordingly are not well adapted to the problems of locating sources for these wares.

We turn now to a second methodological issue. Research into E ware has been heavily influenced by historical paradigms. While this is somewhat contrary to accepted notions of the objectivity of archaeological study, it must be accepted that such analyses have been made - and *post facto* are part of the individual history of E ware scholarship. They are, moreover, fully defensible in methodological terms. For vessels imported in a clearly limited series of events it is likely that a

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[171] Thomas, 'East and West', p. 23.

[172] O' Kelly, 'Two Ring-Forts', p. 103.

historical context *can* ultimately be established. The formula for such research proposed by Rahtz[173] would suggest that the historical data are best introduced after the completion of the manual search for parallels. But is this necessary? If the search for parallels may be aided by the testing of an historical model, this does not prevent the gradual testing of the model by further publication and study of the material.

The posited link between the early medieval Irish Sea basin and the Rhineland had no historical basis. Perhaps doubting the likelihood of an overland link through Anglo-Saxon England, Thomas found an archaeological comparative model in the importation of the 'Bar-Lug' ceramic form into Cornwall from the Rhineland at the end of the first millenium AD[174]. In strictly historical terms, however, the maritime links of the period of Bar Lug pottery are of a wholly different character to those of the sixth and seventh centuries - besides which E ware is rare in Cornwall, hence invoking the Bar-Lug model is scarcely apposite to explain the forces behind its importation to the Celtic west.

In 1967 Thomas and Peacock abandoned the idea that E ware was primarily Rhenish in origin. The principal evidence mustered was from heavy mineral analysis of the tempering sands, which were identified as post-Triassic and most probably Tertiary in character. Such sands are rarer in the Rhineland and not found in Rhenish wares[175]. The conclusiveness with which these analyses have been accepted has been questioned by Campbell[176]. First of all must be noted the failure

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[173] *Invitation to Archaeology*, London, 1985. A good example of this approach is H. Mytum, 'High Status Vessels in Early Historic Ireland: A Reference in the *Bethu Brigte'*, *Oxford Journal of Archaeology* 5 (1986), pp. 375-8.

[174] G. Hutchinson, 'The Bar Lug Pottery of Cornwall', *Cornish Archaeology* 18 (1979), pp. 81ff.

[175] Thomas, *pers. comm.*; Peacock and Thomas, 'Class E Imported', p. 43.

[176] Campbell, 'E ware and Aquitaine', p. 38.

of non-petrologists to appreciate the methodology of petrological studies: a similar problem to the way in which the work of philologists and numismatists is accepted by non-specialists. The heavy minerals present are not unique to Tertiary mineral assemblages. Tertiary and post-Triassic sands themselves are known from a number of parts of Europe[177] and we should also note that such is their suitability for ceramic tempering that small pockets might be sought out in areas where they are less common. Peacock's point is still reasonable: that the assemblage present is more likely to reflect activity in one or two areas where kyanite and andalusite are present in Tertiary sands. Identification of likely sources, however, is still something of a shot in the dark. It is clear from the 1967 study that the historical link of Ireland with Aquitaine, and at least western and Northern Gaul, influenced greatly the new choices of likely areas to test. As Thomas observed in his 1967 study: '...there is no real link between the Rhineland and Western Britain', while: 'On the historical side, Bordeaux and the mouth of the Garonne are wholly relevant to the idea of links between post-Roman Gaul and post-Roman Britain[178]'. In fact, as we have seen, Bordeaux is less relevant than the Loire, though this does not detract from Thomas' basic point about historical likelihood. Doubts raised by the then recent fieldwork of Wailes[179] and the identification of Gaulish Atlantic group *paléochrétienne grise* with the Insular class D seemed to support the likelihood of a link - but the work of Zimmer and the 'western seaways' researchers was clearly also causative[180].

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[177] P-R. Giot, *pers. comm.*

[178] Peacock and Thomas, 'Class E Imported', p. 39.

[179] Wailes, 'Some Imported', pp. Peacock and Thomas, 'Class E Imported', p. 36.

[180] *Christianity in Britain*, p. 271; Imported Post-Roman, pp. 252-4; Thomas, 'Gallic Nautae', pp. 10; 16-17.

E ware in France

In more modern contexts E ware would be described as the product of a rural industry rather than an urban (where in modern Brittany, for example, there were broadly similar pots to the Ei type, termed *pot à lait* and *pot à beurre)*[181]. This distinction may mean little for the early middle ages - though the excavations at the urban centre of Tours produced only a couple of sherds of a ware which might be E ware, amongst a great amount of *paléochrétienne grise* while, conversely, E ware is found in Frankish cemeteries in western France from which *paléochrétienne grise* is almost totally absent[182]. *Paléochrétienne grise* is also absent from Ireland, where there is less obvious influence of the urban Gallo-Roman church than in Wales, where both types occur. This question may deserve more attention, though chronological differences in the occurrence of these wares could also be responsible.

Some intermittent attempts to locate E ware in France have been carried out during the last decade by Mary O'Donnell, Ewan Campbell, Alan Lane and the author. These have concentrated on Poitou and have been, understandably, founded on a wider understanding of the range of form and fabric variants found in Britain and Ireland than Wailes was able to obtain in the 1950s and '60s. We are now clear that the production area will be a small one: the uniformity of E ware forms and fabric indicate a likely single source for all the British and Irish finds.

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[181] See for example the range of forms in M. Pillet, *Potiers et Potéries Populaires en France*, Paris, 1980.

[182] E.g. Herpes and Chadenac. See pp. 178-9.

The first priority of fieldwork has been to clarify if E ware actually was a Gaulish product and to gain a clearer idea of its likely cultural context in western Gaul. These researches have not been systematic investigations, however, and mostly only an adjunct to attempts to fully understand the British and Irish distributions.

The situation on the Continent is hardly comparable to that in Britain. French archaeologists do not depend upon coarsewares as a cornerstone of chronology. The fact that parallels for E ware are rare is not at all surprising and suggestions of searches in the less-likely terrain of Spain or Portugal are perhaps premature[183].

Distribution maps with limited Continental distributions have been confusing to the viewer and have led to suggestions of a British origin for E ware, but there is little reason why a British-made coarseware would be exported to Gaul, except perhaps from Cornwall to Brittany, which received few imports from Gaul.

E ware *has* been found in continental assemblages to the south of Brittany. Three recent finds from Poitou and the Touraine fit with the historical link with the Loire estuary. In Poitou, 'an Eiii bowl' was a surface find from a churchyard at Chadenac[184]. The context is unknown, though a major early medieval cemetery was excavated there last century. From the collection of the British Museum, three beakers of E2 type are from a sixth- to seventh-century assemblage in an enormous cemetery at Herpes, excavated in the last century by P. Delamain. The exact context is unknown, but recent doubts as to the reliability of the site attributions for pieces in the Delamain collection are in this case dispelled by published illustrations[185]. Accession numbers are 176, 178 and 179. Wailes and Campbell
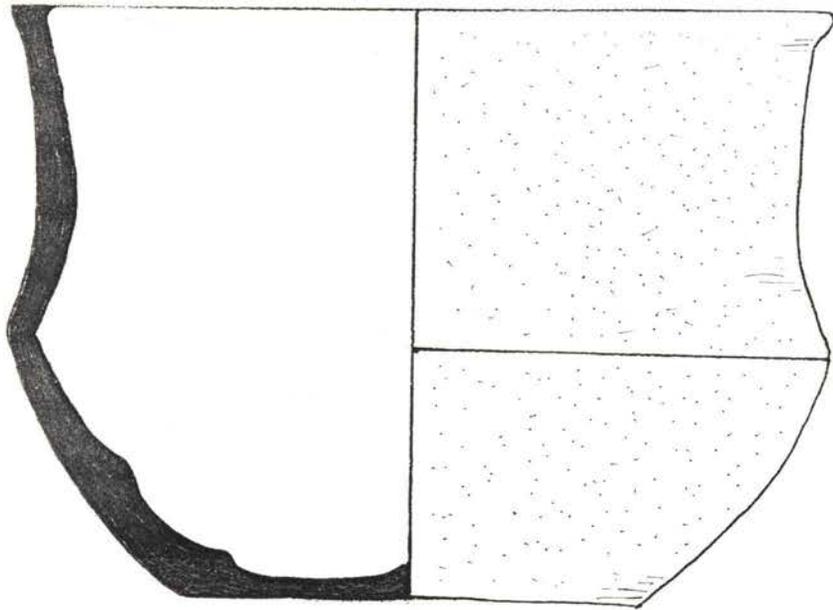
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[183] Campbell, 'E ware and Aquitaine', p. 36; Hodges, 'The Date and Source', p. 40.

[184] E. Campbell, *pers. comm.* Detail on the site in C. Barrière-Flavy, *Étude sur les Sepultures Barbares du Midi et de l'Ouest de la France*, Toulouse/Paris, n.d., pp. 201ff.

[185] D. Kidd, *pers. comm.*
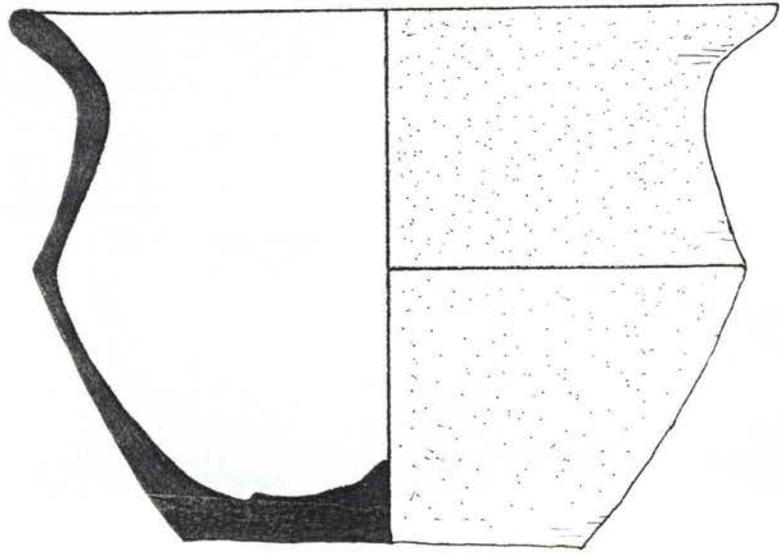
E2 Beakers from Herpes (Charente)

Ew12) 1905 5-20 179
Ew13) 1905 5-20 176

Fig. 9

Ew13   Ew12   Ew14

E2 Beakers from Herpes (Charente)
(Photo courtesy of the British Museum)

Ew13) 1905 5-20 176
Ew12) 1905 5-20 179
Ew14) 1905 5-20 178

Fig. 10

list 176 as E ware, but don't seem to have seen the other two. 176 is not precisely a common E2 form, being elongated above the carination and having an atypical rim. Its fabric is of the dull grey discolouration typical of the E ware from Garranes and Lagore, though one patch is of the brighter orange which is suspected to be the original colour. 179, however, is extremely convincing as E ware (see below). It is of parallel form to British E2 vessels and is of an orange/brown fabric with 'pimply' emergent quartz grits and odd red inclusions. The string cut-off base is identical to E ware base-marks.

From Tours a good parallel to E ware is an Ei style rim and shoulder from the Chateau site (sixth- to seventh-century context). The form is closely but not exactly paralleled at Whithorn in Scotland. The fabric is hard, greyish-white and has rounded, unsorted quartz and odd haematite(?) inclusions. Randoin describes it as 'Paté gris beige clair, fine, avec inclusions de quartz et de feldspath'[186]. From the Monastérie de Saint Martin, there is an Eii type beaker with collar from a sixth- to seventh-century context. The fabric would be again acceptable as E ware, it has indeed the pinkish tinge which is lacking from the other find. It is not paralleled in decoration on British sites[187], though form is acceptable as E ware and the collar is of the type found on many Ei vessels[188]. Also worth noting at Tours is a local variant of *paléochrétienne grise* with trefoil spouts very similar to E4[189].

These finds add to the pieces from Brittany already accepted as E ware. Of these, the Guisseny piece is exactly paralled on British sites[190]. Unfortunately the
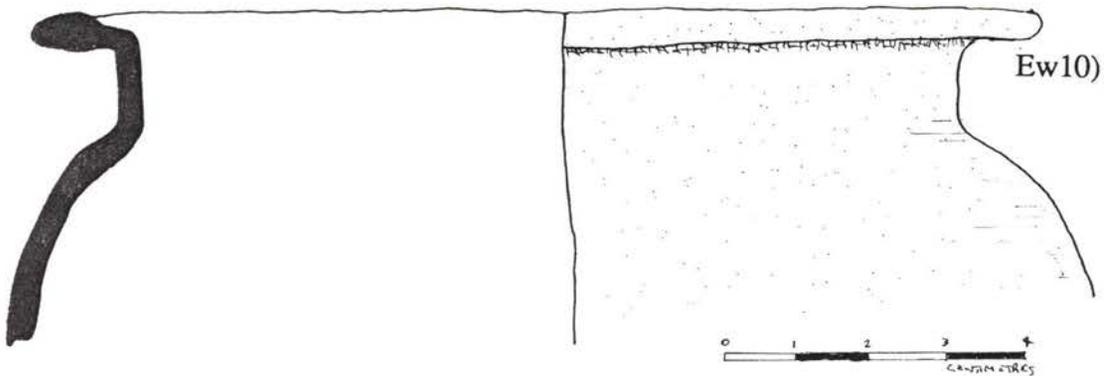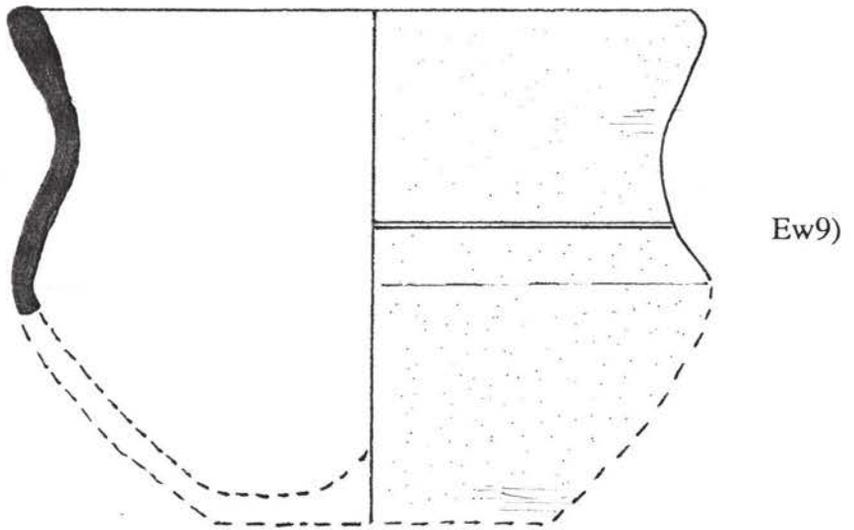
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[186] Sighted by B. Randoin, E. Campbell, M. O'Donnell, P-R. Giot, J. Wooding. Ew2, 6, 7

[187] Though such a collar is common on Ei pots.

[188] Sighted by B. Randoin, E. Campbell and J. Wooding.

[189] No. 3.2063.27

[190] Cf. fig. 7 Ew4. Which is identical to the Guisseny pieces.
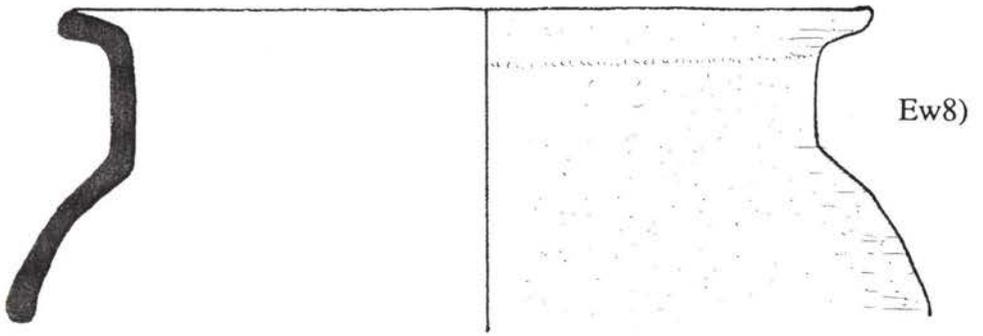
Possible E Ware Vessels from Western France:

Ew8) Small E1: Tours, Chateau 3.1968
Ew9) E2 Tours, Monasterie d'Saint Martin 7.546
Ew10) Large E1   Grotte de Villebors, Lavalette, Charente.
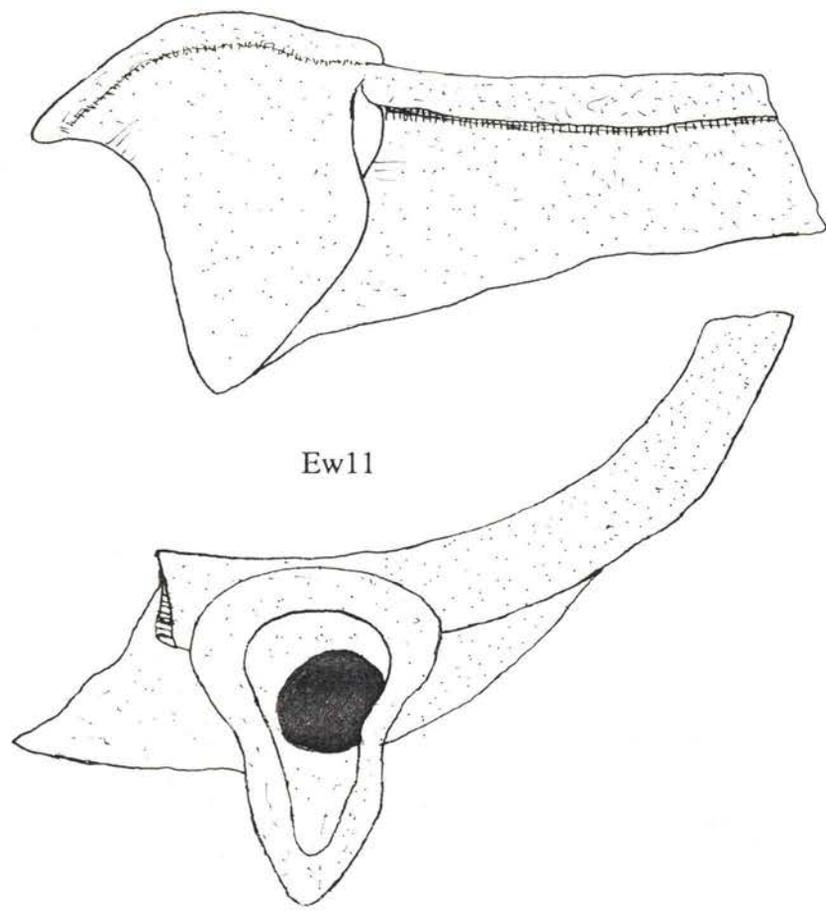
Fig. 11

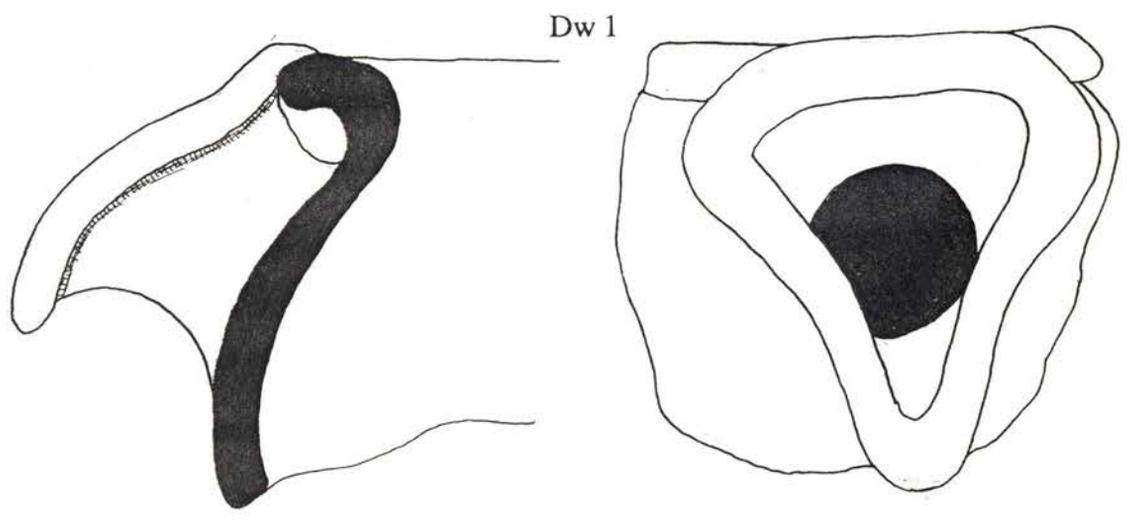**E4 and Comparative form of Paléochrétienne Grise from the Touraine**

Ew11) E4 pitcher with trefoil spout from Scrabo, Co. Derry.
Dw 1) Touraine variant of *paléochrétienne grise:* pitcher with trefoil spout, Tours (probably eighth or ninth century).

Fig. 12

Morbihan and Les Cléons pieces have been mislaid. The Les Cléons pieces are particularly of interest as they are from the Loire estuary, which has an historical link with Ireland. Some of Wailes's drawings of the pieces from this site seem to represent good E ware pieces and some do not[191]. A report from Professor Giot (*pers.comm.*) of a find from the Louvre excavations in Paris has yet to be confirmed by other observers and should not be taken at face value.

The author's studies in France in 1987 and 1988 were conducted on a consciously limited scale[192], so only those collections already identified were examined, along with comparative visits to Paris, Rouen, Evreux, Nantes, Beauvais and Orléans (circumstances prevented access to material at Poitiers and some at Orléans). Extensive use was also made of the work of Wailes and Hodges. There were, in 1987, very few scholars who were convinced that any exact parallels to E ware existed outside of Britain and this evidence was vital to a critical use of E ware as historical evidence.

There is certainly E ware in western French contexts. This is not a claim to be made lightly. Often there have been reports of E ware being found on the Continent which have a long life in oral history (perhaps in the process becoming more conclusive than their claimants intended them to sound). Examples are Swan's finds from Saint-Christoly[193], Giot's from Île Lavret[194] and also finds from Orléans(?)[195], most of which are not very like E ware at all. There are various

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191 Wailes, 'Some Imported', fig. 104 - he notes that this vessel is paler and more finely gritted than most E ware.

192 See pp. 11-14.

193 R. Warner, *pers. comm.;* Williams, 'Petrological Examination'.

194 Giot and Querre, 'Le Tesson', pp. 98-9; examined by the author in 1988 - they are thin, ribbed sherds in a hard, whitish fabric, clearly not E ware.

195 Hodges, 'Some Early Medieval', p. 241.

features of the finds from Tours which make them inconclusive: the best fabric parallel is not convincing in form and the better form is less certain in fabric. The Guisseny piece is exactly matched in form and fabric, but northern Brittany is not western France. The conclusive proof comes, ironically not from French collections, but from the British Museum. The previously unsighted Herpes 179 is a matched Eii form, macroscopically identical to British E ware in fabric and colour and with the string cut-off base exactly like other E ware finds. It awaits closer fabric comparison with British finds.

A good deal of emphasis in refining the origins of E ware has been placed upon comparisons with later, western French ceramic traditions. Peacock and Thomas' 1967 study included analysis of a piece from Camp du Chaillot, near Saintes[196]. A piece from Saint Christoly, provided by Leo Swan, was examined in 1982 by David Williams. These have both evinced fabric similarities to E ware, but are not identical. A piece in the possession of P-R. Giot, from an assemblage of medieval wares from a cave mouth at Grotte de Villebors (Poitou) is so like in form and fabric to pass as E ware (if it is not a genuine piece, out of context)[197]. All of this may seem to add to the likelihood of E ware being a Poitou product, but it is circumstantial evidence at best.

The earlier distribution might have suggested an origin in Brittany, however this is not likely on geological grounds. The heavy minerals in E ware are rare, if not unknown, in Brittany. The finds so far point to the regions of the Touraine, Saintonge and Poitou, though there is a danger of exaggerating the evidence of such a small number of finds. This makes sense in terms of an historical model of links between the Irish Sea basin and the Loire valley, such as has been argued in the

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[196] Peacock and Thomas, 'Class E Imported', pp. 38-44; Campbell, 'E ware and Aquitaine', pp. 36-8.

[197] See fig. 11, Ew10; cf. fig.8, Ew6.

present study. That there is no E ware from the Bordeaux region, slightly further to the south, is logical enough in this connection. Refinement of the historical evidence has rejected the earlier model which led Thomas to argue for the link with the Garonne mouth, cited above. We would expect to find the origin point of E ware somewhere in the Loire region or Poitou on present historical expectations. If not, however, there seems no need to follow Thomas in attributing E ware to a residual Roman ceramic tradition in the very southwest of Gaul - indicated by sites such as Pépiron[198]. Finds from sites such as St Pierre de Vauvray and Orleans are suggestive of similar ceramic traditions in northern Gaul close to the Loire, which are relevant in the light of the known traffic along the Loire valley.

As E ware is now identified confidently on some western French sites (Tours, Chadenac, Herpes), even though the number is small and some finds (Herpes) are more convincing than others (Tours)[199], looking westward of the Rhineland for a source seems more likely to be effective than the earlier approach. Ironically, if anything slowed down the investigation it was Thomas' adherence to the Bordeaux link over the better-attested historical links with the Loire estuary which prevented more attention being given to Poitou and the Touraine.

Historical research has led to the narrowing down of the principal *floruit* of Irish *peregrini* to the Continent to the seventh century, with St Columbanus seen as a pioneer, rather than continuing a trend of the sixth century. This assists in assessing the likelihood of the broadly seventh-century horizon proposed in recent studies (see below).

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[198] Thomas, *A Provisional,* pp. 24-5; C. Gabet, La Céramique Gallo-Romaine Recueille á Pépiron (Charente Maritime)', *Gallia* 27 (1969), pp. 45-70; J. Santrot, *Céramiques Communes Gallo-Romaines d'Aquitaine,* Paris, 1986, eg. p. 141.

[199] See below, pp. 280-1.

In assessing the possible consumer use of E ware, there are some basic points which can be made. The Irish Sea basin, and especially the parts of Ireland and Scotland where E ware is found, had no domestic pottery at the time of the importation of E ware. We should note that there was indeed no type of vessel which could perform quite the same function as E ware. Metal vessels can be heated externally, but are better conductors and so cool quicker. Wooden vessels need to be heated by an immersed heat source. Stoneware type pottery is able to be gently heated.

Campbell has disputed the idea that E ware was used to cook in, noting the irregularity of soot-staining of the fabric - which is often internal as well as external[200]. It is difficult to be conclusive on this, however, as the pots may have been heated by various means, say on a griddle as well as a direct flame, and many are clearly discoloured from the base up. Moreover, Campbell's keenness in dismissing this idea is in conjunction with his questionable argument that the vessels were containers.

Could E ware vessels have been containers? This seems extremely unlikely. Eiii and Eiv vessels are patently for serving purposes. Ei and Eii could have had covers bound over them - Ei in particular usually having a sharply everted rim. But they would be makeshift containers at best. This is not to say that they would have been packed into a ship empty: the dry space inside the jars would have been useful for storage. At best, however, we might imagine a situation where the jar was a bonus offer with the contents - such as one finds in Chinese grocery shops today, where preserved fruit is sold in lidded jars of equal value to the contents. To state

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[200] Campbell, 'The Archaeological Evidence', forthcoming.

that 'they are the equivalent of the earlier amphorae in not being imported as pottery but as ancillary containers'[201] is not at all defensible.

Campbell has made much of the association between E ware and the use of madder. The Ei vessel from Teeshan, in County Antrim, contains a thick deposit of madder[202]. Other pieces from Ireland[203] and Scotland[204] also have purplish stains which may be madder deposits. However, this scarcely can be held to prove that E ware was ubiquitously used to import madder. The logical supposition is that the Teeshan jar was used to *heat* madder, after which it was discarded as useless on account of being set with madder beyond the point where it could be cleaned. Interestingly, it is the most completely preserved (approximately 40% of the vessel: all the lower part of the jar) of all Irish or British finds of E ware, which may further suggest that the vessel was, unusually, abandoned before being broken in use. Surely all this evidence implies was that these were all-purpose vessels, only occasionally used to heat dye. It cannot by any stretch of the imagination act as proof that they were jars to store or carry dye.

There is no logic in attempting to identify a universal usage pattern for E ware, as any consumer may have found their own use for it. In regions where no other pottery was used it has no use-pattern to fit into. Subsequent developments might be noted. Caroline Earwood has suggested that wooden vessels from Loch Glashan are modelled on E ware forms[205]. The emergence of Souterrain Ware

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[201] *Ibid.*

[202] R. Warner, forthcoming. I would like to thank Richard Warner for his assistance in showing me this vessel and discussing it with me. Also C. Lynn, 'Some Early Irish Ringforts and Crannogs', *Irish Journal of Archaeology* 3 (1985/6), p. 51.

[203] Ballinderry nos. B E6 347; A E6 547, now in the National Museum of Ireland.

[204] In the possession of L. Alcock. Neither these nor the Ballinderry sherds show staining of anything like the same quality as the Teeshan piece.

pottery, very dissimilar in form to E ware, in Northern Ireland at the beginning of the Viking period may suggest at least some continuity of a social receptivity for pottery. If wooden vessels *were* made in imitation of E ware it might suggest that the function of E ware in such regions was not one where external heating of the pot was required. In Northern Ireland, on the other hand, the emergence of Souterrain ware might suggest that the ceramic character of vessels was the most desired characteristic. But the links between these traditions and E ware are not so certain as to justify sustained arguments on this point.

The economic context of E ware is a puzzle, but it is too easy to take the view that it can only be explained as a throwaway addition to a lucrative trade in more valuable items. In this madder is no more defensible a choice than wine. Other attempts have been made to prove that E ware was a luxury good in Irish society. In a very doubtful argument Harold Mytum has interpreted an incident in the ninth century text *Bethu Brigte* to a servant inspiring the wrath of the king for dropping a valuable vessel[206] as being to an E ware vessel:

> A churl in the king's house had done a terrible thing. He let fall a valuable goblet belonging to the king so that it smashed to pieces against the table in front of the king. The vessel was a wonderful one, it was one of the rare treasures of the king[207].

Mytum's argument depends on the detail that the vessel was breakable. He assumes then that the vessel is E ware and concludes that E ware vessels could

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[205] C. Earwood, 'The Wooden Artefacts from Loch Glashan Crannog, Mid Argyll', *PSAS* 120 (1990), pp. 79-94. p. 85 turned vessel in wood similar to an E1. Also the vessels from Lagore, Mytum, *The Origins*, p. 247: nos. 1 & 4 are similar in form to E3.

[206] Mytum, 'High Status', pp. 375-8.

[207] 'Do-rigenae at[h]ech a tigh ind rig bet mar. Du-cer airi airit(h)ech logmar ind rig co mmebiad frisin meis ara belaib ind rig. Ba ingnad a lestar, ba dia [s]etaib ingantaib ind rig', *Bethu Brigte* XXX, ll. 324-6 (ed. D. Ó hAodha, Dublin, 1978, p. 10; trans. pp. 27-8).

hence be termed a 'rare treasure'[208]. This is wholly unconvincing. *Lestar* ('vessel') is an ambiguous term[209]. It could imply metal vessels, which might still be fragile enough to shatter, or might also be used of glass. Mytum contends that it cannot here be a glass vessel, on account of Harden's thesis that no intact glass vessels were in use in this period[210]. There is no basis for Harden's thesis (as we will see below) and Mytum's expectations of identification must anyway be considered highly optimistic.

If we may use textual sources to find any context for E ware in Celtic society it must be in broader terms. Texts such as the eight century Irish status-law tract *Críth Gablach* show a wide range of vessels used in the sorts of small households which characterised the complex society of seventh through ninth century Ireland.[210A] We should seek the value of E ware in this sort of context: perhaps imported to aid in cooking on a more individual basis than was done before; or perhaps to introduce a greater range into the vessels available, so that each rank of nobleman might have a cooking pot of a value apposite to his rank.

The Date of E ware

The chronology of E ware has been another cause for debate. Thomas, in the 1960s and '70s, was prepared to accept a date as early as the fifth century, in which connection he associated it with Zimmer's thesis. Much of his argument depended upon the sequence at Gwithian, which has never been completely published. Warner's discovery of E ware in a ditch-fill at Clogher, where it is consistently

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[208] Mytum, 'High Status Vessels', p. 377.

[209] See also the Welsh context: p. 285, n. 207.

[210] *Ibid.*, p. 376.

[210A] *Críth Gablach* X (ed. Binchy, p. 4), XXV (p. 15), XXVII (p. 16).

separated from Mediterranean wares by a sterile 'yellow' layer[211], tended to confirm a growing view that E ware was mostly separate in distribution and date to the Mediterranean wares. It has become increasingly clear from Mediterranean sites that the Mediterranean wares were very unlikely to be arriving in Britain later than the mid-sixth century. This would imply that E ware was largely a seventh-century phenomenon, or later.

The potential dating of E ware rests on several foundations which should be treated critically. Firstly, one may highlight the strong historical evidence for seventh-century links with Gaul, but not for much earlier than 600. This point, oddly enough, was not taken up in work on E ware prior to the 1980s, most archaeologists working on E ware following the older (not entirely superseded) view that links as far back as the fifth century were evinced by the sources. The better evidence for the seventh century, on the other hand, should not be accorded very much weight in dating E ware as, firstly, it reflects a much broader distinction between sixth and seventh-century sources - with Britain and Ireland having few sixth-century historical sources of any reliability and, secondly, the total lack of references to the Mediterranean links evinced by the sixth-century pottery finds warns us that there could equally have been sixth- century Gaulish links which have left no trace.

A second foundation for the dating of E ware is the pattern of distribution. The evidence for the separation of the E ware distribution from that of the Mediterranean wares is beyond doubt and must certainly imply a separate importation context. The exclusion of the Mediterranean wares from E ware distributions on the Continent has been discussed above and seems conclusive. E ware is totally absent from at least two British regions which have produced the

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[211] Fig. 13

Mediterranean wares in some quantity. In one of these cases, North Wales, the comparatively small amount of excavation of early medieval sites may be noted (though, in part, this is a circular argument - as the finding of E ware is often diagnostic in the interpretation of a site as early medieval). The fact that it is not found on any sites in Somerset, and only in minimal amounts in Cornwall, is more pertinent. Cornwall has been at the centre of study of the imported wares since the 1960s. The recent identification of finds of imported wares from an old excavation at May's Hill may indicate the possibility of finds being overlooked even there[212], but in general it must be said that the chances of any recently-excavated material being incorrectly identified are very small.

The dating of E ware is yet to be refined by any Continental data. Only the pieces from Tours were found in context on a site with a long sequence: in a seventh-century pit. Our problem, then, is principally one of relating the occurrence of E ware to the *datum* line provided by the Mediterranean wares, and other reliable dating evidence. The writer, along with other archaeologists, has held the view for some time that E ware is a largely seventh-century phenomenon, but on analysis this bears some re-consideration. The finds from Abercorn, with its conveniently narrow historical floruit, are not E ware[213]. Sites such as Dunadd, with a broadly seventh-century historical floruit, have yielded radiocarbon dates which suggest sixth-century activity[214]. Recent experience, in any event, should warn against attempts to associate occupation phases on historic sites with actual historic events, at least for dating purposes. This has been seen in the case of Conimbriga with regard to the dating of ARS, and is also demonstrated by Warner

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[212] See p. 217.

[213] Thomas, *pers.comm.* I am grateful to Professor Thomas for allowing me to re-examine the Abercorn finds with him in 1988.

[214] A. Lane, *pers. comm.*

in a reassessment of Lagore[215]. There are problems also with the separation of the distribution. The absence of E ware from sites in Somerset must be considered in the light of the general rarity of E ware in Cornwall and Devon. As no finds of E ware have been made east of the Kelsies (near Newquay) on the northern coast, there may be no especial reason to think they would have reached Somerset in the normal course of events - though we should not forget E ware is found as far east as Glamorgan, on the opposite shore of the Bristol Channel. The Clogher sequence must similarly be considered in the light of its location. Clogher itself is well inland and, though an important royal site, may have received only intermittent and unrepresentative imports.

Our discussion of E ware dating is best informed by those sites with complex sequences containing both E ware and the Mediterranean wares: good examples are sites such as Whithorn, Clogher, Dalkey Island and Dinas Powys. Other sites such as Garryduff, Garranes, Derrynaflan, Randalstown, Dumbarton, Iona, Bantham, May's Hill, Caldey and Longbury Bank all have produced both types of wares, but not in a stratified context. Campbell (pers. comm.) suggests that the Dinas Powys sequence shows a distinction between the Mediterranean wares and E ware, but Campbell's revision awaits publication. Two provisionally published sequences, however, also support this chronological distinction between the wares.

At Whithorn the large number of E ware and Merovingian glass finds are mostly from the waterlogged southern sector at the base of the hill. Peter Hill, the excavator, now interprets the Gaulish material as 'rubbish strewn on the fields of the sixth? century monastery', perhaps for manuring. This is an area which was heavily trampled and ploughed in later centuries. The recent interim reports evince little doubt that the Mediterranean wares from the site are associated with earlier

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[215] Warner, 'The Date of the Start', p. 76.

features than the Gaulish find deposits[216]. Sherds of amphorae were found in a rubbish pit, the upcast from another pit and a ditch-fill from phase 3a[217]. This phase is associated with a series of round gutters and other features, distinctly earlier in the sequence than the colluvial phase which produced the Gaulish material. Hill is tempted to see the field wash as sixth century, but we should note that this is probably only on the basis of the c.560-720 date range which seems posited for E ware in his report[218]. Likewise, he is willing to accept a late fifth-century date as possible for the Mediterranean wares[219]. If my redating of these wares, suggested above, is accepted, this could make his E ware phase more recent.

A second aspect of importance is the relationship of the phase of timber buildings in the southern sector. This phase Hill would associate with the Northumbrian activity further north on the site, on the basis of a dendrochronological date for one of the buildings, the presence of one or two Northumbrian artefacts (such as a cresset) and the generally harmonious alignment with the Northumbrian stone buildings immediately to the north[220]. That all the buildings are Northumbrian is not certain, though they appear to be built from a slightly later context than the finds of pottery and glass. Strictly speaking, the building phase does not fully seal the trampled hillwash phase of the Gaulish finds,

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[216] Hill, *Whithorn 3*, pp. 4-5; *Whithorn 4*, pp. 4-7. My analysis of Whithorn is also informed by four seasons spent at the site, including the discovery of much of the E ware and glass in 1988.

[217] *Ibid.*, p. 4.

[218] *Ibid.*, p. 5.

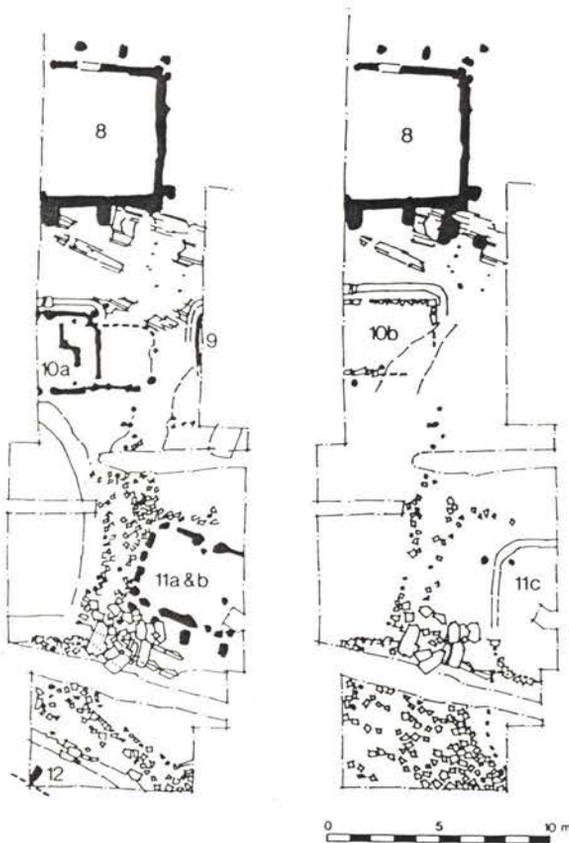[219] *Ibid.*, p. 4.

[220] *Ibid.*, pp. 14-18.

Figure 14. Northumbrian buildings in the south sector. a) Early buildings. b) Later buildings.

Seventh and Eighth Century Buildings at Whithorn, Scotland
(from P. Hill, *Whithorn 3*).

Fig. 13

but they are clearly later than the phase 3b, which is a distinct horizon. Of the 'Northumbrian' phase, some debate might attach to one building, no.11, which gives the dendrochronological date c.687-732 AD from its second phase[221]. The non-conformity of the alignment of this structure with the Northumbrian monastery buildings might suggest that the earliest phase of this building is earlier than the 'probably early eighth century' date that Hill cites[222] - certainly he puts its earliest phase earlier than the surrounding structures and their shale floors.

How much does the association of the E ware and glass with a phase earlier than the buildings matter? We may note that the imports in question have generally 'Celtic', rather than Anglo-Saxon associations, but this need not imply there would be a cessation of importation during a Northumbrian presence. Much could depend on the nature of the takeover, however: it is possible that under a new power the ships which brought them would no longer be safely able to put in near to Whithorn. The layer of shale which seals the clearest building phase is indeed overlain with eighth-century coins.

At Clogher, primary interest has focussed on the construction sequence of the ditch, which seems clearly to put the Mediterranean wares and E ware to either side of the construction phase of a revetted ringfort[223]. A phase of yellow boulder clay consistently seals deposits of Mediterranean amphorae over a silted Iron Age ditch. This boulder clay layer runs under the revetment at some points and may have been part of the rebuilding process of the fort[224]. E ware is found consistently stratified

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[221] *Ibid.*, p. 14

[222] *Ibid.*, p. 17.

[223] R. Warner, 'The Clogher Yellow Layer', *Medieval Ceramics* 3 (1979), pp. 37-40.

[224] *Ibid.*, p. 38.

(a) Turf, clean silt
(b) Gravelly silt
(c) Stoney sand and gravel

1. Occupation debris post-dating weathering of Ring-fort bank
2. Occupation debris just post-dating construction of Ring-fort bank
3. Ring-fort bank
4. Inner revetment of Ring-fort bank
5. Occupation debris just pre-dating construction of Ring-fort bank
6. 'Yellow Layer'
7. Layers of silt with occupation debris
8. Occupation and destruction debris
9. Primary silt in Ring-ditch

CLOGHER

m.   2   Fig. 1   RW
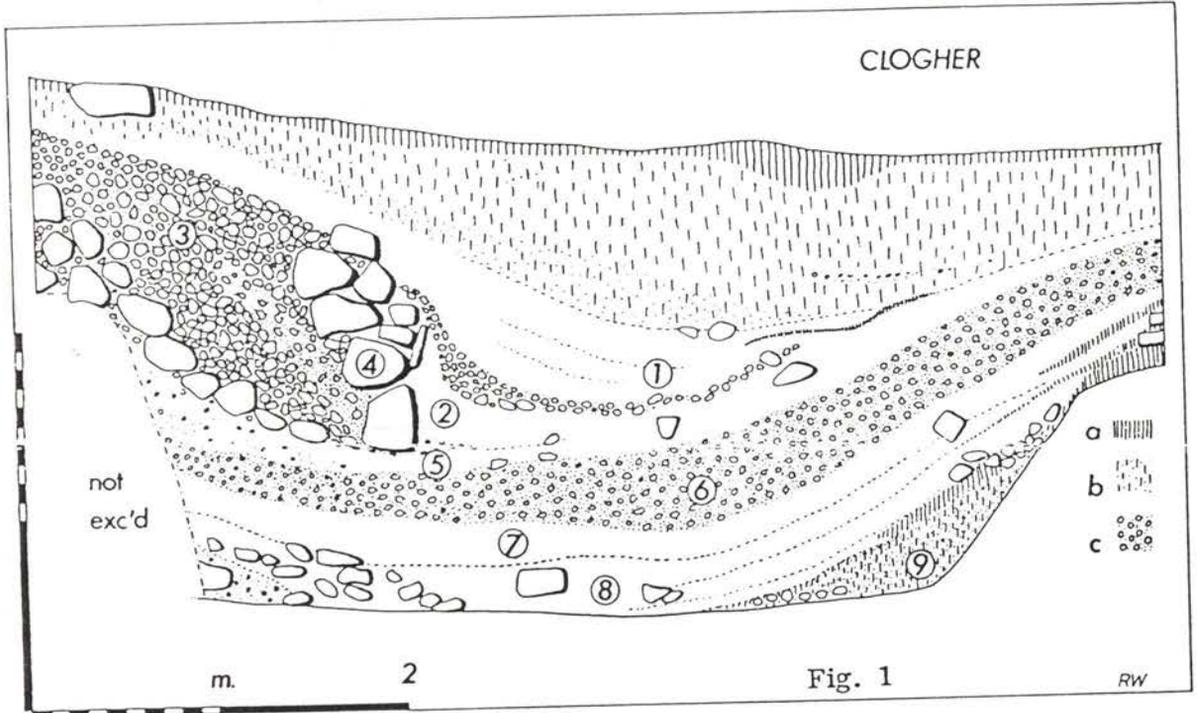
Table 1. Trench X only, to which section Fig. 1 relates

Layers	Amphora sherds	'E' sherds
1/2/5	–	4 (3+ vessels)
7	22 (3+ vessels)	0

Table 2. All Trenches

Layers or equivalent Date	Amphora sherds	'E' sherds
1/2/5	1	31 (11+ vessels)
7	47 (4+ vessels)	0
Whole site, including unstratified	76 (6+ vessels)	47 (11+ vessels)

Stratigraphic Sequence from Trench X, Clogher Co. Tyrone
(from R. Warner, 'The Clogher Yellow Layer').

Fig. 14

above this layer, in layers which sit against and run under the revetment. The virtue of this evidence is its quantity: in Trench X alone sherds of some 3 or more E ware vessels overly some 22 amphora sherds (at least 4 vessels)[224]. There is no possibility that the E ware could be upcast from the same layer as the Mediterranean wares, which is the most significant point. The dating of the upper phases is more complex. We would like to be clearer on whether the revetment actually seals any E ware sherds. This is suggested in earlier interim reports, though not explicated in the 1979 discussion[225]. The E ware sherds may be upcast from the building phase of the revetment, if so (as Warner suggests), their chronology might not be far removed from that of the Mediterranean wares. In any event, the separation is unquestioned.

At these sites, the chronology of E ware and the amphorae is clearly separated. If there is good reason to put the Mediterranean wares as no later than the 560s, E ware would seem to be a c.600 or later import. This corresponds very closely with our earliest textual evidence for contacts between Ireland and Gaul. Charles Thomas has clung strongly to the idea that E ware occurs in early sixth-century contexts in Cornwall, suggesting that it came to Cornwall first of all parts of the British Isles. Though this model fits the importation of the Mediterranean wares, its application to E ware must be considered doubtful. So little E ware occurs in Cornwall that doubt might be cast upon the idea that E ware was ever directly imported there - though this might only reflect a failure to find the west Cornish centres. The distribution might be secondary from Scilly or Ireland. In the

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[224] *Ibid.*, pp. 38-9.

[225] R. B. Warner, 'Clogher Demesne', *Excavations: Bulletin of the Association of Young Irish Archaeologists* (1972), p. 28.

light of the Gwithian sequence being only one sample, and not fully published, we perhaps should not attach such weight to its testimony as does Thomas.

The distributional pattern of E ware will be discussed in chapter 5.3. For the moment we will conclude that the ware is most likely a Gaulish import from a single source, the *floruit* of which is probably measurable in decades, centred on the seventh century.

Imported Glass

Fragments of glass vessels occur on some thirty-odd western Insular sites. The greater part of these vessels are of putatively 'Merovingian' type, so they are also likely to be evidence of maritime activity between Gaul and the Irish Sea basin, though this idea has only been given consideration since the mid-1980s, before which a passage overland through Britain was considered more likely. The glass vessels are of a distinctive character, though there is some variety of form and colour, and only a few are paralleled either from the Continent or Anglo-Saxon England. No full catalogue has yet been published of the western British finds[227] and many recent discoveries are not yet fully published[228]. The general features of the assemblage may now be established, however, and some progress made in defining the role of glass in maritime trade.

The study of the vessel glass has been dominated by the views of Harden and acceptance of his theories served to discourage comprehensive study of the

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[227] Edward Bourke has discussed the Irish material as part of a M.A. thesis at University College, Dublin and Ewan Campbell has discussed the entire assemblage in a doctoral thesis at University of Wales, College of Cardiff. I have not had the opportunity to consult either thesis, though I would like to thank Ewan Campbell for much helpful discussion.

[228] Most notably finds from Whithorn in Scotland, Longbury Bank in Wales and Moynagh Lough in Ireland. The finds from Cadbury Congresbury in Somerset will only appear in print late in 1992.

forms and features of the glass, which would appear worthy of the same character of attention as the imported ceramics. Harden insisted that the imported material was a selection of fragments brought in as 'cullet', i.e. as a trade in scrap glass for use in metalworking[229] and hence reconstruction of the forms of the vessels would be pointless. Doubt has also been cast upon the possibility of reconstructing the forms of vessels from fragments[230]. Harden's erroneous view has only been questioned in print in recent times[231], so before proceeding to discussion of the import types, we must first re-examine this thesis.

Harden's Thesis

The vessel forms from which the fragments from western British and Irish sites derive are of several types. By far the most common is a cone of pale yellow/green metal, decorated with white marvered trails. Study of this form (and its misinterpretation) was central to the formulation of Harden's model. In seeking to reconstruct the forms of the western British and Irish vessel finds, which are all in fragmentary form apart from one atypical find from Mullaroe, Co. Sligo[232], the decorative forms on the *eastern* British finds of cones of 'Merovingian' type were accepted as providing the most likely model. The eastern British finds, mostly from Anglo-Saxon graves, are trailed principally in a spiral below the rim and

[229] Harden, 'Glass Vessels', p. 154; D. B. Harden, 'Glass', in L. Alcock, *Economy, Society and Warfare among the Britons and Saxons*, Cardiff, 1987 (henceforth 'Harden in Alcock' - reprinted from *Dinas Powys*, 1963), pp. 142-3.

[230] Hunter, J., 'Glasses from Scandinavian Burials in the First Millenium AD', *World Archaeology* 7 (1975), p. 79.

[231] Campbell, 'A Blue Glass', p. 244; Wooding, 'What Porridge', p. 14; Alcock and Alcock, 'Excavations at *Alt Clut*', pp. 113-115.

[232] R. Warner, 'The Irish Souterrains and their Background', in H. Crawford, ed., *Subterranean Britain*, London, 1979, pp. 124-5.

sometimes in a band of combed festoons at the waist[233]. These festoons rarely reached the upper or lower extremes of the vessel, however, and did not explain the stubs of trails finishing close under the sub-rim trails on fragments from Dinas Powys[234]. The trailed proportion of the eastern British cones was considerably less than the ratio of trailed to untrailed fragments in the Dinas Powys and other collections[235] - allowing the theory to emerge that trailed pieces had been selectively collected for secondary use. The finding of molten droplets at Dinas Powys served to support the idea that scrap glass was melted down for decorative use - though the fact that pale yellow glass, trailed or untrailed, was not amongst the re-used pieces should have been given greater attention[236].

The correct conclusion was that western British finds were simply trailed over a much larger proportion of their surface than those from Anglo-Saxon and Rhenish sites. Ewan Campbell has identifed the 'festooned chevron' as the commonest type. This often runs the full length of the vessel: from the very base to merge with the sub-rim trail.

A *small* number of western Insular glass finds genuinely form a subset of the assemblage on Saxon sites. These include fragments of two claw beakers and other Saxon pieces from Dinas Powys[237] and some clear-trailed vessels from Whithorn. A few other fragments, which have been engraved with a sharp wheel, are found at such sites as Dalkey Island and Whithorn - the latter being very closely

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[233] Harden, 'Glass Vessels', pp. 146, 160; Harden in Alcock, p. 146.

[234] See Harden in Alcock, p. 143 - fig 9.1, nos 26 & 29.

[235] Harden in Alcock, p. 143.

[236] Harden in Alcock, p. 149.

[237] Campbell, 'A Blue Glass', pp. 239-45.

matched by the well-known piece from Holme Pierpont in Nottinghamshire[238]. These are the exception, however, rather than the rule and Harden was otherwise in error to suggest that the western British finds were a subset of the eastern British distributions.

Research has undoubtedly been hampered by the very small portions of glass found, but this too easily led to the suspension of formal approaches after the 1960s. Large portions of vessels from Whithorn (see fig. 14) confirm Campbell's conclusion that the 'festooned chevron' is the commonest type involved. Once this is recognised, the basis for Harden's model disappears and substantial proportions of vessels can be reconstructed. Campbell has been able to do this for some of the Dinas Powys vessels[239]. At Whithorn a number of rim pieces were able to be fitted together by the author[240]. These attempts have been made principally by following decorative patterns. Undecorated pieces present more problems, but we may observe that the colour and thickness may vary considerably along the length of a cone, which again may have encouraged belief in a greater number of vessels being present than was actually the case. Finally, Harden made much of the lack of bases amongst the Dinas Powys assemblage. These have been found at Whithorn and Armagh, however, and we may follow Campbell in making the point that these are, anyway, the most obstrusive parts of the vessel, being the thickest and sharpest fragments, and may hence have been most thoroughly disposed of on site[241].

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[238] Harden, 'Glass Vessels', p. 136.

[239] *Pers. comm.* and Campbell, 'Glass Vessels or Cullet', forthcoming.

[240] See fig. 16, H1 & H2.

[241] Campbell, 'Glass Vessels or Cullet', forthcoming.

The failure to recognise the western Insular assemblages as mostly separate from the eastern was also the consequence of too easy acceptance of an 'industrial' model for glass usage. It stands to reason that glass vessels should be studied as objects with a functional use. This is contrary to common practice, however, where much research focusses on the technical question of glass manufacture. It is pleasing to see my Australian colleague Frank Broeze taking issue with the same question in reviewing a recent shipwreck site report[242]. We may contrast the expected role of pottery to that of vessel glass. The diagnostic value of glass is controversial: unlike pottery it is not indestructible - though the reputation of glass with a high potash content is too often falsely carried over to the western Insular assemblage, which is mostly of the durable soda-lime-silica type. Glass is undoubtedly recyclable - and this may reflect where it is disposed of on a site - but if the vessels have not been recycled their formal identity may be recovered. The working span of glass may be much the same as that of pottery, perhaps more highly valued, but, conversely, more fragile. The primary point, however, is that fragments of vessels with an identifiable morphology turn up frequently on western Insular sites and on these grounds may play a diagnostic role often of equal value to that of the imported ceramics.

It is frustrating then that the fragmentary state of the assemblages has been being taken to necessitate certain types of treatment[243]. There is no need to argue the exclusive value of scientific approaches over typological. Henderson and Ivens[244] have tackled further questions relating to the role of cullet in Irish

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[242] F. Broeze, Review of J. N. Green, *The VOC Retourschip Batavia*, *The Great Circle* 12.2 (1990), (125-6) p. 126.

[243] D. Sanderson, J. Hunter, and S. E. Warren, 'Energy Dispersive X-Ray Fluoresence Analysis of First Millenium AD Glass from Britain', *Journal of Archaeological Science* 11 (1984), p. 53.

[244] J. Henderson and R. Ivens, 'Dunmisk and Glass-Making in Early Christian Ireland', *Antiquity* 66 (1992), pp. 52-64.

decorative glass and enamel work. They indeed conclude that a continuing glass industry (in the light of new manufacturing evidence from Dunmisk[245]), rather than any major contribution of cullet (in the light of the small numbers of vessel finds[246]) is most likely.

Types of Glass Present

The glassware falls into three definite categories, with hints at further groupings.

> **Group A** are cones with pale yellow, yellow/green (very many examples of both these colours) green[247] or yellow/amber[248] metal. Some appear to be undecorated. In others, decoration includes white mavered sub-rim trails in a spiral. Other pieces have hairline trails under the rim[249]. Very often they have white mavered trails on the body in festooned chevrons. Other body decoration may be a form of thick loop trailing, uncertainly related to the chevron[250]. All this glass I propose to call the 'Atlantic' type, as it is not yet paralleled further east in Anglo-Saxon England or Merovingian Gaul. This is by far the predominant type. Other types include pale amber[251] and iron blue cones[252] with white mavered spiral trails under the rim, which are probably part of the 'Atlantic' group also. Some other pale yellow vessels have optic

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[245] *Ibid.*, p. 60.

[246] *Ibid.*, p. 61.

[247] E.g. Margam, Armagh.

[248] E.g. Whithorn +88/7707. In D. Sanderson, 'Analytical Results from Two Glass Sherds from Dunollie', in Alcock, 'Excavations at Dunollie', fiche, p.71, this sort of colour is explained as an imperfection of production.

[249] E.g. Whithorn +87/4100; Mote of Mark fig. D (Harden, 'Glass Vessels', p. 150).

[250] E.g Dumbarton 71, Alcock and Alcock, 'Excavations at *Alt Clut'*, pp. 113-15.

[251] E.g. fig. 17 H1 & H2.

[252] E.g. Mote of Mark fig. F (Harden, 'Glass Vessels', p. 150).

bulges[253], others are plain and very thick at the rim[254]. These latter two are not definitely cones and may be palm cups.

The basic 'Atlantic' cone forms, in pale yellow and green, are found at the following sites, in some cases along with blue and amber pieces of the 'Atlantic' class - as most finds are not fully published at time of writing the following is not a comprehensive catalogue (references are given for discoveries made since the publication of Harden's 1956 study):

Armagh[255]

Castlehill[256]

Clogher[257]

Dalkey Island[258]

Dinas Powys[259]

Dumbarton[260]

Dunadd[261]

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[253] E.g. Whithorn No. +89/9898; Mote of Mark fig. J (Harden, 'Glass Vessels', p. 150).

[254] Mote of Mark fig. A (Harden, 'Glass Vessels', p. 150; Dinas Powys No. 46 (Harden in Alcock, pp. 143 & 147).

[255] D. B. Harden, 'Enamel and Glass', in 'Excavations at Cathedral Hill, Armagh', *UJA* (1984), pp. 135-6.

[256] *PSAS* 53 (1918-19), p. 123. A comparison with Whithorn +88/7705 +89/10149 confirms the identification.

[257] In the Ulster Museum.

[258] D. B. Harden, Appendix 10: 'Note on Glass Fragments from Dalkey Island', in Liversage, 'Excavations at Dalkey Island', pp. 193-5.

[259] See Harden in Alcock, *op.cit.*

[260] Alcock and Alcock, 'Excavations at *Alt Clut*', pp. 113-115.

[261] In the National Museum of Antiquities of Scotland. Not noted by Harden in 1956.

Garranes

Garryduff

Gwithian[262]

Longbury Bank[263]

Margam Deer Park[264]

Mote of Mark[265]

Moynalough[266]

New Pieces[267]

Trethurgy[268]

Whithorn[269]

White trailed pieces in iron blue only have also come from Ballinderry and Ballycateen.

Group B are pieces which are likely imports from Anglo-Saxon England. These include the cobalt blue squat jars from Dinas Powys and Chew Stoke

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[262] Rim sherd in pale yellow/green. In the Royal Institution of Cornwall.

[263] 1 pale amber, 19 pale yellow-green. Campbell and Lane, *Excavations at Longbury Bank* (no page numbers).

[264] E. Campbell, 'New Finds of Post-Roman Imported Pottery and Glass from South Wales', *Archaeologia Cambrensis* 137 (1989), pp. 63-4.

[265] Harden, 'Glass Vessels', p. 150. More recent finds by D. Longley are not yet fully published.

[266] E. Campbell, *pers. comm.*

[267] A. Lane, 'New Pieces, Montgomeryshire (Powys)', in Edwards and Lane, eds, *Early Medieval Settlements*, p. 97.

[268] J. Price, 'The Glass Fragments from the Lower Ward', in C. Thomas, ed., *Tintagel Papers (Cornish Studies* 16), Redruth, 1988, p. 26.

[269] Author's observations 1987-9. Around 40 vessels. The most representative and best preserved of the assemblages. Most finds seen by author, but many were unavailable for closer study as they were loaned to the University of Bradford and not returned at the time of my last visit, in October 1992.

and the claw beakers from Dinas Powys[270]. Various pieces from Cadcong also fall within this group. Cadcong has also produced 'Kempston' style beakers and pieces from Whithorn[271] with similarly transparent trails may also be in this group.

Group C are pieces with wheel-engraved decoration of Holme-Pierpont type. Pieces of this type are from Dalkey Island and Whithorn[272]. These may also be an assemblage shared between the eastern and western zones of the British Isles.

Odd pieces remain unclassified: for example amber palm cup rims from Whithorn[273] and Lagore may be Carolingian, but they are not exactly identifiable.

The dating of the groups all falls between the years 400-800 and a date between the mid-sixth and early seventh would be likely for all but the 'Kempston' types (possibly fifth century) and the Mullaroe flask (ninth century[274]). The cobalt blue jars would be dated by Campbell to the early 600s[275] and the claw beakers are a sixth century type[276]. Group A is unknown outside of the Irish Sea zone and can only be dated by association with imported pottery. A broad contemporaneity with E ware seems likely from associations at Whithorn, but Hill *(pers. comm.)* would

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[270] Campbell, 'A Blue Glass', pp. 239-45.

[271] No. +88/8484.

[272] Whithorn: no. +88/8362; Harden, Appendix 10 'Note on Glass Fragments from Dalkey Island', in Liversage, 'Excavations at Dalkey Island', pp. 193-5. A comparable piece may be also from Grave 49 at High Down. See M. G. Welch, *Early Anglo-Saxon Sussex*, Oxford 1983, p. 145.

[273] See fig. 20

[274] Harden, 'Glass Vessels', p. 154.

[275] Campbell, 'A Blue Glass', p. 244.

[276] Harden in Alcock, p. 145.
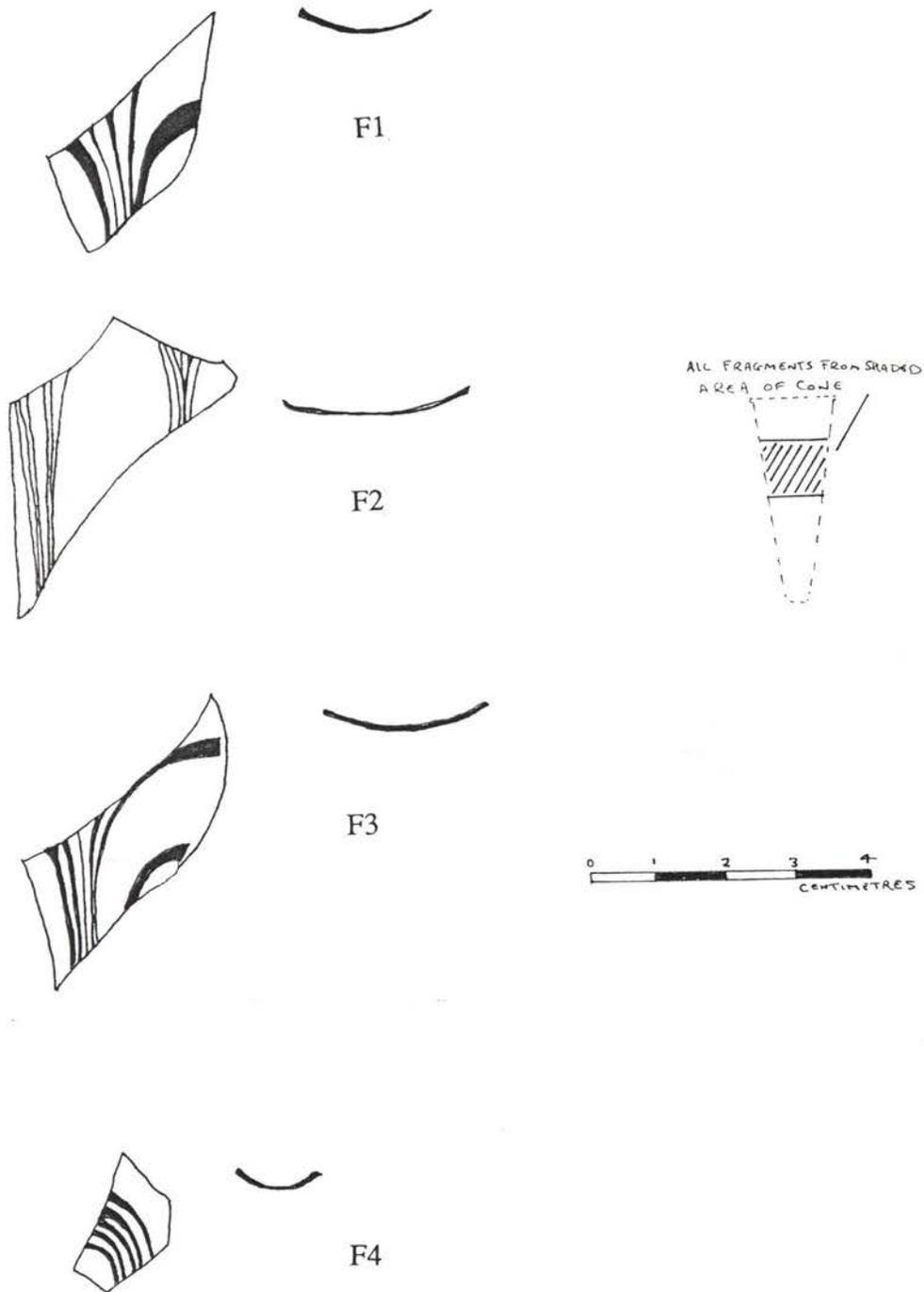
Glass Vessels with 'Festooned Chevron' Decoration:

F1) Whithorn +89/ 9850
F2) Whithorn +89/ 10095
F3) Whithorn +89/ 9845
F4)Whithorn +89/1049

Fig. 15
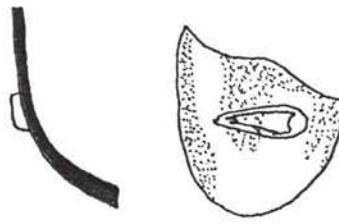
F6

F7

ALL FRAGMENTS FROM
SHADED AREA OF CONE

0   1   2   3   4
CENTIMETRES
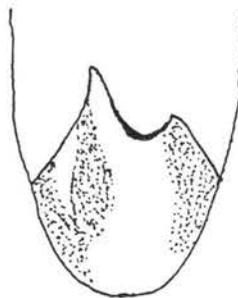
F9

Glass Vessels with 'Festooned Chevron' Decoration:

F5) Armagh
F6) Whithorn +89/ 10000
F7) Dinas Powys No. 93.

Fig. 16
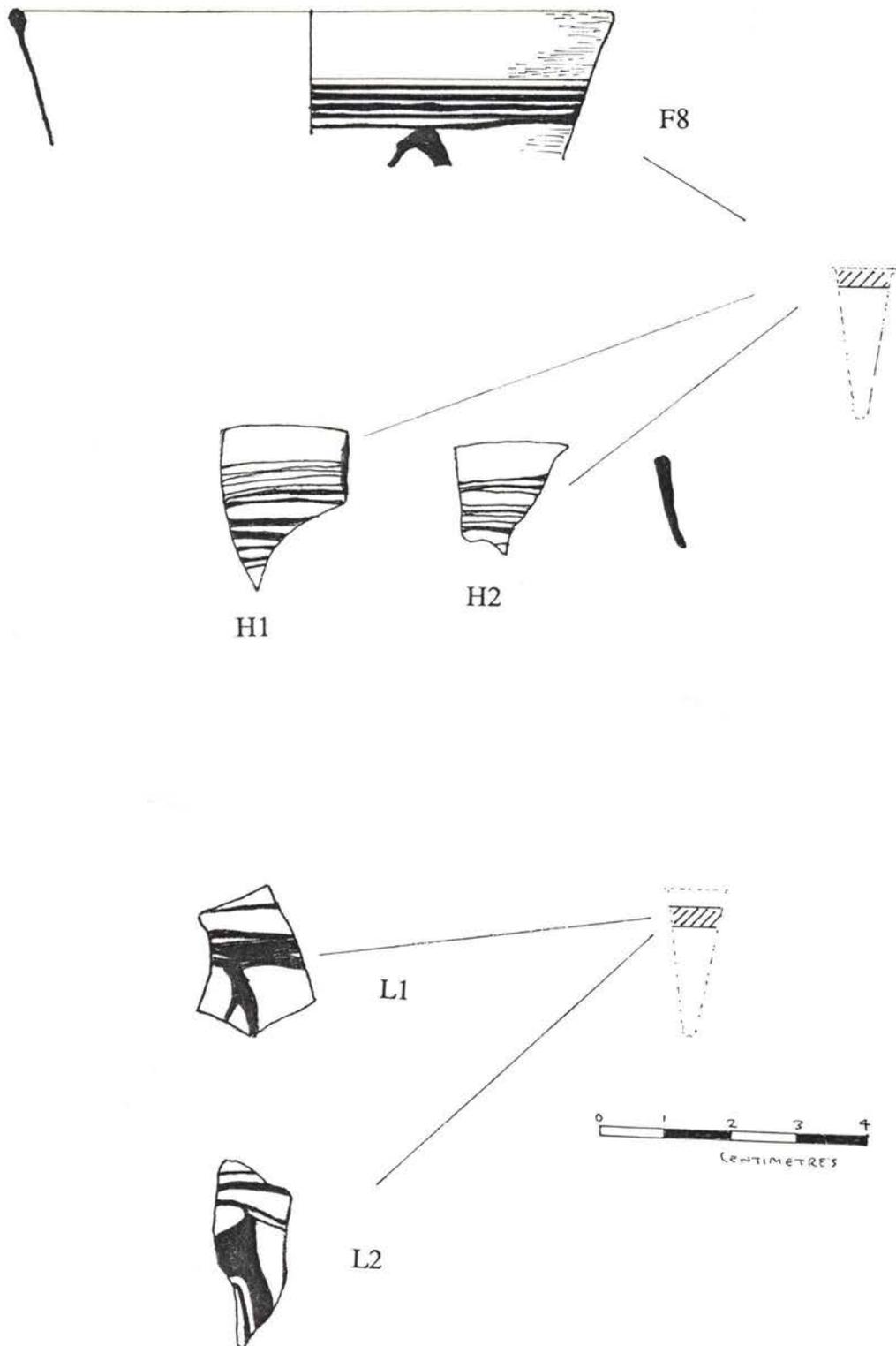
Glass Cones:

with Horizontal Sub-rim Trailing

F8) Dinas Powys (and tip of Festooned Chevron) - 26
H1) Whithorn + 87/4032
H2) +88/8318 (joins with H1)

with 'Lattice' Festoons

L1) Whithorn +88/8442
L2) Mote of Mark (Harden, p. 150: 'M')

Fig. 17
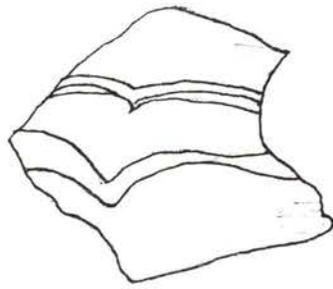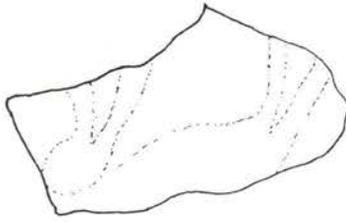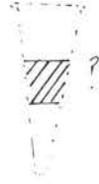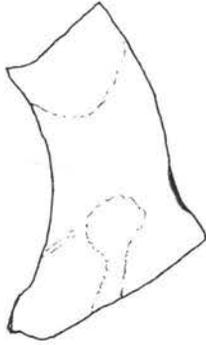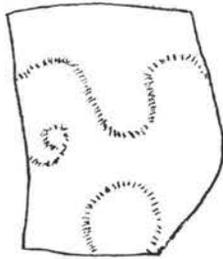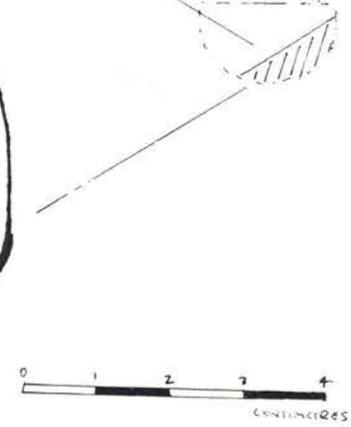
Glass Vessels:

with 'Combed Festoon' Decoration:

CF1) Whithorn +87/4273

with Optic Decoration:

O1) Whithorn +89/9898
O2) Mote of Mark (Harden, p. 150: 'J')

with Engraved Decoration:

EG1) Whithorn +88/8326

Fig. 18

suggest that the glass appears earlier in the sequence than E ware, though it continues into the same period. Whether the glass fragments from earlier and later periods on site are of the same group needs further investigation. For example, a beaker in pale yellow metal with combed festoons[277] (as opposed to festooned chevrons) was found in an otherwise sterile context at Whithorn, away from the main sequences. It is very similar, but not the same, as most Atlantic group pieces. When these sorts of fine distinctions are made (if they are indeed important) we may observe a narrower dating range for individual imported glass groups.

Glass appears on the hillfort sites of Somerset and western Cornwall. At Congresbury the glass assemblage is more 'Saxon' in quality than 'Atlantic', with several pieces being of the 'Kempston' type[278], while previously noted pieces from South Cadbury and Tintagel are not demonstrably similar to the best known types. The more recent find from Tintagel is of more normal 'Atlantic' type, however, with white horizontal trails[279]. A seventh-century context is unlikely at Tintagel. We will return to the distributional questions later in this chapter.

The Source of the Glass Imports

In searching for an origin for the glass imports, we may straight away observe that scholarship has followed a very similar pattern to that followed in investigating E ware. The different methods of research considered normal for these finds, however, have regrettably seen the E ware and glass distributions only rarely compared to each other - after an initial comparison which went a long way to

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[277] Cf1: found in a trench opened in a field north-west of the main area in 1987.

[278] P. Rahtz, *pers. comm.*

[279] Price, 'The Glass Fragments', p. 26.

inspiring the Rhineland origin theory for E ware[280]. The initial likely source identified was the Rhineland and the assumed entry path was overland by way of Britain - somewhat contrary to historical likelihood. Again, as in the case of E ware, the fact that the closest parallels were in the Rhineland was reflective of the intensity of research and excavation work in that region and the paucity of such work further west in France. The incidence of cones with white mavered festoons is seen as more of a Belgian/northern French trait[281] - just as the northern French parallels for E ware are superior to the Rhenish. A cone in greenish metal with white mavered festoons was found at Herpes in Charente-Maritime[282] - matched exactly by a find from Highdown in Sussex[283]. These pieces are not close to the western British finds in decoration, but are close enough to suggest that there are more westerly trailled cone traditions (of coastal distribution) than the Rhenish which offer potential for placing the 'Atlantic' group.

Museum collections in France do not contain wide ranges of glass vessels from late-sixth/ seventh century contexts - probably reflecting a previous lack of interest in collecting fragments from domestic refuse. Two palm cups in the collection at Saint Germain-en-Laye[284] suggest that the same colours and mavered trailing as found on British sites also existed in the Marne region in the late-sixth century, but these are only vague clues and systematic study of new glass discoveries are only likely to reveal the source for the British finds.

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[280] Peacock and Thomas, 'Class E Imported Pottery', p. 36.

[281] S. M. E. Van Lith, 'Late Roman and Early Medieval Glass from a Settlement at Maastricht, Dutch South Limburg', *Journal of Glass Studies* 30 (1988), p. 67.

[282] British Museum 1905 5-20 61 - fig. 19 CF2.

[283] M. G. Welch, *Highdown and its Saxon Cemetery*, Worthing, 1976, p. 15.

[284] See fig. 20

Two textual sources demonstrate that the use of glass vessels was known to literary audiences in the Celtic west. In the *Gododdin*, the hero Bleiddig mab Eli drank wine from brimming glass vessels[285] - drinking wine from glass vessels is also used as a metaphor for the ease with which a hero picks up his spear[286]. This text is of indeterminate date, however, and though it establishes a courtly context for the drinking of wine we should not place too much value upon it in the light of our conclusions upon the value of the heroic literature of Ireland[287]. A reference in Adomnan also depicts the use of a glass vessel, in the Pictish court at Inverness, when the saint prophesies:

> 'Now Broichan has received a hard blow. For an angel sent from heaven has struck him heavily and broken into many pieces in his hand the glass vessel from which he was drinking'...When the saint was still speaking these words, behold, as he had predicted, two men on horse-back, sent by the king, arrived, and told all that had happened concerning Broichan, in the king's fortress, in accordance with the prophecy of the saint[288].

The combined weight of these references is considerable. There are no definite Irish references, though the indefinite word *lestar* (cf. Middle Welsh *lestri* in the *Gododdin* reference) might sometimes be describing glass vessels. The context is evidently 'courtly' and this is reflected also in the archaeological distribution: which

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[285] 'Bleidic mab eli ervisset gwin gwydyr lestri llavn', *Gododdin* XCII (ed. I. Williams, *Canu Aneirin*, Cardiff, 1961, p. 45).

[286] 'Hut arolli wayw mal gwin gloew o wydyr lestri', *Gododdin* LXV (*Ibid.*, p. 32).

[287] See pp. 141-2.

[288] 'Nunc Broichanus fortier concussus est; nam angelus de caelo misus graviter illum percutiens vitream in manu ejus de qua bibebat confregit in multa biberam fragmenta...Adhuc sancto haec loquente verba, ecce sicuti praedixit duo a rege misi equites adveniunt; omnia quae in regis munitione de Froichano juxta sancti vaticinium sunt acta enarrantes, Adomnan, *Vita Columbae* II.34 (ed. Anderson and Anderson, pp. 400-1).

H3

CF2

0 1 2 3 4 cms.

Glass Cones from Herpes (Charente)
(Photo courtesy of the British Museum)

Fig. 19
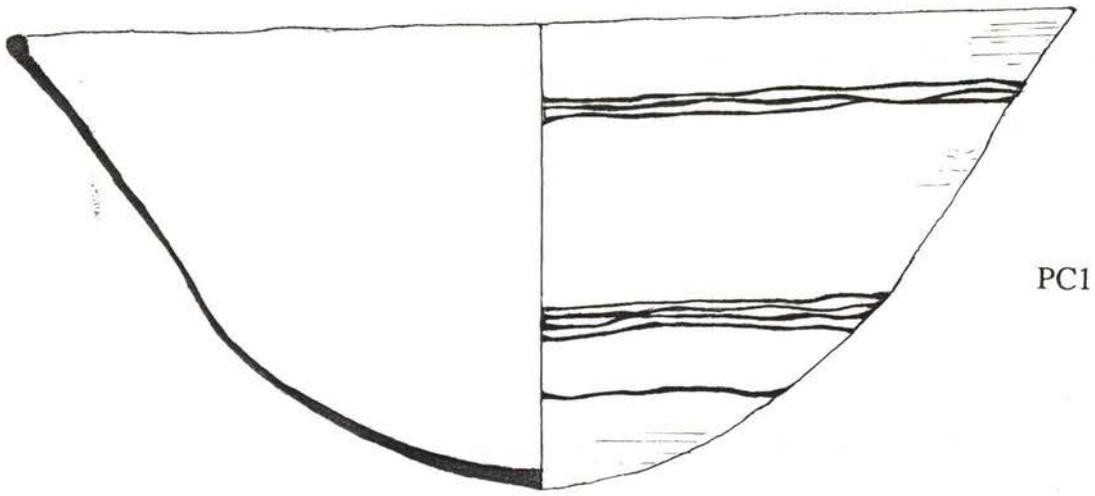
PC1
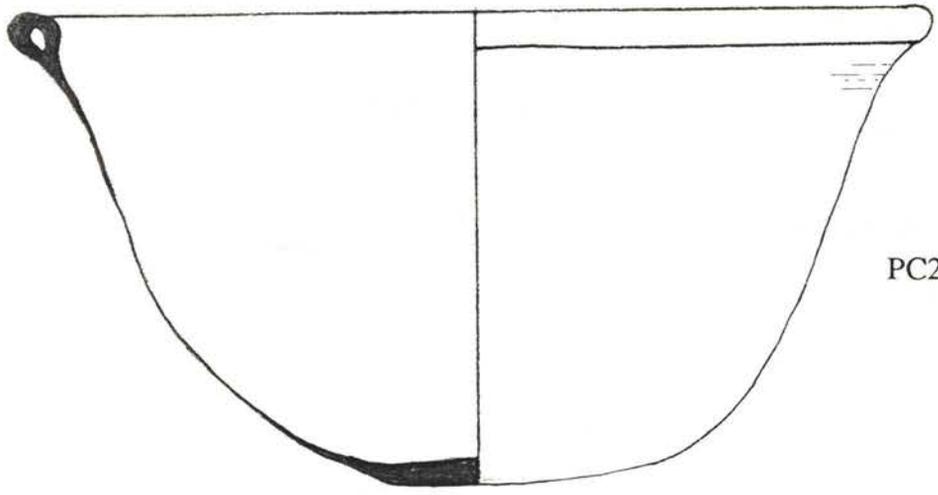
PC2

PC3

Possible Parallels from the Continent:

PC1) Pale Yellow Palm Cup, Chaouilly-sur-Marne (in Saint German-en-Laye collection)
PC2) Amber Palm Cup with Folded Rim (in Saint German-en-Laye collection)
PC3) Folded Rim of Amber Palm Cup, Whithorn +87/4216.

Fig. 20

is more confined to high status sites than that of E ware. Adomnan does not specify wine as the contents, though the *Gododdin* does, so we should not assume that they were only used for wine [288A].

Frankish Metalwork in Ireland and Western Britain

The evidence of metal, especially iron, objects of supposedly Frankish origin is of obvious interest in the light of the ceramic connection and Thomas has returned debate to this evidence in his recent reassessment of the Gaulish material[289]. Finds of such objects have been sporadic, with metal having a lower rate of post-depositional survival than pottery or glass: the largest collections being from crannog sites such as Lagore and Buston, where an anaerobic context was present. This fact should be appreciated as yet another example of the ways in which the omnipresence of Frankish influence may be hidden behind the unrepresentative quality of the evidence. Nonetheless, it would seem easy to overrate the evidence of the metalwork: a Frankish origin is not proven for most pieces, both Anglo-Saxon or local manufacture cannot be ruled out. Beyond that, we can also only guess at the social context within which artefacts might sit.

Some objects are unique in Insular contexts and are best explained as personal possessions of individual travellers. From a midden at Tean, Isles of Scilly, a bronze loop and a rivetted openwork plate with rivets are definitely Merovingian imports. Thomas interprets the former as part of a *châtelaine*, or *gürtelgehänge*[290]. The rivetted openwork plate is in fact also almost certainly part of a *châtelaine* as sixth/ seventh century examples are characterised by such

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[289] 'Gallic *Nautae*', pp. 18-19.

[290] Thomas, 'Gallic *Nautae*', p. 18; Thomas, *Exploration*, pp. 195-7.

288A See Gododdin LXXXIII (ed. Williams, p. 40), where a hero drinks mead from a glass (*tavloyw ac ysgeth tavlet wydrin*).

studding on an openwork plate[291]. An object such as this in Scilly is testimony to a maritime link with somewhere. Most other supposed finds of Frankish metalwork in Ireland and western Britain[292] are uncertain evidence of trade or even direct travel. A variety of beads[293], brooches, horse trappings and iron weapons may all be of Frankish origin[294]: for some, however, no more than a 'Germanic' origin can be held as certain and Anglo-Saxon may be as likely as Frankish. Those which are of Frankish origin may be best explained as personal possessions: Thomas' suggestion, on the strength of later usages of the word *ffranc* in Welsh[295], of a presence of Frankish mercenaries seems overly-ingenious[296]. Also possible is the idea that arms might be traded[297].

Certainly unlikely to be trade goods are two Frankish coins from Ireland, both from the Sarthe départment: one, at Port Laoghaise, minted in Le Mans;

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[291] D. Renner, *Die Durchbrochen Zierscheiben der Merowingerzeit*, Mainz, 1970, provides a typology for the round examples only, but a comparison certainly confirms the relationship of the Tean plate with Merovingian pieces.

[292] James, 'Ireland', pp. 385-6.

[293] Unpublished work by M. Guido has identified a number of definitely Frankish glass beads on western British sites.

[294] Thomas, 'Gallic *Nautae*', pp. 19-20; Hencken, 'Lagore', pp. 93ff.

[295] I. Williams, *Studies in Early Welsh Poetry*, Dublin, 1944, p. 31.

[296] Thomas, 'Gallic *Nautae*', p. 6.

[297] Doehaerd, *The Early Middle Ages*, p. 163.

another, from Trim[298], minted at Beaufay[299]. These compare with Rigold's coinage phases I and II in Britain - made up of coins from the period pre-625 AD[300] including 3/4 of the Sutton Hoo assemblage and the pre-Augustinian coins in the Canterbury cemetery, which contains a strong western and northern Gaulish element[301]. Later Frankish coin imports to England are from East Francia exclusively[302]. The association of these coins with trade by both Peacock and especially Hodges in discussions of E ware are totally unjustifiable[303]: quite clearly the Canterbury and Sutton Hoo assemblages are personal collections, rather than anything to do with economics. The offshoots in Ireland are likely to be personal possessions, also, as Ireland did not use coin in this period - *contra* Hodges this non-use of coin reflects more than a shift in western Gaulish monetary policy which saw coinage less often traded.

In conclusion, we may be much less optimistic of the potential of the metalwork and related imports, unless further finds show repeated patterns of

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[298] Picard would suggest that Slane, very near Trim, figures in the Frankish machinations of the seventh century where Dagobert II was sent into exile: J-M. Picard, 'Church and Politics in the Seventh Century: the Irish Exile of King Dagobert II', in *idem*, ed., *Ireland and Northern France AD 600-850*, Dublin, 1991, pp. 27-52

[299] S. E. Rigold, 'The Sutton Hoo Coins in the Light of the Contemporary Background of Coinage in England', in R. Bruce-Mitford, ed., *The Sutton Hoo Ship Burial*, Vol. 1, London, 1975, p. 660.

[300] This date must be regarded as somewhat arbitrary: being obtrusively based upon the desired historical association with Redwald. It is pleasing to see that this view is shared by Wood, 'The Franks and Sutton Hoo', p. 4. For discussion of the Anglo-Saxon hoards: P. Grierson and M. Blackburn, *Medieval European Coinage: The Early Middle Ages*, Cambridge, 1986, pp. 122-7.

[301] Rigold, 'The Sutton Hoo Coins', pp. 653-77.

[302] *Ibid.*, p. 655.

[303] Hodges, 'The Date and Source', pp. 39-40.

contact with one or two sources. Where even less tangible evidence is concerned, such as the Gaulish sculptural influences postulated by Henry, Hamlin, James and Warner[304], the problem is the same as with Hillgarth's thesis on textual tradition. Travel via the western sealanes is not unlikely, but is unproveable. Both the E ware and glass offer better possibilities for refining patterns of contact otherwise only vaguely indicated by textual sources and for resolving questions of site chronology which are themselves crucial for our understanding of economy. The glass emerges as potentially the more interesting group of artefacts. We should note, along with the Alcocks[305], that the glass is more numerous than the pottery at sites, for example Dinas Powys and Whithorn, where there are large assemblages of both. The glass is probably less limited of chronological range than E ware, as we have seen (which may ultimately make E ware a more useful finite *datum*), while the varieties of glass may be individually and relatively datable to different periods. The fuller publication of the complex assemblages at Congresbury and Whithorn will offer the possibility of using this material to disentangle questions of contact and chronology further. Both these sites have well-preserved and well-excavated sequences and have an Anglo-Saxon element in their glass assemblages - reflecting Anglo-Saxon contact which is historically likely to be earlier at Congresbury than that at Whithorn. The variety of the links of these sites, both in political and chronological terms, could be extremely useful in establishing chronological frameworks.

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[304] See James, 'Ireland', pp. 384-6; Warner, *pers. comm.* has observed a further strong link between the Rathmichael/ Glencolumcille group of slabs and sources in Poitou.

[305] Alcock and Alcock, 'Excavations at *Alt Clut'*, p. 113.

Chapter 5.3 Artefactual Distributions and Routes of Maritime Trade in the Late-Sixth through Eighth Centuries

Artefacts which demonstrate a maritime distribution offer potential for establishing the paths of maritime exchange and to locate the ports where ships landed, though we have seen in chapter 2.4 that such assemblages can be interpreted in a variety of conflicting ways to indicate maritime routes. In the following discussion, centring on the distribution of E ware, we will look at the maritime considerations of voyages into and within the Irish Sea and the routes of contact which they indicate. It is contended here that more and less probable speculations as to use of these sealanes can be made from critical use of archaeological and literary sources in combination, with the aid of realistic use of marine data.

The E ware Distribution

First we must consider the distribution patterns of the imported artefacts and how much these patterns may represent the original paths of importation and redistribution. The quantity of E ware seems far too great to be explained by one, speculative cargo - nor is it the type of good (unlike the Mediterranean amphorae and their contents) which would be likely to form the bulk of a single cargo. The overall E ware forms are very uniform and there appear to be no grounds for claiming that we have a diversity of Continental wares in this class - except perhaps in the case of the numerically small class of E4[306]. Any demand for pottery in western Britain and Ireland at this time was not being filled by imports from more than one Continental centre. Either we must imagine that regular voyages from

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[306] Where there are two distinctly different forms of spout.

Ireland were only converging on one continental centre to obtain pottery or, far more likely, that the impetus for the imports was Gaulish and that one set of 'sailors from Gaul' were bringing in their local pottery.

The fact that the largest concentrations of E ware are in the north of the Irish Sea basin suggests that foreign vessels carried the wares into the north of the zone: like Adomnan's *gallic nautae* going as far north as the Clyde estuary and adjacent waters. This is not to say that all coastal discoveries of the ware are primary importations, we may indeed distinguish a primary voyage from secondary distributions, though the secondary voyages were probably over a shorter distance than the redistributive voyages which carried the Mediterranean wares northward - as the latter are concentrated in the south of the Irish Sea zone and the primary voyages seem likely to have stopped there.

A look at a simple distribution map of E ware[307] is largely a reflection of archaeological enterprise, however, rather than a basic guide to maritime routes.

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[307] E ware finds as listed in Thomas, *A Provisional List*, pp. 20-24. Additions and Deletions are given here in Thomas' format. Forms present are noted where known. A new, complete, catalogue is expected shortly from the work of Ewan Campbell. Identifications by: LA = Leslie Alcock, EC = Ewan Campbell, MOD = Mary O' Donnell, CT = Charles Thomas, JW = Jonathan Wooding.

Additions

South-west Britain

Bryher, Isle of Scilly (Thomas, 'Bryher') CT
Dial Rocks Hill, Isle of Scilly (Thomas, 'Bryher') CT
May's Hill, Isle of Scilly (Thomas in F. Turk, 'A Study', pp. 78-80) 1/ E1 CT JW

Severn - South Wales

Caldey Island, Dyfed (Campbell, 'New Finds'). 1/ E1 EC

Isle of Man

Port e Candas, German, Isle of Man EC

Scotland

E ware Pottery

20+
10-19
2-9
1

Suggested Routes of Importation:

Primary Voyages
Secondary Voyages

Fig. 21

We may offset this problem by discussion of the character of some of the individual sites. In the earliest discoveries of E ware, clusters of dots appeared on the map through individual events such as the Harvard archaeological mission and concentrated work on the early medieval period by O'Kelly, Alcock, Thomas, Lane and Campbell in different places and decades. Most of the earliest research was on obviously high-status sites such as Garranes, Garryduff, Lagore, Dunadd and Dinas Powys, finds from a more economically diverse range of sites have only been added with more systematic excavation work: for example in Northern

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Ardifuir, Argyll (in National Museum of Antiquities, Edinburgh) 1/ E1   JW LA
Lochspouts, Argyll (Laing, 'Cooking Pots', pp. 185-92) E1 EC JW
Whithorn, Wigtownshire (Hill, *pers. comm.* and author's observations) 10/ E1, 1/ E2, 4/ E3, 1/ E4   JW EC

Ireland

Derrynaflan, Co. Tipperary 1/ E1   JW EC
Kedrah, Co. Tipperary   EC
Lisleagh, Co. Cork   MOD
Marshes Upper, Co. Louth   EC
Moynagh Lough Crannog, Co. Meath   EC

Deletions:

South-west Britain

Hellesvean, Cornwall   CT JW

North Wales

Dinas Emrys, Gwynedd   EC JW

Scotland

Abercorn, West Lothian   EC CT JW
Craigs Quarry, East Lothian   EC JW
Dun Ardtreck, Skye   EC
Elie, Fifeshire   EC
Little Dunagoil, Bute   EC
Luce Bay, Wigtownshire   EC

Ireland

Nendrum, Co. Down   MOD

Ireland, since 1950[308]; and the Republic of Ireland since 1970[309]. This is also seen most recently in Scilly, where the number of find-sites of E ware has doubled as a result of Thomas' focus on these islands since 1980. The greatest concentration of E ware finds is in Northern Ireland and southern Scotland, though that fact that many sites were abandoned in Northern Ireland at the end of the early christian period has aided in the recovery of much data in that region.

Growth of the distribution in last two decades has followed a distinct pattern, however: new finds have been from areas where E ware was already found, or in areas closely linked. Odd finds in areas otherwise bare of E ware have been gradually recognised as misidentified: such as Dinas Emrys in Gwynedd[310], finds from Lothian[311] and one from Skye[312]. Some areas remain uncertain, however, owing to a lack of ability to identify early medieval sites. Lane and Campbell, with persistence, have identified a number of early medieval sites in South Wales - in Dyfed two of these, both unfortified and only located by stray finds, producing E ware[313]. Brittany has similar problems, with none of its early medieval sites being identifiable by visible morphology[314].

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[308] E.g. Armagh (Armagh), Ballyfounder, Downpatrick and Lough Faughan (Down), Lisdhu (Fermanagh), Scrabo (Derry), Teeshan (Antrim).

[309] Derrynaflan and Killededadrum (Tipperary), Killucan (Westmeath), Randalstown (Meath), Reask (Kerry).

[310] Inspected by the author in the National Museum of Wales in 1988.

[311] Craigs Quarry, Abercorn.

[312] Dun Ardtreck.

[313] Longbury Bank, Caldey Island.

[314] P-R. Giot and L. Fleuriot, 'Early Brittany', *Antiquity* 51 (1977), p. 110.

Some areas are now very likely to be excluded from the distribution. McPeake's suggestion that E ware existed in Chester[315] was inaccurate: despite its Irish Sea outlook it was a relatively isolated port[316]. Somerset has seen enough archaeological endeavour to have turned up E ware if such were there. Central and western Cornwall remain a little more puzzling. Pieces of E ware from High Peak and Bantham, on the south coast of Devon, and Guisseny on the north Breton coast, seem to suggest that E ware could have been imported as part of cargoes brought into the English Channel, though, if so, the paucity of finds does not yet indicate whether such activity focussed on either shore in particular, or was primary or redistributive in character.

E ware occurrence will continue to increase, as it is clear that we have only found a small percentage of the amount imported, but the occurrences will probably now be more predictable. The largest totals of E ware at individual sites have been found at Dunadd, Whithorn, Dinas Powys and Garryduff. All of these sites have been the subject of sustained excavation over several years - in the case of the early twentieth century excavations at Dunadd the techniques used were primitive and likely to extract larger percentages of finds than would be the case with modern methods. The quantities found range from around 20 vessels at Dunadd and 16 at Whithorn to single vessels at the majority of sites. For comparison we may note that no single site contains as large a proportion of the entire insular assemblage of E ware as the Tintagel assemblage does for the Mediterranean wares. This is not a question of scale of excavation, as at Tintagel the Mediterranean pottery is a

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[315] J. C. McPeake, M. Bulmer and J. Rutter, 'Exacavations in the Garden of No. 1 Abbey Green, Chester, 1975-77: Interim Report', *Journal of the Chester Archaeological Society* 63 (1980), pp. 14-38.

[316] Griffiths, 'The Coastal', pp. 68ff.

ubiquitous surface find. All of this indicates that E ware was probably a subsidiary good, never forming the physical (let alone economic) core of a single cargo.

The finds of single vessels must be set in context with the region in which they are found. One vessel from a totally excavated site at Trethurgy in Cornwall is explicable in terms of the general rarity of E ware in the southwest peninsula. Single finds from sites on the Isle of Man must be seen in the light of comparatively little excavation - though the absence of E ware from recent major excavations at Peel is interesting to note[317], even though it is found at the nearby site of Port e Candas (German). Odd finds through trial-trenching at Whithorn and Longbury Bank have expanded naturally along with the assemblages - in areas where E ware had previously been rare. On the other hand, a single find from Proudfoot's narrow trench at Downpatrick has not been significantly added to by later excavation, even though E ware is ubiquitous in Northern Ireland.

It can be seen that our pattern is achieving greater stability when we note that more finds are being made in the hinterland of the sites where the largest totals already exist. Around Dunadd, E ware finds identified from Ardifaur, Loch Glashan, Dunollie and Dumbarton in recent decades have helped in defining a maritime and hinterland province. Finds from Lisdhu in Co. Fermanagh are likely to be closely linked to the centre at Clogher, and finds in North Co. Cork and Tipperary extend the range of finds at major sites in South Cork. Routes in and out of Dinas Powys can be related to more recent finds at Lesser Garth Cave and in Dyfed.

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[317] D. Freke, *Peel Castle Excavations*, Interim Reports, Liverpool, 1983-7.

The Distribution of Glass Vessels

With the dismissal of Harden's thesis from consideration, comparisons of the Atlantic glass and E ware distributions have again been made, though few discussions have appeared in print[318]. Ewan Campbell *(pers. comm.)* considers the two to be related imports and this idea is worthy of discussion.

The glassware distribution is heavily weighted toward the eastern side of the Irish Sea, in contrast to the western and northern focus of E ware. Very large totals from Dinas Powys and Whithorn certainly reflect the larger scale of excavation at those sites. Differences in excavation scale between Ireland and western Britain could account for some differences. Very few of the humbler sites producing E ware have produced glass finds, either in Britain or Ireland. The high status sites in Ireland in general have not been excavated on the scale of Dinas Powys, Dunadd or Whithorn. This is certainly likely to make the distribution lopsided. The situation is not the same as with *paléochrétienne grise,* where there is no Irish distribution at all. Nonetheless, as noted in chapter 4.2, the glass finds compare interestingly with the redistributive pattern of the Mediterranean wares in being found in quantity at sites in western Britain and at Dalkey Island, but in lesser quantities elsewhere in Ireland - though glass is found at sites in Co. Meath, at Dunadd and at the Mote of Mark, where the Mediterreanean wares are not.

Routes of Maritime Traffic: The Severn and Southern Coasts of Ireland and Britain

The pattern of Bristol Channel traffic, which we have seen in the sixth century with regard to the distribution of the Mediterranean wares, is not replicated in the

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[318] Wooding, 'Gaulish Artefacts', pp 169-72.

Glass Vessels of 'Atlantic'
Type:
British and Irish Distribution

● - 30+
● - 10-20
● - 2-10
• - 1

Fig. 22

seventh. On the north side there may have been little change. The Welsh sites of Dinas Powys and Longbury Bank produce the full range of Gaulish import classes: E ware, D ware and 'Merovingian' glass, with further finds of E ware and glass in Glamorgan and Dyfed. The E ware at least can be explained by a landfall in Glamorgan, close to Dinas Powys (perhaps in Cardiff itself) and another at Caldey Island in Dyfed, near to Longbury Bank. There is good reason to see the Lesser Garth finds as linked to Dinas Powys. Campbell has suggested that iron ore sources at Lesser Garth supplied the iron-working activities at Dinas Powys[319]. The Longbury Bank site was clearly in contact with the island monastery of Caldey[320].

The finds of earlier imports at Cadcong, virtually on the same longitude as Dinas Powys, suggest that the voyages, redistributive or primary, which took the Mediterranean wares to Dinas Powys, Coygan Camp, Longbury Bank and Caldey were likely to have been the same as brought the wares to Somerset. This pattern is not replicated in the seventh century finds. On the south side of the Bristol Channel E ware is found no further east than The Kelsies (near Newquay) and E ware is conspicuously absent from the heavily-excavated sites of Tintagel and Cadcong, where it is accordingly unlikely ever to be found. There are substantial Continental glass finds at Cadcong, but these contain a very substantial Saxon component[321].

We might suggest then that there is a real change to the pattern of contact in this area. The relocating of the *paléochrétienne grise* and much of the glass to a British-focussed trading network of the mid-sixth century, proposed in chapter 4.2,

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[319] E. Campbell, 'Lesser Garth Cave', in Edwards and Lane, eds, *Early Medieval Settlements* , pp. 86-7.

[320] Campbell, 'New Finds', pp. 259ff.

[321] J. Price, 'The Glass' in P. Rahtz *et al.*, *Cadbury-Congresbury*, forthcoming.

would see it separated from the E ware evidence, which may suggest that the Bristol Channel became less central after Saxon incursions into North Somerset and Devon. By the mid-seventh century imports into Dyfed and Glamorgan may have been coming from Ireland. The weight of the distribution of E ware is, after all, towards the north of the zone and the maritime incentives for a voyage north along the eastern shore of the Irish Sea are not as great as along the western shore.

Particularly interesting in this connection is the hagiographical evidence linking Caldey to Ireland, implied to be more than an isolated voyages[322]. The links in metalwork finds between Glamorgan and Meath are also especially compelling. A penannular brooch fragment from Dinas Powys is of Kilbride-Jones Class C4, one of the only firmly-provenanced types, centring on County Meath[323]. This indicates either the presence of an Irish craftsman, or a direct import from Ireland. Graham-Campbell would favour the latter[324] and suggests a trade in scrap metal as the most likely explanation. This is plausible, though Irish style metalwork also occurs on an industrial site at Lesser Garth[325]. The E ware could easily be a secondary import from Ireland, also. Its absence from most other parts of the Bristol Channel make Dinas Powys less likely to have been primary importation point from the Continent.

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[322] See pp. 94, 225-6.

[323] J. Graham-Campbell, 'A Lost Zoomorphic Penannular Brooch from Kells, Co Meath', *JRSAI* 116 (1987), pp. 122-4.

[324] J. Graham-Campbell, 'Dinas Powys Metalwork and the Dating of Enamelled Zoomorphic Penannular Brooches', *BBCS* 38 (1991), p. 224.

[325] L. Alcock, 'Dark Age Objects of Irish Origin from Lesser Garth Cave, Glamorgan', *BBCS* 18 (1959), pp. 221-7.

Dunadd

Dumbarton

Luce Bay

Isle of Whithorn

Meols

Dalkey Island

Waterford Harbour

Cork Harbour

Caldey

Cadbury Congresbury

Tintagel

Bantham

Scilly

Nantes

Noirmoutier
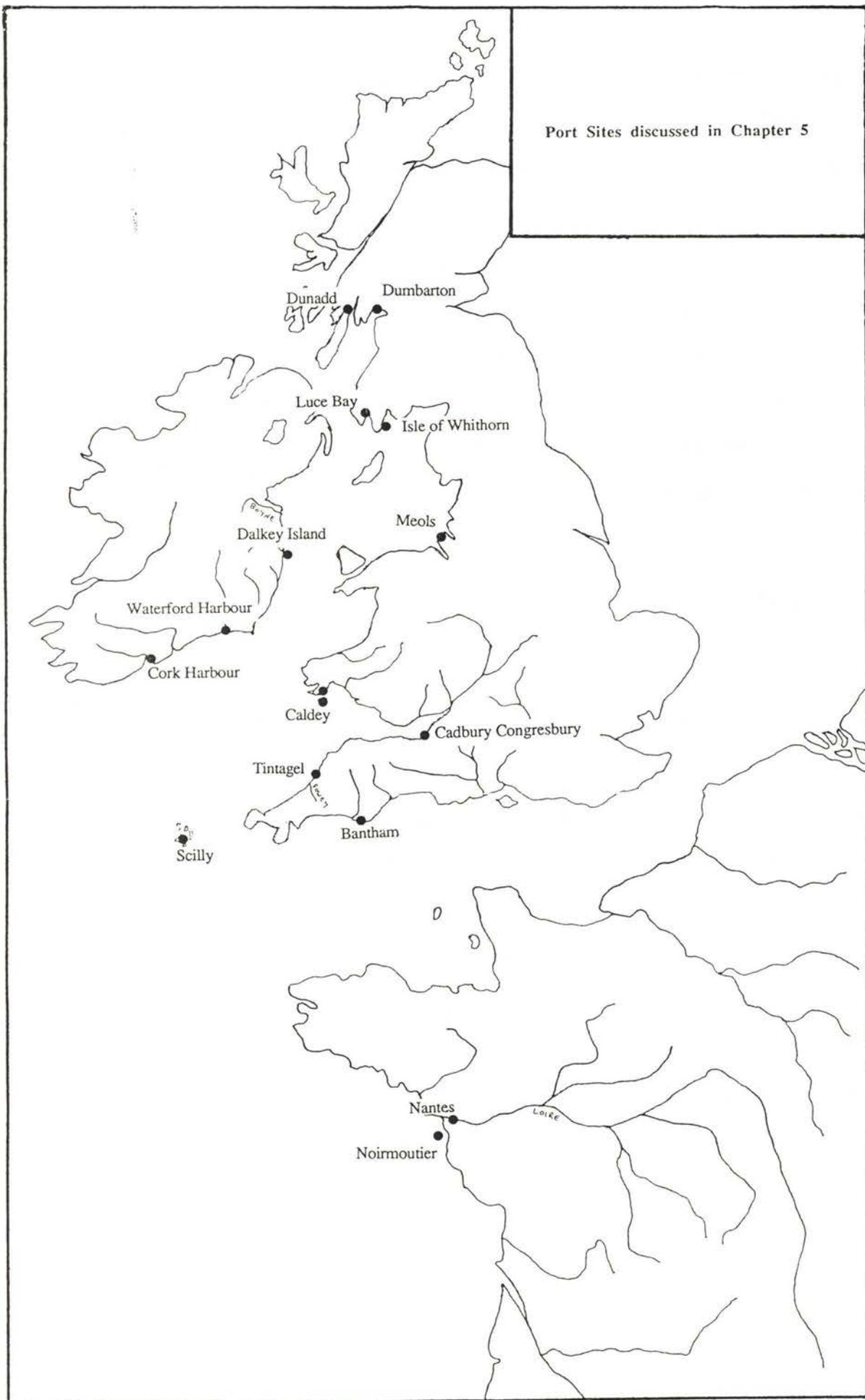
Fig. 23

On the other hand, a primary landfall in Scilly is not unlikely. E ware pottery occurs there on some 6 sites[326] and most of the other Cornish finds are in the very west of Cornwall, where they could be secondary distributions from Scilly. The maritime advantages of Scilly as a primary landfall from the Continent have been outlined in chapter 4. The primary involvement of Scilly in voyages into the Irish Sea zone in the seventh century, however, could just as easily be en route to southern or eastern Ireland as to the Bristol Channel ports. Out of Scilly, E ware finds at Gwithian point to the natural harbour of St Ives Bay. Finds on an unenclosed site, washed by the tide, at Bantham, on the south coast of Devon point to a landfall there. In both cases this is likely to have been a coastal trading voyage out of Scilly.

The East Coast of Ireland and North Wales

The quantity of E ware pottery from Co. Cork would make it a likely a primary landfall by a foreign vessel. Indeed in view of the problems of the outfall of the mouth of the English Channel, a vessel setting on a northward voyage from Brittany might easily find conditions for landing in Scilly unfavourable and head instead for Munster - which may then have alternated with Scilly as a primary landfall from abroad. A cluster of sites within reach of Cork harbour might favour this as the prinicpal landing point. From Munster it is possible to make a broad reach across the prevailing wind to the east or the west. Finds of E ware at Reask and Inishcealtra do not necessarily imply voyages from Gaul direct into the Shannon - the unreliable story in the *Vita Kyarani*[327] represents the commercial

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[326] Bryher, Dial Rocks Hill (Tresco), Mays Hill (St Martins), Samson, St Mary's, Tean.

[327] See p. 214.

interests of a later age, when ships from France sought fish from the Shannon as part of restricted medieval commodity networks, which did not obtain in our period. That the Shannon played a secondary role in distribution of E ware seems undoubted (perhaps along with fish for local markets), but *(contra* Thomas) the trail of E ware to Westmeath from Dublin seems equally likely to have first brought the ware to the Shannon shores, only from there to be distributed southward to Iniscealtra and Reask. St Samson's voyage seems to indicate the presence of a port in Dublin Bay[328]. Thomas, however, would suggest that a site in the Boyne estuary is more likely to be responsible for the E ware finds west into Meath[329].

As we have seen, voyages up the Irish Sea to Ireland, Scotland and Wales are suggested by both literary and archaeological evidence. That these followed the western shores, i.e. the easy coast of Ireland, would seem most logical in maritime terms. Significant obstacles exist on the coast of Wales, especially Dyfed, which is heavily encumbered with shoals. At all times of the year, except Spring, southwesterly winds are most prevalent. In Summer the chances of a westerly or southwesterly in the Irish Sea are around 60%. The evidence of E ware pottery, present in greater amounts on the western shores of the Irish Sea, may reflect the maritime concerns of sailors from the Continent favouring the, safer, western shore of the Irish Sea in the face of prevailing conditions which rendered the eastern shore less safe for northward navigation. That the glass and Mediterranean wares, otherwise rare in eastern Ireland, are found in quantity at Dalkey Island has been noted in chapter 4.2, and might suggest that even a British-focussed network would proceed north via a leg toward the east coast of Ireland[330].

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[328] See pp. 225-6.

[329] Thomas, 'Gallic *Nautae'*, p. 21.

[330] See pp. 222-3.

There is no E ware in Gwynedd. Mediterranean finds, however, are reported from Dinas Emrys and Degannwy in Gwynedd, though both are problematical[331]. We should be conscious of Bede's testimony to Anglo-Saxon incursions into Gwynedd and Man in the 620s, which he claims 'brought the isles of Man and Anglesey under English rule'[332].

The Northern Basin of the Irish Sea

In the northern basin of the Irish Sea, tidal streams in the Solway are especially strong, as are those off the coast of Lancashire. On the Solway coast, no E ware occurs east of the Mote of Mark, while no imported ceramics are found at all in the Mersey area, though this is likely to reflect the boundary between Celt and Saxon as much as the dangerous tides and shoals.

Bowen highlights the role of the Isle of Man in Irish Sea traffic[333], though an early Anglian presence here is also suggested by Bede. The lack of excavation on Man renders its role uncertain. Certainly it is a likely stopping point and landmark for vessels operating around the significant region of Whithorn. Tidal streams divide around Man and from Man a ship can wait to pick up a tidal stream to almost any part of the region. A major slack water area is present off County Louth, between the Boyne mouth and Ulster and a detour toward Man is often necessary for a sailing vessel heading north along the Irish coast[334]. The highest

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[331] The Dinas Emrys material of definite early medieval type is limited - even the B ware pottery is ambiguous, being of Class 45, which can be of either Roman or post-Roman date. The, very fragmentary, Degannwy B ware has been impossible to locate for re-examination.

[332] Bede, *Historia Ecclesiastica* II.9 (ed. Colgrave and Mynors, pp. 162-3).

[333] Bowen, "'Britain and the British Seas'", pp. 26-7.

[334] See p. 39.

point of Man, Snaefell, is 620 metres and can be viewed from both Ireland and Scotland, though cloud envelopes it much of the time. It should be noted in passing that excavation in the Isle of Man may have much to tell us about the possible divisions between 'British' and 'Irish' trading provinces.

Finds of E ware in Northern Ireland are very likely to have been from a primary voyage from the Continent. A cluster of finds in Co. Down might highlight this coast as a primary landfall, rather than the treacherous conditions of Belfast or the Antrim coast. Unlike the Sound of Jura, the passage off the Mull of Galloway presents few dangers, though the tidal race is fierce. The Admiralty Pilot describes it as 'free from dangers, except in the vicinity of Craig Laggan'[335] the same is generally true of the Ayrshire coast, except around Girvan. Hence it is explicable that continental shipping would have ventured at least as far as the Clyde estuary. At the head of navigation of the Clyde is a political centre where there is a wide chronological range of imports in Dumbarton Rock. This is the well-attested British fortress of *Alt Clut* - mentioned in Bede, Adomnan and later sources - doubtless commanding a harbour nearby and an ideal landmark for a ship approaching from the south or west.

A voyage into the seas around the Hebrides is an entirely different proposition to a voyage up the Clyde. Tidal streams are strong off the western side of the tip of Kintyre, owing to the funnelling between the landmasses of Northern Ireland and western Scotland. This renders both the Jura and Kilbrannan Sounds dangerous. South of the Isle of Mull the waters are very treacherous indeed with inequalities in the seabed causing possible tidal races, heavy surf at the change of tide and eddies. For the moment we may note the disincentives for voyages of ships travelling up the Irish Sea from abroad. If a vessel put into the Clyde estuary it would also have to backtrack to go on to Dunollie or Iona. There is no definite

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[335] Hydrographer, *West Coast of Scotland*, p. 28.

evidence that the route around Kintyre or along the Antrim coast was used in this period, though we should not overemphasise negative evidence when the sources are limited. E ware is rare in Antrim and Derry and not suggestive of a primary importation to Derry or any point west of Belfast Lough or Kintyre. The case for the intermediacy of Dunadd in the Dalriada importations has already been made. Voyages between Ireland and Iona are of course known, but there is no evidence that any of these left Ireland from east of Kintyre/ Derry. Libran, for example, sails for Iona from Derry[336], and though his general destination is stated as 'Britain', it is clear that the *island* of Britain is what is meant (i.e. in this case Dalriada). The familial and political links between Dalriada (in particular Iona) and Ireland were of a character which would be well served by maritime links with Derry.

Within the northern zone of the Irish Sea there have been a number of attempts to identify a range of movements of raw materials and produce between sites. The excellence of the fishing conditions off the west coast of Man and the south coast of Dumfries and Galloway may have been a motivation for the existence of regular contacts between these shores from an early date - along with the fact of the easy visibility of neighbouring landmasses, not a major issue in international trade, but probably crucial in the paradigm of coastal voyaging.

Whithorn has a range of finds suggesting long-distance traffic as well as a likely pattern of east-west trade along the south coast of Dumfries and Galloway. Whithorn itself is five kilometres from a harbour at the Isle of Whithorn, which Symson, in his *Description of Galloway* of 1684, described as 'a very advantageous port .....in which ships of great burthern were safe in any storm[337]. As with Grenville's estimation of Tintagel, we should put some weight in the

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[336] Adomnan, *Vita Columbae* II.39 (ed. Anderson and Anderson, pp. 432-3).

[337] A. Graham, 'Some Old Harbours in Wigtownshire', *TDGNHAS* 54 (1979), pp. 49-ff.

testimony of early modern mariners who judged these harbours by the requirements of ships comparable in size and performance to those of the early middle ages, who saw these harbours before modern improvements were made upon the natural conditions[338]. The Whithorn site, which recent excavations are identifying as being of genuinely urban size by the seventh century[339], clearly constituted a centre which brought in and processed materials from long- and short-distances. In the absence of evidence for the extractive industry in the immediate vicinity, and taking account of the centrality of Whithorn in the northern part of the Irish Sea, we may see the economic importance of Whithorn as predicated in a large degree upon location - though the political and religious contributions to the status of the site remain less clear. Whether the imported wares at Whithorn represent primary landfalls from abroad or, perhaps more likely in terms of a northward voyage to Dumbarton, Dunadd or beyond, secondary imports from Man or Ireland must remain for the moment unsolved.

In summary, the distribution of E ware offers evidence for a general north-south voyage pattern, with hypothetical landing-points at Scilly, Cork, Dalkey Island, Man, Isle of Whithorn, Co. Down, Dumbarton and Dunadd. These in turn may connect with identifiable coastal traffic out of Scilly to far western and southern Cornwall; out of Cork to Kerry and the Shannon; out of Dublin to South Wales; between Man, Whithorn and the Solway; and between Dunadd and Dalriada.

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[338] See p. 199.

[339] Discoveries in David Pollock's 1992 excavations have opened up an area on the north side of the church hill, with settlement comparable in extent to that covered by the site excavated in 1986-91.

At the other end of the voyages, the finds of E ware from western Brittany may or may not represent maritime distributions. Certainly the three known find sites are on or near the coast. It is most logical to explain their presence as due to local traffic with the Loire estuary, such as the appearance of *Brittani* in the *Vita Filiberti* may represent[340]. However, links between Brittany and western Gaulish ports remain something of a mystery: for example there is almost no *paléochrétienne grise* in Brittany[341]. The finds from Guisseny may be imports from Cornwall. The western coast of Gaul does not present ideal conditions for the mariner setting out. There is only a 30% chance of a fair wind for leaving Nantes or Bordeaux and such a wind continues to be necessary until one reaches a point west of Ushant. The estuaries of both the Loire and the Garonne are encumbered by shoals. The story of St Columbanus' ship being obstructed and stranded while setting out from Nantes, however miraculous, certainly presents a picture which fits the genuine maritime problems of Nantes. For a vessel voyaging out of Nantes, however, the chances of a favourable return wind are around 70% which might have encouraged local enterprise, which could wait for a fair wind to leave, knowing that their return could be relied upon. For foreign vessels arriving, the island of Noirmoutier, apart from its salt resources, might have represented a good place to obtain pilotage for the difficult entry of the Loire - just as, on reaching Britain, the Scillies may have useful for the same reason.

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[340] See pp. 265.

[341] Giot and Fleuriot, 'Early Brittany', p. 110.

The E ware evidence centres on the seventh century. Clear definition of the eighth century in the western sealanes is lacking. In parts of the western sealanes the eighth century would have seen dramatic changes. That Spain fell to Islamic invaders in 711, might be expected to have stimulated the Atlantic connections of the christian pockets remaining in the Asturias. The most logical target, southwest Gaul, however, was also conquered in the 720s. In the light of these disruptions it may not be surprising that clear evidence for Atlantic activity in western Gaul and Spain is lacking in the eighth century.

In the Irish Sea no definitely eighth century artefacts show an identifiable maritime distribution. In Ireland, a few literary sources have been noted, such as *Cormac's Glossary*[342] and *Tecosca Cormaic*[343], which suggest that foreign, and in particular Gaulish, links might not have ceased with the cessation of importation of E ware, but political changes would certainly have closed some ports and routes. Anglian conquest of Galloway had occurred by the early 700s, bringing measurable changes in the sequence of imports at Whithorn[344]. Consolidation of other coastal holdings, such as in Anglesey, Man and Cornwall, would have seen greater Anglian naval control of the Irish Sea. An assault on Ireland is recorded in 684[345]. How early Anglo-Saxon ports in the Mersey entered into the activity of the Irish

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[342] See p. 256.

[343] See p. 50.

[344] See pp. 289-91.

[345] Bede, *Historia Ecclesiastica* IV.26 (ed. Colgrave and Mynors, pp. 426-7).

Sea is unclear. Sites such as Meols in the Wirral[346], and Luce Sands[347] and Whithorn[348] in Wigtownshire produce eighth-century *sceattas* which at least show a new presence in coastal trading centres in the eastern part of the Irish Sea, even if we cannot show such coins to be the objects of maritime activity.

In Ireland the transition between the eighth and the ninth century AD coincides with some profound changes in decorative techniques in Insular metalwork art. Ninth century brooches and other decorated pieces from Ireland use amber by prefence to enamel and glass ornaments. The ninth century seems very early for such changes to be attributed to 'Viking influence'[349]: in a period where raiding seems to have been the norm, it is hard to see Viking influences penetrating established Irish factories, such as those which produced the Ardagh and Derrynaflan chalices (the latter showing the shift to amber ornament). Some archaeologists are even prepared to see amber arriving in the seventh century[350]. This is a change which brings the far northern regions into contact with the western sealanes: prefiguring Viking period links and what Bowen was to describe as the 'seaways in reverse': with Ireland and the Irish Sea receiving regular imports and settlement via the sealanes around northern Scotland to the North Sea and Iceland - the reverse of the pattern in 400-800. *Did* this 'reversal' have a an earlier counterpart in Irish links with the far north? Irish voyages northward had begun in

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[346] *Ibid.*, p. 68.

[347] W. Cormack, 'Northumbrian Coins from Luce Sands, Wigtownshire, *TDGNHAS* 52 (1965), pp. 149-50.

[348] Hill, *Whithorn 3* pp. 8-14.

[349] M. Ryan, 'The Significance of the Hoard', in *idem*, ed., *The Derrynaflan Hoard*, Dublin, 1983, p. 38-41.

[350] S. Youngs, ed., *The Work of Angels*, London, 1989, p. 208.

the late-sixth century, when the voyager Cormac explored north by sea and Columba, visiting the Pictish court at Inverness, negotiated protection for him from the King of Orkney if his voyage took him there[351]. Dicuil, writing early in the ninth century, provides clear evidence of the persistence of this coastal activity northward out of Iona. Though he describes 'Irish' voyages northward, he is clearly a monk of Iona[352] and talks of having voyaged himself to some of the northern isles[353]. Irish activity in this region clearly overlapped with Norse activity and may be influential in the Norse settlement of the Faeroes and Iceland. It also may have opened up new sources of materials. The possibility that reindeer antler was arriving in Orkney in the eighth century has been canvassed[354] and similar speculation has been made of the importation of amber to Orkney[355]. These links may explain some changes in the orientation of Irish exchange, though sources via Anglo-Saxon England may also be considered for the amber imports.

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[351] *Vita Columbae* II.42 (pp. 440-1)

[352] This is evident from the reference to Suibhne, Abbot of Iona (766-72) as his 'master', Dicuil, *Liber de Mensura* XII (ed. Tierney, p. 62). See most recently A. P. Smyth, *Warlords and Holy Men*, London, 1984, pp. 167-9.

[353] Dicuil, *Liber de Mensura* XV (ed. Tierney, pp. 76-77).

[354] B. Weber, 'Norwegian Exports in Orkney and Shetland during the Viking and Middle Ages', in R. Hall, R. Hodges and H. Clarke, eds, *Exchange and Trade, Medieval Europe 1992, Pre-Printed Papers Volume 5*, York, 1992, p. 159-167.

[355] E. Roesdahl, 'Denmark, Scandinavia, Europe - Trade and Exchange 11-12th Centuries', lecture to the *Medieval Europe 1992* conference in York.

Conclusion

This dissertation has put the results of some of the latest work in British and Irish archaeology relating to the communication and commerce along the western sealanes into a broad historic and geographic context. Throughout a consciousness has been retained of the methodological basis and the scholarly reception of the 'wine trade', 'western seaways' and 'Irish Sea province' models and wherever possible the underappreciated influence of these models has been noted.

We have seen that a developing pattern can be traced from century to century. In the fifth century, Roman period routes of activity still predominate: from the Channel into western Gaul, from Spain into the Mediterranean, and on an east-west axis in the Irish Sea - these routes used more by raiders than traders in our references to activity.

Historical and archaeological data show changes which can be linked with historical circumstances: Byzantine interest in the western Mediterranean and Britain bringing a brief intrusion into the western sealanes; Galicia and Gaul enjoying an escalation of exchange in the sixth century as Suevic Galicia was isolated, converted and conquered by its neighbours; the Irish Sea was brought into direct contact with Gaul around the seventh century - though British links with Gaul had flourished in the sixth century, Anglo-Saxon incursions eventually cut out much of the British shore from the more maritime- and Ireland-focussed network that predominated in the seventh century. The idea of 'natural' links between Ireland and the Continent, a sweeping anachronistic model of Continental origins in Irish cultural history, should now be seen as a myth.

The data for travel along the sealanes need to be liberated from sweeping chronological models and the evidence for refinement of their dating and context

appreciated. The imported ceramics have been lumped together in their study at the expense of other logical associations: E ware with textual sources for seventh century maritime exchange with Merovingian Gaul; D ware with Latin lapidary inscriptions of Gallo-Roman cultural origin. And the linking of the wares with conventional commercial ideas have seen repetitious discussion of Leontius's fanciful detail at the expense of Procopius's more compelling interest in northern affairs. Ironically, the lumping in of the study of *imported glass* with the ceramics would have been of benefit to its study, as we have seen. In a few cases, the western seaways and Zimmer's models simply blinded the viewer to the total lack of evidence: such as in the supposed antiquity of links between Ireland and the Continent.

The maritime data also need only simple and clear treatment to yield important evidence for the mechanics of travel and transport. Ships in use along the sealanes have been traced to wooden traditions of Roman and Celtic derivation. Curachs were limited in use to raiding and in very local transport - which must be set against the 'western seaways' picture as it exists in popular discourse. The overwhelming consistency of maritime data with archaeological and historical use of the sealanes must be seen in some other terms than a simple causal relationship between the capacity of ships over the conditions. Here it is suggested that foreign traffic observed greater limitations in the maritime conditions on account of their unfamiliarity with conditions - while ports were located often to take account of good maritime circumstances.

At the conclusion of this analysis a very different picture of the scale of western sealanes activity has emerged from that favoured by most previous studies. Most studies of western sealanes activity, from Zimmer through to Thomas, resist the temptation to minimalise activity: doing so by asserting continuity and quantity in the pattern of western sealanes activity, looking beyond the narrowest

interpretation of the evidence. In the case of Zimmer this was to provide a model for scholarly migrations, in the case of Bowen and Crawford, to assert the existence of a full maritime culture, and in the case of archaeologists such as Alcock and Campbell, from a justifiable suspicion of attempts to minimalise the chronological range and scale of archaeologically-attested patterns of contact. Thomas's ideas hover between the continuity and discontinuity perspectives, as we have seen, taking a minimalist view of the traffic in Mediterranean pottery, but sometimes a maximalist view of the role of maritime activity, while the work of James and Haywood (as well as the author), follows standard historical caution in asserting contacts only from a narrower interpretation of the available data.

Some differences between the disciplines of archaeology and history can be seen here: with the archaeologist usually assuming a greater element of the unknown in terms of evidence and resisting a temptation to see archaeological events as falling within the limits of measurable historical activity. The frequency of archaeological investigation to determine whether archaeological connections between zones *prefigure* historically-attested links reflects the latter issue. As we have seen, such questions have the capacity to inform historical study, though we should note also their less constructive use as 'devil's advocacy' to history, without addressing broader questions of continuity and discontinuity.

We should note in conclusion here how, in a different way, some of our disparate evidence can be drawn into patterns, from which some general models can be formulated. Historical activity *can* be very closely related to archaeology, though the relationship is not one in which historical evidence need be seen to have priority. The beginning of historical events is often prefigured by archaeological evidence of early contact. Roman expansion into northern Europe is prefigured by trading contacts. Justinian's conquest of the west considerably post-dates the occurrence of Aegean imports to as far away as Britain. Finer dating of

Merovingian and Gaulish imports in the Celtic west will probably in time show slightly earlier links than the seventh century between these two zones. Even Bowen's 'reversal' of the sealanes, as we have seen above, is prefigured by new materials arriving from Scandinavia. On the other hand, contrary to Thomas's assertion that trade continued without reference to politics, political change can be seen to have brought a swift halt to many international connections: at Whithorn with the Anglian conquest, with the conquest of Galicia by the Visigoths - Leuvigild's looting of trading ships during the conquest of Galicia perhaps being a good example of why discontinuity occurred. Our speculations on economy remain tentative: however, the lack of a true commercial economy has been seen as likely in most parts of the sealanes and on this basis we should be clear that there is no reason to see the sealanes as so economically dependent on trade as to necessitate continuity of exchange. Exchanges fuelled by personal or political connections are liable to decline with political change and discontinuity breeds only an episodic picture.

Bibliography

Abbreviations

AA	*Auctores Antiquissimi.*
BAR	British Archaeological Reports.
BBCS	*Bulletin of the Board of Celtic Studies.*
CBA	Council for British Archaeology.
CEDRBI	*Councils and Ecclesiastical Documents Relating to the Britain and Ireland.*
CMCS	*Cambridge Medieval Celtic Studies.*
ECMW	*Early Christian Monuments of Wales.*
IJNA	*International Journal of Nautical Archaeology.*
LCL	Loeb Classical Library.
MGH	*Monumenta Germaniae Historica.*
P. L.	*Patrilogia Latina.*
PRIA	*Proceedings of the Royal Irish Academy.*
JRSAI	*Journal of the Royal Society of Antiquaries of Ireland.*
PSAS	*Proceedings of the Society of Antiquaries of Scotland*
SLH	*Scriptores Latini Hibernici.*
SS rer. Merov.	*Scriptores rerum Merovingicarum.*
TDGNHAS	*Transactions of the Dumfriesshire Natural History and Archaeological Society*

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